The Turnover Dynamics of Residential Buildings



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ئائىلەم گە تەقدىم

For my family

ئۇلۇمدىن باشقىسى تاماشا

This is an Uyghur saying, a literal translation would be "as long as it is not death, anything else is (fun like) a party"

Declaration

This thesis has not been submitted in support of an application for another degree at this or any other university. It is the result of my own work and includes nothing that is the outcome of work done in collaboration except where specifically indicated. Many of the ideas in this thesis were the product of discussion with my supervisors Andrew Jarvis and Bronislaw Szerszynski.

Abstract

The construction and operation of buildings is one of the most resource-intensive elements of the economy, therefore buildings are a central focus of efforts to reduce energy use and hence greenhouse gas emissions. Because of their longlasting nature, buildings are also important factors in deciding the inertia of economies, and determining the turning point of economies in net-zero transitions.

Traditionally buildings are assigned single representative timescales of the order of 80 years. However, building investments may be seen as investments in components, each having its own service life ranging from seconds to centuries, with returns expected over this interval. The aim of this thesis is to explore the relationship between investments in buildings and their turnover timescales, which I refer to as the investment-timescale distribution, and to identify its role in the capital inertia of the building sector in the climate transition.

In chapter 2, this investment-timescale distribution is first developed for a single building using the financial costs of components and their expected service life. This is then extended to a representative building (RB) by applying a wellestablished mortality function for the service life of each component. The resulting investment-timescale distribution of an RB is a near continuous yet multi-modal distribution with a first moment of 38 years, remarkably close to the expected working lifetime of its inhabitants.

I explore the implication of this investment-timescale distribution in chapter 3, in particular for the dynamic maintenance schedule and economic performance of an RB in the UK. This is done by simulating maintenance costs to counter the depreciation of components as they approach their performance thresholds. I evaluate the performance of this simulation using return on investment (ROI). The result is a near stochastic maintenance schedule despite the deterministic nature of the simulation. This provides a strong indication as to why the interaction of timescale spectra with maintenance thresholds yields the complex and hard to predict maintenance dynamics we see in real property portfolios.

Finally, in chapter 4, I apply the investment-timescale dynamics to simulate the dynamics of energy demands and carbon liabilities of an RB. This simulation contrasts these dynamics under a net-zero carbon policy and a business-as-usual (BAU) scenario. The results show that, for new build, the longer-lived (>70 years) carbon-intensive components avoid much of their maintenance carbon liability if the economy decarbonizes in the interim. This also suggests that delaying currently carbon intensive construction until less carbon intensive options are developed should be considered during the transition to net-zero.

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Contents

1 INTRODUCTION	9
1.1 Turnover dynamics	
1.1.1 Investments and turnover timescale	10
1.1.2 Dynamics and capital inertia	
1.1.3 Survival analysis	14
1.1.4 BOQs and quantity estimates in building procurement	16
1.2 Depreciation and maintenance dynamics	
1.2.1 Different forms of depreciation	17
1.2.2 Maintenance threshold	18
1.2.3 Maintenance	19
1.2.4 ROI	21
1.3 Timescale dynamics in the net-zero transition	
1.3.1 Decarbonisation of the building sector	23
1.3.2 LCA and carbon dynamics	24
1.4 Thesis aims	
1.5 Reference	
2 HOW MUCH AND FOR HOW LONG? THE INVESTMENT-TI	MESCALE
DISTRIBUTION OF RESIDENTIAL BUILDINGS	
2.1 Introduction	
2.2 Aims and objectives	
2.3 Methodology	
2.3.1 An expanded Bill of Quantities	45
2.3.2 Product average lifetime assignment	47

2.3.3 Mortality functions and the representative building	
2.4 Results	51
2.5 Discussion and Conclusions	
2.6 References	
3 AN INVESTMENT-TIMESCALE PERSPECTIVE OF THE M	
DYNAMICS OF RESIDENTIAL BUILDINGS.	67
3.1 Introduction	
3.2 Decay, depreciation and maintenance dynamics	
3.3 Modelling maintenance	74
3.4 Aims and objectives	77
3.5 Methodology	
3.5.1 Building depreciation and maintenance simulations	
3.5.2 Returns on investment	79
3.6 Results	
3.7 Discussion and Conclusions	
3.8 Reference	
4 BUILDING INERTIA AND CLIMATE CHANGE	
4.1 Introduction	
4.2 The net-zero transition and buildings	
4.3 Aims and objectives	
4.4 Methodology	
4.4.1 Overview	
4.4.2 Carbon and energy-timescale distribution	

The Turnover Dynamics of Residential Buildings

4.4.3 Simulations	
4.5 Results	110
4.5.1 Energy and carbon timescale distributions	
4.5.2 Cumulative emissions	
4.6 Discussion and Conclusions	
4.7 Reference	
5 CONCLUSION AND FUTURE WORK	
5.1 Conclusion	
5.2 Limitations and future work	
5.3 Reference	

List of Tables

List of Figures

Figure 2.1 A schematic representation of the Schmalwasser and Schihlowski (2006) asset mortality function as used by the German Federal Statistics Office. The bar shows the first moment of the distribution (T in equation (1)), Figure 2.2 The investment-timescale distribution. Bars show investments in individual components of the building described by the BOQ. Black line is the distribution of the Representative Building (RB). Individual distributions under this (coloured) are an estimated partitioning of the RB distribution into four constituent distributions with representative timescales and contributions Figure 2.3 The lifetime distribution of monetary investment for operational Figure 3.1 Common depreciation patterns: blue line is 'one-hoss shay' depreciation, grey line is straight-line depreciation, black line is geometric Figure 3.2 Capital value distribution with respect to timescale of the RB. The black line is the investment (capital)-timescale distribution in year zero. The grey patch is the range between no depreciation and full depreciation at the maintenance threshold within which any particular distribution might sit. The dashed line is the mean profile at equilibrium after \sim 200 years. The red line is a given year's profile. L = 0.7......82 Figure 3.3 a. Aggregate total capital value when L = 0.7. b. Annual investment in maintenance over time. The dashed line is an inflation-free annual rental income

£154/m ² /yr. c. ROI over time for different maintenance thresholds $L=$ [0, 0.2,
0.4, 0.6, 0.7, 1]. $L = 0.7$ is highlighted and used in the central simulation giving
payback time of 30 years
Figure 3.4 The probability distribution of annual net profit
Figure 4.1 a. The timescale distributions for monetary investment, energy and
carbon of a Representative Building. The patches are derived from the high-low
ranges offered in the ICE database. b. The timescale distributions of
energy/money, carbon/money and carbon/energy intensities
Figure 4.2 a. Cumulative carbon time histories under Business-As-Usual (black
line) and net-zero 2050 scenarios (dark red line). b. Carbon-timescale
distributions of an RB under the decarbonization scenario, when its newly built
in 2020 (black line), and in 2050 (red line) 115

Glossary

Term	Definition	
Investment	The allocation of resources, most often money, into a building and its components with the expectation of generating a future return.	
Substructure	All components within a building that are invested in to ensure its function over a range of timescales, from seconds to centuries, including short term components like electricity used to switch on a lamp, to long-term components like windows and walls.	
Timescale	The duration a component lasts until it either retires or is replaced by a new product.	
Operation	The resources invested to keep the building running, e.g. electricity, heating, water.	
Maintenance	The resources invested to repair or replace building components.	
Return on investment (ROI)	The amount of rental return generated by the investment in a building relative to its cost.	
Maintenance threshold	The performance level below which a building component must be repaired or replaced.	
Representative building (RB)	A theoretical structure that stands in for a large cohort of buildings., capturing the typical characteristics and performance of the broader group.	

1 Introduction

Buildings and dwellings are among the most essential structures people build, providing shelter from the elements, predators, and other people since ancient time. The built environment, however, is more than simply a structure; it is the physical expression and manifestation of countless economic, social, and environmental processes that are inextricably linked to human activities and changing societal needs. This has pushed the building sector to the forefront of the global economy, accounting for 13% of the world's GDP and it is expected to reach 15% in the near future (United Nations Environment Programme, 2020).

Because of their long-lasting nature, buildings are seen as fixed assets that impose a significant level of inertia within the economy (Fisch-Romito *et al.*, 2021; Seto *et al.*, 2016; Grubb, 1997). The creation of a building requires a long-term commitment to future resource use, and this is invariably longer than the amount of time that remains before, for example, net-zero emission target must be reached. Therefore, understanding the turnover dynamics of built structures is crucial in understanding their impact on any climate transition and their risks to carbon lock-in.

1.1 Turnover dynamics

1.1.1 Investments and turnover timescale

The term "investment" describes the allocation of resources, most often money, with the hope of making a profit or producing income in the future. It includes putting money into an asset or a business with the intention of generating returns that outweigh the original investment. And return is the growth in investment's value over a certain period of time, frequently this is years or even decades.

The creation of buildings can be seen as an investment that lasts long enough to provide a net-positive, time-weighted future return, which is determined in part by their service life (OECD, 2001). However, buildings are not single components, but instead heterogeneous structures that are comprised of a vast number of components, each of which having their own lifetime. When investors make investment into buildings, they are essentially making investments in building substructures, and by extension are expecting returns over the timescales of these substructures. These can range from seconds to decades or more, given that it can be applied to every element of a built structure. For example, a carpet can be used for decades, whereas turning on a lamp would generate illumination in mere seconds. This calls into question the conventional division between building construction, operation, and maintenance, since all three can be seen as just investments with varying time lengths for returns. Therefore, it is important to specify the relationship between the size of investment and its turnover timescale, I call this the investment-timescale distribution.

10

There are good reasons to believe that this investment-timescale distribution is just as crucial to the operation of man-made structures as it is to natural ones. The replacement of cells in our bodies is something that we all go through on a daily basis. For example, although our hair is known to fall out on a regular basis, most of us do not become bald in the short or medium term. Similarly, our skins are continually being regenerated by new tissue, whereas providing blood samples or donating blood does not deplete our circulatory system. These examples demonstrate the replacing properties of human body cells and tissues that make up the whole human body. All cells and organs have their unique turnover rates hence lifetimes: red blood cells in our circulation last four months and then generate new cells; human lens cells and central nervous system neurons may live a whole human lifetime (Milo et al., 2010).

1.1.2 Dynamics and capital inertia

The lifetime of built structures, together with the diverse range of service lives of building components, contribute to the overall dynamic trait of the building system. Inertia of an object is usually described as its resistance to changes in its path, and this definition holds true for economies just as much as it does for any other collection of items, such as buildings. The creation of buildings and their components create a commitment to future profits, and that leads to inertia. According to Davidsdottir and Ruth (2004), the rate of capital turnover has the greatest impact on the modification of energy efficiency and carbon emission profiles. Investments in building components, spread over a range of lifetimes from seconds to centuries, may limit the pace of transition to an economy with net zero carbon emissions corresponding to the turnover rates of those components (Jaccard and Rivers, 2007). Consequently, it is crucial to understand the inertia of built structures created by the dynamic investments made over an array of timescales in identifying the turning point in economies through the transition to net-zero.

There have been some studies tried to explore the relationship between capital stocks and their turnover timescales, hence capital inertia. Studies usually have focused on certain sections of the economy when trying to define the impact of inertia associated with a sudden shift in climate change, especially within the energy sector. Using capital assumption of energy power plants, Genna (2020) discovered that the economy is likely to increase its stock of fossil fuel-dependent investments until 2070, and hence that there is capital inertia owing to alreadyengaged fossil fuel reserves. Davis et al. (2010) calculated the contribution of existing carbon dioxide-emitting devices to future emissions and predicted total future CO₂ emissions from fossil fuel burning by existing infrastructure of 496 gigatonnes between 2010 and 2060, causing mean warming of 1.3°C above preindustrial levels. Mercure et al. (2018) performed inertial analysis on stranded fossil fuel assets with an emphasis on technology lifecycles and found that, due to ongoing technological advancements worldwide, assets would become stranded regardless of whether new climate policies are implemented, despite the decline in the demand for fossil fuels. While Mercure et al. (2021) assessed the values of global human and produced capital in different sectors and compared their natural depreciation rates to those needed to meet climate objectives. Jaccard and Rivers (2007) investigated the relationship between the turnover rates of buildings (71.5 years), urban form (117 years), equipment (20-30 years), and various carbon

emission delay options, and indicated that an early reduction for long-lived capital assets is economically advantageous to avoid the impact of capital inertia. Inspired by this, Shalizi and Lecocq (2009) separated the capital stock into 4 groups each with their own lifetime: consumer durables with lifetime of 5-15 years; buildings including power plants and factories lasting 15-40 years; infrastructure such as road, rail, power distribution networks lasting 40 to 75 years; with land use and urban form lasting longer than a century. They concluded that assets last longer than 15 years had a direct impact on global greenhouse gas emissions in 2000, as the emissions from power plants and factories are usually from electricity and heat that take up 25% of total emissions; similarly, more than 10% of emissions are from transport systems with 40-75 years' lifetime; lastly, emissions from urban sectors take up more than 5% of total GHG emissions.

While the building stock has a considerable influence on the macro-level economy and carbon emissions, research exploring the dynamics of the building stock seem to be quite sparse. Yang and Kohler (2008) created simple models of infrastructure and building stocks using 2005 as the base year. The 2005 starting stock includes buildings built between 1978 and 2005 was considered to have numerous age cohorts. To predict stock evolution from 2005 to 2050 on a five-year basis, a cohort-based technique was used to identify the average age of buildings built after 2005. They found that building lifetime affects future mass flows and environmental consequences, even though their model did not explicitly reflect dynamic ageing. Hu et al. (2010) evaluated Chinese building stock using a normal lifespan distribution function. Population and per-capita floor area were used to estimate building stock. The authors examined national and city-level

possibilities of future demand for steel and concrete for Chinese residential structures. Huang et al. (2013) conducted a similar study making the assumption that the lifetime of concrete buildings follows a normal distribution, with an average lifespan of 30 years for brick-concrete buildings and 40 years for reinforced concrete buildings. The heterogeneity of building components and their corresponding service life, however, has not been specifically addressed in capital inertia research. Understanding the relationship between capital investments and the inertia of built structures would enable us to identify the key elements that have the greatest impact on the climate change trajectory of the building sector and potentially mitigate the risk of investing in assets that may turn unprofitable in the event that the economy must undergo a transition more rapidly than its investment inertia allows.

1.1.3 Survival analysis

Typically, an average service life is used for building components in LCA studies, instead of accounting for products' real exposure to a range of situations. Each component is assigned their own designed service life by their manufacturers, while in reality, some survive longer than expected and others retire sooner. Similar to human demography, while old buildings mature and eventually die, new buildings are created via investments, resulting in a distribution of building ages at any given moment. The age distribution of investments led to the development of vintage capital theory in the 1960s. This also developed to take into consideration the impact of vintage on productivity in models of growth and technological change (Solow, 1960). A vintage capital structure exists in an economy when machinery and equipment from various generations have varied productivity or face distinct depreciation rates (Benhabib and Rustichini, 1991). Having said that, research and theory surrounding the evolution of capital stocks and their turnover timescales is noticeably absent from the vintage capital literature.

As mentioned before, turnover timescales of building substructures offer key understanding of the capital inertia of buildings and their resistance to climate policy. What matters is the probabilistic survival function of the population of items, not the expected service life of it. More efficient building maintenance and reduced environmental costs might result from a better knowledge of the survival times of building components (Silva, de Brito & Gaspar, 2016; Firlag & Piasecki, 2018). Consequently, it is common practice to take into account the retirement age of components as determined by a probabilistic survival function. The dynamics of investments in a building may be described as a collection of survival functions for all the individual components that make up the building. In the UK, it was widely assumed in economic modelling that all assets of a particular kind were retired simultaneously when they reached the average or expected service life for that group. A delayed linear mortality function was then implemented, with the assumption that all assets would be retired between the ages of 80 and 120% of their typical service life (Eurostat-OECD, 2013). However, more recently this approach has been replaced in national accounts methods with a symmetrical normal distribution with the 95% probability fall within two standard deviations of the mean is extensively used (Eurostat-OECD, 2013).

A variety of survival distribution functions are generally accessible for the purpose of describing the survival process across different areas. On the other hand, the literature on survival analysis of buildings is limited as there is little information available on the history of building stocks (Aksözen et al., 2016). Miatto et al. (2017) conducted tests on different probability density functions and discovered that the lognormal distribution provided the most accurate representation of a large amount of real data on building lifetime in Japan, where buildings have relatively short lifetime with an average lifetime of less than 30 years. They also studied Salford in the UK, where buildings are significantly older, and a Gompertz distribution was found to best suit those data.

When viewed as capital stock in national accounts (OECD, 2001), the assumed survival distribution of buildings differs between nations, being variously described by normal, Gompertz, Weibull, lognormal, and Winfrey distributions (OECD, 2001; OECD, 2009; Johnstone, 2001; Bohne et al., 2006; Müller, 2006; Aksözen et al., 2016). For example, Zhou et al. (2019) used the Weibull distribution to estimate the lifetimes of residential buildings in China. In the Netherlands, survival probabilities of buildings were best described by Weibull distributions (OECD, 2009). In this PhD I employ the widely used Gamma distributed mortality function of Schmalwasser and Schihlowski, (2006) which underpins the EU national accounting system. This is explained in detail in chapter 2.

1.1.4 BOQs and quantity estimates in building procurement

Before buildings are built it is invariably necessary to predict the construction costs so the investor can gauge affordability and select appropriate designs and materials. This process is known as creating a bill of quantities (BOQ), and it is often performed by a quantity surveyor.

The BOQ is a detailed inventory of the building's components that includes not only the quantity, area, volume, and weight of each part, but also, and most importantly, the purchase and installation costs of each part. Given its proprietary nature, getting a BOQ from a quantity surveyor, architect, construction contractor, or organization is usually difficult. Since a BOQ is used for cost estimating and bidding tasks to subcontractors, it only provides the quantities for structural parts and their costs. It fails to include any further costs to make the building livable. As such, a basic BOQ is not very useful for a comprehensive analysis that covers every aspect of a building. Usually, domestic appliances and white goods are empirically catalogued using technical literature.

1.2 Depreciation and maintenance dynamics

Post construction, effective building maintenance planning for large building cohorts still is one of the most challenging works for building investors, partly because each building component has a large variety of service lives. Investmenttimescale profiles are important when exploring what happens after a building is built.

1.2.1 Different forms of depreciation

Depreciation is the term used in national accounts to describe the decrease in the value of fixed capital as a result of wear and tear, damage, aging and obsolescence (Karabarbounis and Neiman, 2014). However, there is yet to be a worldwide

agreement on the right depreciation assumption even those these underpin all national accounting systems (OECD, 2001). In reality, a number of approaches have been used. In the US, National Income and Product Accounts (NIPA) formally recognized geometric depreciation as the 'default' assumption, whereas in the UK, Office for National Statistics (ONS) and a few other national statistical agencies, straight-line depreciation is the norm.

Geometric depreciation is assumed in all macroeconomic accounts of capital turnover where there is a relatively high level of aggregation such as at the cohort level. This includes all the components of that same type that are produced within a defined period of time and generally share certain traits (Sliker *et al.*, 2018). Oulton and Srinivasan (2003) used the geometric assumption in their empirical study for the UK fixed assets and concluded that "the geometric assumption is found to fit the facts quite well". According to Schmalwasser and Schihlowski (2006), members of comparable components cohorts follow similar retirement paths and so have common mortality functions, which is linked to the cohort's average service life. This underpins the application of geometric depreciation to building components at the cohort level in chapter 2.

1.2.2 Maintenance threshold

Buildings must comply to a number of performance standards throughout their life cycle, including safety, watertightness, foundation compatibility, aesthetic comfort, durability, and so on. However, there are times when the building components no longer function as expected after a certain amount of time has passed, and these are the times maintenance actions should be performed. According to Gaspar (2009), regardless of the simplicity of the concept of the service life, it is incredibly challenging to estimate replacement of depreciated assets, or maintenance, through models because it varies depending on the performance criteria, which depends on time, place, investor as well as the cultural, financial, political, visual and environmental context of the buildings. According to Iselin and Lerner (1993), there is no adequately reasonable threshold for deciding whether or not to intervene in building decay, only subjective criteria. According to Aikivuori (1999), only 17% of performance threshold judgements are genuinely based on building degradation, whereas 44% of maintenance is completed based on subjective reasoning. In this PhD, six maintenance thresholds have been provided to show the different degrees of maintenance, while only one is chosen for the central simulations.

1.2.3 Maintenance

Traditionally, maintenance is described as work done on existing structures to retain, repair, or improve components of a building, its services and surroundings, to their original level while not falling below the acceptable performance level (Le et al., 2018). According to Chong et al. (2016), buildings require maintenance during more than 90% of its lifetime after construction and about 75% of overall spending is on maintenance. It is an important yet complex process.

Generally, maintenance studies are mostly focused on reactive/unplanned maintenance and preventive/planned maintenance. Reactive or corrective maintenance refers to the maintenance actions conducted after an equipment malfunctions, whereas preventive maintenance is the regular, scheduled maintenance actions to prevent failures. A range of quantitative frameworks have emerged to evaluate maintenance dynamics. These largely fall in the domain of operational research. Gholami and Hafezalkotob (2018) combined data mining and time series models to predict a prognostic preventive maintenance scheduling based on past data and failure patterns. Kwak et al. (2004) ran a Monte Carlo simulation that examines conditionbased preventive maintenance by having maintenance staff do a fixed-period inspection to identify failure on air-conditioning facilities. Kim et al. (2018) applied a multiple regression analysis, based on the payment record related to the maintenance of educational buildings, to create a maintenance determining model. Farahani et al. (2019) also used historical data on the spending expenditure of maintenance of four university buildings over a 42 year period to construct a life cycle cost (LCC) model. More complex mathematical models have also been used in maintenance planning. Kwon et al. (2020) developed maintenance models using case-based reasoning and generic algorithms. Konior and Stachoń (2021), and Otmani et al. (2020) used fuzzy sets and neural networks to handle the uncertainty and vagueness in predicting the occurrence of the wear process in maintenance studies. Quite often, the Building Information Modelling (BMI) framework, which is able to create a digital representation of building information usually within 3D models, is used when planning maintenance (Myungdo and Ung-Kyun, 2020; Leśniak et al., 2021; Zima et al., 2020). Nevertheless, even with maintenance planning in place, there is still a risk of reactive maintenance occurring, which further complicates maintenance estimation. This underlines that maintenance scheduling is inherently difficult to predict, and the reasons for this have not been fully articulated.

1.2.4 ROI

When an investment is made, there is generally an expectation of a return. Profitability is considered when investing in buildings by expecting an 'income' generated from the investment. Return On Investment (ROI) is used for measuring this additional 'income'. The term "return on investment" describes the amount of money gained (profit) from an investment relative to its original cost. It demonstrates how effectively and efficiently capital is being used to generate profits. By considering the ROI, investors may be able to determine whether funding a certain project is a viable decision. In the residential building sector, investors expect their returns through rental income (Bracke 2021; Mills, Molloy, and Zarutskie 2019) or avoided rents through ownership.

Resources are invested in the creation of a residential building, with a goal of producing returns over a range of timescales from seconds to centuries, even if those returns are only ever visible in aggregate through building productivity as expressed through say rents. For example, gas may be used to heat a space, which may have an impact for say hours. Electricity might be used to light up a room for less than a second. In both cases, resources are still being invested, and returns are expected over time by staying long enough while rental returns are received. However, the timescale of rental returns is significantly longer compared to the time it takes to light a room, consequently, consistent investment into the future is necessary to generate these returns.

Typically, studies calculate a property's ROI by dividing the annual income produced by the purchase price i.e. these are annual returns on investment, which are akin to capital productivities. Chambers et al. (2021) manually collected financial data at the property level for the institutional real estate portfolios of four Oxford colleges from 1901 to 1983, found out that the average annual return is just under 5%/yr, and more than 90% of the returns are below 8%/yr. They also discovered, during the last two decades of their study period, the average annual returns for agricultural and residential properties are about 3%/yr, but the average annual return for commercial real estate is above 6%/yr. Jordà et al. (2019) analysed four main asset classes in the advanced economies from 1870 to 2015, resulting in an average ROI (including price change) of 7%/yr, which is indistinguishable from the annual returns on capital observed at the global scale (Jarvis pers comms). Findings from both studies reveal a disparity between the current average ROI prediction for 2022-2050 for all properties in the UK, which stands at 5.1% (Statista, 2021), highlighting the productivity gap the UK currently finds itself in.

Cumulative ROI represents the evolution of the initial investment over a specified time period. It serves as a reliable indicator in the estimation of the payback period for a debt, such as a mortgage. In this PhD, cumulative ROI is calculated by dividing cumulative rents by cumulative investments which are composed of investments in construction, operation and maintenance, then I use it to assess the maintenance strategy and find a suitable maintenance threshold for simulation.

1.3 Timescale dynamics in the net-zero transition

1.3.1 Decarbonisation of the building sector

The aim of the Paris Agreement is to limit the increase in global average temperature to less than 2 °C compared to pre-industrial levels, and to take actions to ensure that temperature rise remains below 1.5 °C (UNFCCC, 2015). The government of the UK has endorsed emission reduction targets that would result in achieving net-zero emissions by the year 2050 (European Parliament, 2020). This suggests a rapid decrease in global emissions over the next few decades (Rogelj et al., 2018).

Given that around 40% of energy-related worldwide carbon emissions are attributed to building and the construction industry (OECD, 2022), without a doubt, buildings are a primary target when it comes to reducing energy and carbon emissions (Röck et al., 2020). Even though climate change issues are often framed in the present tense, it is critical to understand the implications of today's construction and maintenance activities on the behaviour of buildings in the future. Investments in long-lasting capital stocks like buildings and the resulting emissions hold distinct features that set them apart from other forms of investment. Decisions about investments in buildings may establish energy and emission lock-in for extended periods, perhaps a century or more. Achieving a low carbon-built environment and meeting the 2050 net zero ambition requires a transformational shift in the construction sector. Therefore, understanding the turnover inertia of carbon emission in built structures is crucial in making climate decisions.

23

1.3.2 LCA and carbon dynamics

It is important to understand how resources are employed to build, maintain and operate buildings during any transitioning towards net-zero emission targets, as novel design tactics and corresponding new maintenance plannings might be necessary in addressing the current climate issues. The most well developed and widely itemized method for analysing environmental impacts associated with structures is life cycle analysis (LCA). It is a framework for quantifying and assessing the environmental consequences of a product or service system's life cycle from cradle to grave or similar (Nawarathna et al., 2021). Yet, most LCA studies have failed to include the dynamics of carbon emissions in the built sector. This is covered in more details in chapter 4. Similar to monetary investments, resources and carbon emissions in structures are also dynamic, because all resources, and associated carbon, flowing in to/out of the buildings during the construction period, are then having their substructures being maintained over a wide range of timescales. In this way, the separation between embodied carbon and operational carbon in LCA studies seems irrational, as resources are always being invested into the building only over different turnover times. Equally, this view could be applied to operation and maintenance as they are all just being allocated over different lengths of service life. More precisely, operation is essentially the maintenance of shorter-lived components, e.g. lighting up a room requires a continual 'maintenance' of electricity simply because lighting a room lasts seconds or less, and it is this framework that informs the estimates of operational and embodied energy and emissions which have become central to building performance assessments (Ibn-Mohammed et al., 2013). Therefore, the

traditional separation of construction, operation and maintenance phases is challenged in this PhD.

1.4 Thesis aims

This thesis seeks to comprehend the role of the dynamic characteristics of building investments in the capital inertia of the building sector during its transition towards net-zero. The focus will be on the relationship between the capital investments in buildings and their turnover timescales. It will also include the implication of the turnover dynamics in building maintenance and hence its longterm returns, as well as its impact in making carbon related decisions under the net-zero policy. The insights generated will provide a novel foundation for future work in both the economics and sustainability of buildings, holding significant relevance for various stakeholders, including policy makers, regulators, housing investors, and homeowners. More specifically, understanding carbon lock-in more accurately within the timescale framework will help policymakers identify the timescales that hinder the transition to a net-zero economy and help them create more effective policies. Regulators can benefit from the turnover dynamics perspective in making informed investment decisions to minimize carbon during the journey to net-zero. The turnover dynamics implied in maintenance also offers a practical framework for homeowners cooperating with utility companies in resource management, effective maintenance planning and service delivery, as rapid transitions necessitate swift changes in housing operations and maintenance practices. Housing investors should find the research valuable when making investment decisions about new housing constructions. Thus, this thesis not only addresses academic inquiries by introducing the concept of investment-timescale distribution, but also provides practical knowledge for stakeholders in achieving net-zero target, bridging the gap between theoretical research and practical application.

To that purpose, three research chapters are presented covering the following objectives:

Chapter 2: How much and for how long? The investment-timescale distribution of residential buildings

This chapter specifies the relationship between the investments in building components and their turnover timescales to construct the investment-timescale distribution of a cohort-level representative building (RB).

Chapter 3: An investment-timescale perspective of the maintenance dynamics of residential buildings

This chapter uses the investment-timescale distribution of an RB from chapter 2 in conjunction with the performance threshold of a depreciation process, to simulate the dynamics of the maintenance schedule of the RB, and explores how the dynamic investment and maintenance affect the financial performance of a UKbased RB.

Chapter 4: Building inertia and climate change

This chapter applies timescale dynamics to the carbon emissions and energy use of the RB to create the associated carbon- and energy- timescale distributions. From this, together with timescale-specified maintenance schedule, I quantify a cumulative carbon budget under a business-as-usual and 2050 net-zero scenario.

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2 How much and for how long? The investment-timescale distribution of residential buildings.

Abstract

Buildings are arguably the basic physical structure underpinning the functioning of society, and their creation and operation represents one of the largest capital investments that society makes. This investment can be seen as the production of a structure which has to last long enough to yield a net-positive, time-weighted future return, with the service life of the building defining this timescale. However, it is clear that buildings are themselves comprised of a vast array of components, each with their own service life. In this chapter, I approach buildings as assemblages of components, or substructures, with different average service lives ranging from seconds to centuries.

By considering the components of a building aggregated with respect to timescales, rather than conventional construction categories, I am able to define the turnover dynamics of a building through specifying the relationship between turnover timescale and size of investment, something I refer to as the investmenttimescale distribution. I estimate this distribution for a single development from its bill of quantities (BOQ), which gives us access to a monetized, >2000component decomposition of a building. Borrowing from Chester et al. (2024), I then extend this single building analysis to the cohort level or representative building (RB) by recognising that the stated service life of any component is simply the first moment of its respective mortality function. Through assuming a wellestablished mortality function for assets that accounts for the observed correlation between first and second moments, I create the investment-timescale distribution for the associated population of buildings.

The result is a near continuous, yet multi-modal investment-timescale distribution for an RB which has an overall first moment of 38 years. The four component modes have representative timescales of <2 years, 9 years, 26 years and 53 years respectively, describing four aggregate classes of investments within the RB. Borrowing from Duffy and Henney (1989), and Brand (1994), I conceptualised these four timescales in the investment-timescale distribution as non-interacting shells, layered from the longest timescale material exterior to the shortest timescale information-rich interior. I speculate that this structure is necessary to create and maintain the high-information environments that people occupy, through buffering the ephemeral internal space of the building from its aggressive/variable external environment. I note that the 38-year mode is close to average working lifetimes, suggesting a strong link between the overall

investment pattern in buildings and the pattern of returns expected by its occupants.

2.1 Introduction

In the region of 13 percent of global GDP is attributed to the construction sector, and real estate comprises more than half of all capital wealth (Savills, 2023). Furthermore, around 40% of the raw material consumption, 40% of the global energy use, 25% of water use, 12% of land use and 33% of carbon emissions can be attributed to the building sector (Fumo et al., 2010; Monahan and Powell, 2011; Chang et al., 2012).

Because of their decades-long service lives, buildings are also key determinants of the inertia of economies, and this not only moderates growth, but also plays a critical role in determining the turning circle of economies when considering transitions to net-zero (Chester et al., 2024). As a result, it is becoming ever-more important to understand the dynamics of built structures from their inception in the design and construction process, through their operation and maintenance, and finally to their end of life. It is also important that, where possible, we set this in the context of the macro-economy that these built structures underpin, and the resource and climate change constraints emanating from this.

All capital investments are made with the intention of creating returns over a certain period of time. These are usually years, if not decades, into the future. The creation of a capital investment requires an investor to continue investing in the associated structures until they are prepared to give up the return or the return ceases. Consequently, this dedication to future activities results in inertia. Inertia,

as the resistance of an item to oppose changes in its trajectory, is equally applicable to economies and other physical objects, even if the inertia of an economy might be described differently from the inertia of a building.

The creation of a building can be viewed as an investment of finance and resources that results in a structure yielding returns over its service life (OECD, 2001). This was first demonstrated thermodynamically by Jarvis and King (2024), who showed how investments in energy efficiency can lead to increased energy use. Residential buildings are generally considered to have service lives in the region of 50-100 years (e.g. Giordano, 2012, Cuella-Franca & Azapagic, 2012, Aktas and Bilec, 2012). However, when finance and resources are invested to make a building, they are actually used to make an array of sub-structures, with the building consisting of a large number and array of these: walls, floors, foundations, finishes, etc.. Each of these substructures also has a unique service life, some of which are shorter and some longer than that of the building they serve. For example, carpets have service lives in the region of a decade (BCIS, 2006), whereas bricks can have service lives of centuries (BCIS, 2006). Given that this applies to every element of the overall built structure, a more accurate view of a building than simply a structure with a particular service life, is as a complex assemblage of substructures, each with their own service lives.

To understand the dynamics of buildings, following Chester et al., (2024), I propose that it is important to estimate what proportion of the overall investment is made into each substructure, and hence into each possible service life category. Knowing this 'investment-timescale distribution' should not only help quantify the

temporal distribution of future returns; it should also underpin the scheduling of the maintenance and operating costs implicit in any given building design. Specifically, a structure requires all its sub-structures to function, so all elements with service lives less than that of the structure must be replaced within the lifetime of the building, with the shorter-lived elements being replaced more frequently. This raises a critical issue: if maintenance is simply the replacement of substructures, then both the initial construction and the subsequent maintenance of a structure are both simply investments, albeit made at different times and in components defined at differing spatial and temporal scales.

We can extend this view to the operation of the building, with 'consumption' of energy, to run the building say, being simply an investment in maintaining the temperature gradient between inside and outside the building, with a service life of say hours. Although these utilities are driven by consumer behavior – motivated by factors such as thermal comfort, they play a critical role in impacting future value of a property and its inhabitants over a wide range of timescales. This view is appreciated in the concept of productive consumption, where consumptive actions that not only meet current needs but also contribute to future productivity (Winslow, 1951). Behrman and Deolalikar (1988) demonstrated this on a microeconomic level by empirically examining how expenditure on nutrition and health improve workers' efficiency and productivity. Hicks (1979) extended it to the macroeconomic level by analysing how consumptions in health, nutrition and education contribute to improvements in human capital, leading to improvements in productivity and economic growth. Wheeler (1980) further analysed these human needs in African, Asian and Latin American countries, nutrition, finding that expenditure on nutrition, education and health have long-term effects to the overall economic output, especially in economies with lower per capita income. Steger (2002) explored this view from the economic growth perspective, exploring productive consumption with two distinguished models: human-capital model and labour-efficiency model, both implied consistency with empirical economic observation. In the context of building, adequate space heating, for example, is crucial in ensuring the building remains habitable, comfortable and maintaining occupants' satisfaction, which, in turn, enhances structure value and the future returns of both the building and its occupants. Therefore, by integrating operation within the investment-timescale dynamics, I acknowledge its important impact on future returns over all relevant timescales and not simply those greater than one year imposed by annual accounts. Certainly the investment-timescale perspective calls for this wider view of investment dynamics while ensuring a more accurate understanding of building investments and their turnover timescales.

Traditionally, construction, operation and maintenance of buildings are seen as three distinct phases, here I attempt to challenge this view, through considering the full spectrum of possible service lives associated with buildings and how financial and resource investments are distributed with respect to these.

The idea of a building being highly dynamic and changing through time has been discussed (Grant and Ries, 2013; Itard and Klunder, 2007; Jostein Hovde and Moser, 2004), but has seldom been quantified. Perhaps the most developed framework for doing this is within product survival analysis and the service-life data associated with this. The service life of a product is the period of time in which

a product is in use. Service life can help to decide the frequency of activities required to operate, maintain and replace products and systems (Grant & Ries, 2013). Products and materials have service-life predictions based on their composition, design and installation quality, as well as expected maintenance regime and environmental exposure (International Organization for Standardization (ISO 15686-1, 2000). Integrating product service life into dynamics Life Cycle Analysis (LCA) might help to enhance the representation of the building's operation phase and progress the evaluation of building's life cycle environmental impacts.

A number of studies have been undertaken to determine the impact of service life assumptions on LCA studies (Strand and Hovde, 1999; Graveline, 2005; Salazar and Sowlati, 2008; Thomsen and van der Flier, 2009). There is a lot of variation in building service-life estimation in LCA studies. Buildings as a whole, as well as their substructures, are considered dynamic due to the wide range of service lives of building components (Itard and Klunder, 2007). Duffy and Henny (1989) believed a buildings' initial life cycle should be 50 years, while Mithraratne and Vale (2004) modelled residential structures using a 100-year lifespan, compensating for changes in component service life via variation in periodic maintenance. Kellenberger and Althaus (2009) simplified their LCA by assuming an 80-year service life for building components in their study. According to Marteinsson (2003), the average lifetime of houses in Iceland are frequently assessed at 60-70 years. They also attempted some disaggregation of this, noting service lives for windows ranged from 5-10 years to 80 years. Nordby et al. (2009) for more than 1500 years, so that second- and third-service lives may be suitable for some materials. Huuhka and Lahdensivu (2016) did a statistical analysis on 50818 demolished buildings in Finland and concluded the average lifetime of residential buildings is 58 years. According to Paulsen (2003), depending on whether the determinant of service life is economic, aesthetic or functional, service life of flooring materials ranges from 5 to 40 years. Scheuer et al. (2003) measured the embodied energy of different materials with assigned lifespans and concluded that materials with a high replacement rate have high embodied energy. Islam et al. (2011) have compared yearly greenhouse gas emissions and embodied energy of buildings with different lifespans. Collinge et al. (2013) integrated temporal variability of processes in energy production industry and calculated timeadjusted climate change impact to underscore the importance of considering timescales in building LCA studies.

The majority of life cycle assessments, however, make an assumption about the stability of a structure's service life that is inconsistent with the nature of buildings (Verbeeck and Hens, 2010). Because buildings have a lengthy service life—some lasting longer than others—modeling structures requires special considerations (Borg et al., 2001). Buildings are difficult to model because of their scale, complexity, dynamic characteristics, and demands of the occupants (Scheuer et al, 2003). As such, a great deal of uncertainty has been associated with service life estimation (Lacasse and Sjostrom, 2005; Itard and Klunder, 2007; Bergsdal et al., 2007, Brattebø et al., 2009; Verbeeck and Hens, 2010). The service life of a building is influenced by many factors, such as its composition, the standard of its design

and installation, the frequency of planned maintenance for its materials and systems, and its surroundings, including temperature and exposure (ISO 15686 Part 1, 2000). In a lot of cases, it is also based on manufacturer's data and empirical in-situ performance (Renne et al., 2022). Furthermore, service life prediction specifies the kinds of activities needed for maintaining, repairing, and replacing of building materials and systems as well as how often they must be done. Establishing a more thorough understanding of the variable nature of structure lifetime is crucial as a consequence.

I propose that the investment-timescale distribution of a building provides an appropriate lens through we can start to quantify and understand these dynamics, since this would indicate the relative importance of each service life in the overall built structure, with large investments at particular timescales reflecting the importance of those timescales in the dynamic characteristics of the overall building. There is significant potential in it determining the importance of a structure or a class of structures in the inertia of an economy through the lock-in it represents into a particular pattern of energy use and emissions. For climate change this turns out to be a key consideration because capital inertia plays such an important role in determining the 'turning circle' of the economy when attempting to avoid future emissions in a transition scenario (Bertram et al., 2015).

2.2 Aims and objectives

In this chapter, I am going to construct the investment-timescale distribution of a particular residential building from the itemized bill of quantities (BOQ) used to

tender for the original construction. This will exploit proprietary data on the expected service lives of the building substructures itemized in the BOQs, and additional information on general operating costs, furnishings and fittings. From this I then estimate the investment-timescale distribution of an RB for a cohort of residential buildings sector within the UK macroeconomy. I do this by assuming that the expected service life of each substructure is simply the first moment of a more general timescale-dependent mortality function for that substructure class. Applying this mortality function to each of the itemized substructures allows us to reclassify the money invested into *named substructures*, into the money invested into *turnover timescales*, thereby constructing the investment-timescale distribution I am after. This investment-timescale distribution is used to decide the maintenance schedule that takes place post-construction and the spectrum of the return created (see Chapter 3), and their implication for reaching the net-zero carbon target of the Paris Agreement by 2050 (see Chapter 4).

2.3 Methodology

2.3.1 An expanded Bill of Quantities

Before most buildings are constructed, it is usual for the quantity surveyor attached to the project to produce a BOQ. This is an itemized list of the components of the building detailing not only the physical quantities of these components, but also the cost of each component to both purchase and install. The list is generally exhaustive given the BOQ is used to produce a bottom-up estimate of the projected construction cost of the overall project which is central to the tendering and subsequent construction (Trainor, 2019). Unfortunately, this makes BOQ proprietary and hence very difficult to acquire by third parties.

Here I analyse the BOQ for a residential development comprised of 5 apartments and 5 houses, with a total internal floor area of 777 m². Although this development has an above UK average specification, the fact that it is comprised of 10 dwellings goes some way to alleviating an N=1 analysis when considering its representativeness per unit area costs. The BOQ is broken into 10 sections comprising frame and substructures, floors, roof, stairs, walls, windows, doors, finishes, fixtures & fittings and site preparation works. In total, there are ~2000 costed items within these 10 sections. For each item, a detailed description is given along with the estimated unit cost.

The BOQ only covers the construction phase of the building structure. What this overlooks are additional investments made in making the building habitable. As a result, I have added furniture and white goods costings derived from a popular furniture and appliances retailer (IKEA). Because I aim to account for all relevant timescales active in the turnover dynamics of buildings, I also include expenditures traditionally associated with their operation. Operational expenditures are those used to run the built structure, including for lighting, powering appliances, heating and cooling. I view these as investments in exactly the same way as construction costs: they are simply investments into relatively short-lived substructures. Take space heating for example. As touched on previously, this is the money invested in actively maintaining the desirable temperature difference between the inside and outside of the building, which although simple, is as much a substructure of the building as its walls. I take these costs to be represented by the per unit area utility bills of an average UK house. The resultant investment distribution reflects a notional new residential building that has undergone no depreciations.

2.3.2 Product average lifetime assignment

For each component on the BOQ I assign an expected service life or design lifetime. I take central cases of lifetimes provided by the Building Cost Information Service (BCIS) Life Expectancy of Building Components (2006) guide, which presents the results of surveys of the expected lifetimes of common components in buildings. Where exact matches to components could not be found, a combination of manufacturer and published literature values were used. For the residual cases where items were cited as lasting the lifetime of the host building, a value of 75 years was assumed (Schmalwasser and Schidlowski, 2006). The lifetimes of excavation, disposal, temporary protection, cleaning & testing, and mechanical installation during construction period are assigned 1 year service lives because these activities/components are only required during construction. White goods and additional furnishings and fittings were assigned service lives in line with either manufacturer warranty or published literature values. In the absence of a literature on this, the running costs of appliances were assigned service lives based on the expected duration of the service provided. For example, investments made in vacuuming are assumed to be remade weekly, as are investments in washing clothes. Investments in warming a room are assumed to last hours, and those in lighting the room seconds.

2.3.3 Mortality functions and the representative building

Although it is often convenient to assume all products are retired once they achieve their expected service life, experience tells us that, similar to people, some assets retire before they reach their expected service life, while others may last much longer than expected. For an individual component of a building, we might view the retirement age as probabilistic, determined by a specific survival function (Volland et al., 2020). As a result, setting aside any maintenance effects (see Chapter 3), the dynamics of a specific building might be seen as a random draw from the array of probabilistic survival functions of all the ~2000 components comprising that building. Although such sampling might shed light on the possible variability in dynamics between say UK residential buildings, it is not very informative when attempting to shed light on the behavior of large cohorts of buildings as would interest someone attempting to make policy or investment decisions in this space. As a result, I take a different approach inspired by the recent work of Chester et al., (2024), where I incorporate the full dynamic of the mortality function of each of the ~2000 components of the building. While mortality functions usually effectively account for functional variability due to normal wear and tear, aging, foreseeable obsolescence due to technological changes, and risks of losses from accidental damages, they do not cover consumerdriven component replacement due to social reasons, such as changes in fashion and status preferences.

Each component of the building is represented by an amount invested to buy and install it, and an expected service life. I now apply a mortality function to this which retains the same expected (mean) service life, but distributes the investment over a range of service lives from 0 – 250 years with varying likelihoods, attempting to reflect the likely survival characteristics of that component. Although mortality functions vary significantly between products and services (OECD, 1998), they are found to possess generic properties, and in particular that the second moment of the mortality function (say the standard deviation) is closely related to the first moment (say the mean). There is good reason for such a relationship in that the longer something last the greater the spectrum of ways it can both die or be protected to survive longer (shorter) than expected.

In this study I use the Schmalwasser and Schihlowski (2006) mortality function used by the German Federal Statistics Office because it captures the variance of the mortality function depending on the expected service life. Specifically, the fraction of total investment, f, is gamma distributed over timescales T with respect to the expected service life \overline{T} (see Figure 2.1)

$$f = 9^{9}(8!)^{-1}\overline{T}^{-9}T^{8}e^{\frac{-9T}{\overline{T}}}$$
(1)

The selection of this function was predicated on empirical motor vehicle registration data given this has always represented the most observed survival process in the economy. However, (1) has since been tested extensively on a broad range of sectoral classes through its adoption by the German Federal Statistics Office.

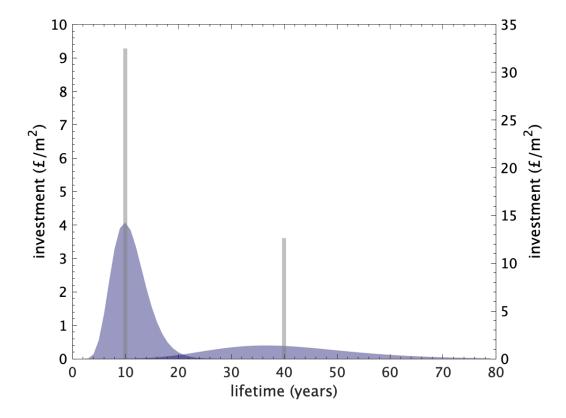


Figure 2.1 A schematic representation of the Schmalwasser and Schihlowski (2006) asset mortality function as used by the German Federal Statistics Office. The bar shows the first moment of the distribution (*T* in equation (1)), which represents the expected service life.

Having redistributed the investment in each component appropriately across all relevant timescales, I can now re-aggregate these investments for each of these timescales and hence produce the investment-timescale distribution that I am seeking.

The investment-timescale distribution I produce now no longer represents the single building covered by the BOQ. Instead, it represents the equivalent investment-timescale distribution of a very large cohort of these buildings exposed to the likely array of disturbances that give rise to patterns of mortality in line with the Schmalwasser and Schihlowski (2006) mortality function. As such, I argue that the investment-timescale distribution I produce is that for the Representative Building (RB) for that cohort i.e. it is a measure of the likely

turnover dynamics of the cohort. This is borrowed from the concept of representative agent in the economics, which refers to a typical decision-maker within a given category. It is also worth noting that the names of components now get lost at this point in the framework as I have re-aggregated investments on the basis of their turnover timescale as opposed to their name or conventional categorization (Chester et al., 2024). So any particular timescale in the distribution is comprised of all >2000 components but to varying degrees.

Through extending the analysis from the single building in the original BOQ to a cohort of buildings and consequently to cohorts of building components with similar timescales, I aim to serve the interest of decision makers in understanding the entire UK building sector rather than focusing on one single house. I also aim to extend the reach of my analysis. Because the RB is derived from an anonymous BOQ of a UK residential development, the primary focus of this research is on UK residential new builds. However, it is important to note that the methodology developed here is not confined to this specific context. The investment-timescale distribution approach can, in principle, be applied and tailored to other building categories and geographic locations. This flexibility allows the methodology to be adapted to suit various settings, enhancing its broader applicability.

2.4 Results

Figure 2.2 shows the investment-timescale distribution of both the individual components of the building specified by the BOQ (the grey vertical bars), and also the RB distribution derived from this (the black curve). Unsurprisingly, there is a clear concentration of expenditures on zero to one year timescale substructures

associated with what we commonly refer to as 'operating costs', but which I characterize as short-lived productive structures. Beyond this, components span service life timescales from 1 – 150 years or more, with varying levels of investment. After applying the mortality function and re-aggregating, I find the RB distribution is near continuous with two apparent modes at 1 and 27 years and a first moment (mean) of 37.8 years.

To explore this further I look for the minimum number of distributions that describe the full RB distribution. I achieve this by fitting multiples of equation 1 to the RB distribution, under the assumption that any sub-distribution will also follow the same Schmalwasser and Schihlowski (2006) mortality function – i.e. that their first and second moments are equal and gamma distributed. Again, the justification for this approximation is that the longer substructures last, the more likely they are to express either longer or shorter than expected service lives.

Figure 2.2 and Table 2.1 show the results of the partitioning of the RB distribution, which I find can be described by four sub-distributions. Again, the shortest of these is the approximate one-year expenditures associated with the operation of the RB as largely expressed through the utility bills. This accounts for about 14 percent of overall investments in the creation of the RB (Table 2.1). Obviously this proportion rises substantially post-construction, because the associated substructures turn over so rapidly and hence require near continual (in the context of the RB turnover dynamics) replacement and/or maintenance (see Chapter 3).

Chapter 2: How much and for how long? The investment-timescale distribution of residential buildings.

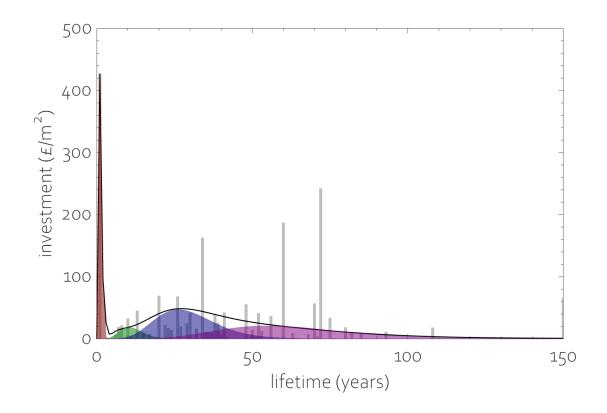


Figure 2.2 The investment-timescale distribution. Bars show investments in individual components of the building described by the BOQ. Black line is the distribution of the Representative Building (RB). Individual distributions under this (coloured) are an estimated partitioning of the RB distribution into four constituent distributions with representative timescales and contributions shown in Table 2.1.

Table 2.1 The partitioning of the Representative Building (RB) distribution shown in Figure 1. Here, equation (1) is used to describe each sub-distribution. Four sub-distributions were found to characterize the RB adequately, and these have been parameterized by fitting to the RB distribution using nonlinear least squares. Uncertainties are estimated 95 percent confidence intervals.

Timescale (years)		Relative contribution (percent)	
1.28	(1.27 - 1.29)	14.69	(13.53 - 13.92)
11.47	(10.85 - 12.10)	5.34	(4.43 - 5.55)
29.58	(28.99 - 30.17)	34.82	(31.32 - 33.74)

Figure 2.3 shows the breakdown of the ~ one-year expenditures, indicating how the operational costs can themselves be considered as investments spanning a continuous range of timescales from seconds to months, albeit with high turnover rates. Operational costs here are the costs needed for running the structure, reflected by the utility bills. For example, the use of washing machines, irons and vacuum cleaners etc. In the absence of more granular data, I partition the operational costs into three distinct timescales of hour, day, and week.

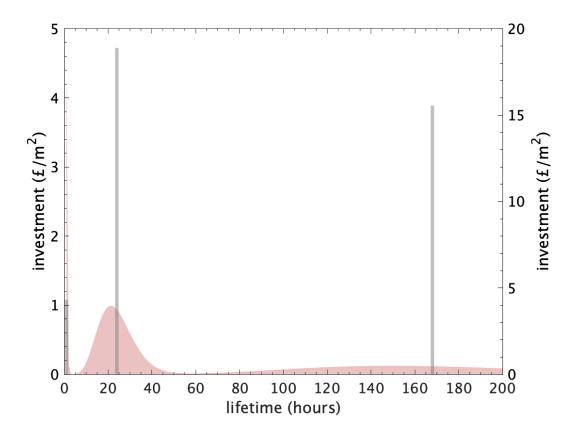


Figure 2.3 The lifetime distribution of monetary investment for operational products with service lives of less than a year.

Beyond the one-year investments I observe three further sub-distributions of RB timescales with first moments at 11, 30 and 60 years, accounting for 5.34, 34.82

and 32.41 percent of total investments (Figure 2.2 and Table 2.1). Although I have largely lost the named classes of substructures when re-aggregating to timescales, some putative cross-referencing with the BOQ classes can be attempted to understand likely named structures contributing to the four discrete distributions shown in Figure 2.2. Contrasting this with the BOQ, I find that the 11 year distribution is generally associated with white goods and finishings (carpets, PU foam undelay etc.). The 30-year distribution appears to coincide with electrical and water service provision (piping, cabling), ceramic wall tiles, roof covering and timber boarding. Finally, the 60-year timescale appears to correspond to the core structure of the building (natural stone walling, softwood staircases etc.).

2.5 Discussion and Conclusions

In this framework no distinction is made between what are construction costs and what is traditionally viewed as operational costs; all the expenditures I consider are assigned as investments made in the array of sub-structures that constitute the initial creation of an RB. The motive for this is to attempt to understand the dynamic range of a building and hence the relative importance of the timescales I should consider when accounting for its inertia.

Post-creation, substructures will of course be replaced on a range of timescales in order to maintain the functionality of the building, producing future maintenance costs (see chapter 3), but, I argue, although these should not be viewed as wholly distinct from the initial investment in the creation of a built structure given they are simply the turnover of substructures. The fact that some elements of a building are seen to turn over rapidly such that they require specific classification such as 'operational' is, I argue, simply the observer's perspective: people (particularly accountants and economists) tend to view processes with timescales of less than a year as transient *flows*, and ones of more than a year somewhat firmer *stocks* of investment. Even then, maintenance of the substructures of a building are seldom if ever viewed as investments, even though they clearly provide returns through supporting rents. This observer bias in whether something is seen as a flow or a stock has been known in geology for a long time and is often defined by the Deborah number (Reiner, 1964), which is a dimensionless number to describe the fluidity of materials under specific flow conditions relative to the timescale of the observer.

The investment-timescale distribution that I produced for the RB has a first moment of around 40 years. I note that this is also the average working lifetime of people, something that has changed very little over the past century (Ausubel and Grubler, 1995). I suggest that this is more than coincidence, indicating important links between the way that people invest in the places in which they live and the timescales over which they accumulate and benefit from these investments. This mean timescale is of course significantly less than the quoted expected service lives of residential buildings, which is invariably quoted in the range 70 – 90 years. However, this excludes consideration of what goes on *inside* buildings, something I attempt to explicitly capture. For example, not only do sectoral national accounts handle sub-one year expenditures as consumption, but also white goods are handled as a separate class to buildings, even though both are required to co-exist if they are to fulfill their respective functions. Certainly the pattern of 'operational' energy use is directly linked to both white-good devices and the thermal

properties of the building superstructure (Azari, 2019). I note that the average turnover timescale of the RB is larger than the amount of time left to meet the 2050 net-zero target, suggesting that a sizable portion of the investments in property are at risk in a rapid energy transition.

The distribution of investment timescales of the RB resembles the capitaltimescale distribution of the US economy (Chester et al., 2024), with the US economy also being described by 4 representative timescales: one year 'consumptive' turnover, and capital turnover timescales of 7, 50 and 104 years. Chester et al. (2024), also found that these dynamics were remarkably stable over time, even though the sectoral classifications used by the Bureau of Economic Ananlysis evolved substantially over the past 80 years. For access and time reasons I have been restricted to analysing just one BOQ to date, so I am unable to comment on whether this stability over time is also true for a broad class of residential buildings. However, as with macrosystems like the US economy, I argue that patterns of investment with respect to timescales are far more likely to be stationary than the names of the things being invested in. One reason for this is because investments are hedged (invariably implicitly) to attempt to make returns robust, and spreading returns over timescales would represent an effective hedging strategy given attempting to generate returns over a spectrum of timescales is likely less vulnerable to unforeseen disturbance.

I also suggest the decomposition of a building into unique timescales bears some correspondence to the interpretation of building dynamics offered by Brand (1994), building on Duffy and Henney (1989). When I cross referred between the

RB timescales and the BOQ components, I find the 60-year timescale was associated with a building's exoskeleton, and successive timescales of 30 and 10 years associated with successively more transient layers within building. Within Brand's framework, this layering is critical for isolating the inner living space from the variance of the environment surrounding the building, with the internal living space being associated with the most rapid sub-annual turnover dynamics. That this layering is partially discrete, as are the timescale distributions, also points to the need for separation of function and the corresponding separation of timescales. I suggest such separation is a necessary condition for providing the functions of a space that is habitable for human beings.

This concept that complex structures operate over a range of discrete timescales to facilitate function is not only seen in buildings. There are good reasons to think that this form of investment-timescale distribution is as important to the functioning of natural systems as it is to man-made structures (Szerszynski, 2022). For example, this form of behavior is seen in the Earth system (Jarvis 2011; Jarvis and Li, 2010; Steffen et al., 2018; Williamson et al., 2016); in metabolic processes occurring inside cells (Rowland-Adams and Stefanovska, 2021); and in evolving living systems (Pocheville, 2018).

Having characterized the timescale distribution of the RB we are now better placed to explore the maintenance dynamics that this distribution implies (chapter 3), and from this explore the dynamics of the carbon liabilities entered in to when the decision to build buildings is made (chapter 4).

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3 An investmenttimescale perspective of the maintenance dynamics of residential buildings.

Abstract

Robust yet efficient maintenance scheduling for large cohorts of buildings is challenging. This is in part because of the large array of service lives at play for the built sub-structures within any cohort of buildings. In Chapter 2, I showed that investments in these sub-structures can be aggregated with respect to these service lives (turnover timescales), which range from hours to centuries. Here, I build on this dynamic view of buildings to explore the implications of a given investment-timescale distribution for how maintenance costs play out after construction. Orthodox capital accounting and geometric depreciation tells us that the value invested at each timescale can be viewed as depreciating at a rate which is the inverse of the representative timescales, and that once some threshold is reached, re-investment through maintenance will be required, or at least desirable, in order to preserve the value and function of built structures. Rather than giving rise to a steady stream of maintenance costs over time, the interaction of the spectrum of decay processes and a restoration threshold leads to rich dynamic effects expressed in a near stochastic schedule of maintenance costs. In line with experience, in some years no maintenance may be required, whereas in others a number of timescale thresholds are breached simultaneously, such that repair costs outweigh rental incomes. I find the associated annual maintenance costs are characterized by a clearly defined exponential probability distribution. Not surprisingly, the investment-timescale distribution at the point of construction is not preserved; instead, the cohort becomes a complex and everchanging mix of new and older elements. Finally, I exploit this dynamic view of cohort-level maintenance dynamics to explore the aggregate Return On Investments (ROI) in construction, maintenance and operation, and the payback dynamics of these investments. This shows that ROI is increased and payback times decreased by tolerating ever increasing levels of capital depreciation, pointing to the obvious tradeoff between rental profitability and the use value of residential buildings.

3.1 Introduction

As the age of buildings continues to rise worldwide, maintenance costs have been recognized as an essential constraint on public and private finances (Kwon et al., 2019). Furthermore, the safety of buildings and the quality of the lives of their users are directly linked to maintenance schedules (Chan, 2019). Poor maintenance scheduling not only impacts on the physical and social function of built structures, but also can cause significant increases in overall maintenance costs (Kwon et al., 2019); Ighravwe & Oke, 2019). Because of these socioeconomic impacts, it is widely accepted that systematic maintenance planning, preferably at the point of construction of a building, is key to both the social and financial success of any such investment (Kim, Lee & Ahn, 2019; Yang, Hsieh & Kung, 2012; Arditi & Nawakorawit, 1999). Furthermore, because maintenance costs have such an important impact on public and private budgets, understanding the dynamics of these costs is also important for wider economic management, avoiding safety concerns arising, e.g. the UK RAAC scandal that is due to the use of reinforced autoclaved aerated concrete (RAAC) in ceilings that are now prone to collapse.

Globally, the construction sector is estimated to contribute 13% to global GDP (Oxford Economics, 2021) and building maintenance costs account for about 50% of the construction industry's turnover (Lateef, 2009). Maintenance costs account for about 75% of the total running costs of buildings (Booty, 2006), among which, costs for mechanical, electrical and plumbing alone can take up to 50% of a building's life cycle cost (Kwon et al., 2020; Khanzode, Fischer & Reed, 2007; Kwon et al., 2017). As a result, not only is maintenance vital to a buildings ongoing use,

because the associated costs are so significant there is pressure to attempt to minimize these costs over time in order to deliver appropriate returns on investment (Tiun, 2006; El-Haram and Honer, 2002; Minami, 2004). Furthermore, in addition to the level of investment in construction being a good predictor of levels of development (Bon, 1992), because newly commissioned infrastructure experiences relatively low maintenance costs compared to its mature counterparts, maintenance costs can, in part, be implicated in national growth statistics (National Infrastructure Commission, 2017). This makes the prediction of maintenance schedules and costs for buildings valuable.

Given their long-lasting service lives, buildings are also important drivers of economic inertia, which plays a crucial role in defining the transitioning route towards the net-zero carbon target (Chester et al., 2024). Maintenance activities are responsible for a sizable carbon emission in building sector. At the same time, a well-structured maintenance work provides a high possibility in modifying new and existing buildings as well as reducing their carbon footprint during operation (Pearce, 2006; Nelson, 2008), and hence their adaption to climate change. As a result, there is significant potential in understanding the turnover dynamics of built structures through their construction (Chapter 2), operation and maintenance. This chapter is the continuance of Chapter 2, describing the maintenance process of an RB after the creation of the investment-timescale distribution.

A range of studies try to categorise maintenance approaches and their optimal applications, and their categorisations vary in details but are mainly based on how and why maintenance happens. Preventive and reactive maintenance are the two

70

primary maintenance approaches that are taken into consideration. Preventive maintenance strives to keep a structure functioning at some level through regular inspections and repairs (Madureira et al., 2017) in order to actively manage degradation (Ruparathna, Hewage and Sadiq, 2018; Queensland Government, 2022; European Standard, 2017). In contrast, reactive maintenance is the necessary repair of an asset after failure (Muyingo, 2009; European Standard, 2017; Queensland Government, 2022; Ruparathna, Hewage and Sadiq, 2018). Over the long term, an effective preventive maintenance plan may lower overall maintenance costs when compared with a reactive strategy (Alamri and Mo, 2022), but also risks significant unnecessary costs (Eti et al., 2006). In contrast, reactive maintenance is an effective cost minimization strategy until undetected failures result in disproportionately large maintenance costs, including loss of function (Molęda et al., 2023). These arguments parallel wider discussions over planned versus reactive adaptation strategies (Sirvio, 2015; Shagluf et al., 2018; Molęda et al., 2023).

Accurately allocating maintenance funding is a well-known problem (Lee and Scott, 2008; Shah Ali, 2009). The fundamental difficulty in effective maintenance scheduling is, as with all investment, that money is spent on structures that inhabit an uncertain future, where numerous stochastic events act to either extend or shorten planned service lives. As a result, although seldom seen this way, maintenance costs share similar dilemmas with all investments decisions, and in many respects maintenance should itself be seen as a form of investment, albeit into building sub-structures in order to preserve value and use in the overall structure. In this chapter, I explore the implications of the investment-timescale distribution identified in Chapter 2 on the depreciation dynamics and maintenance costs of residential buildings.

3.2 Decay, depreciation and maintenance dynamics

Understanding decay processes and the associated depreciation of buildings and their components underpins the study of maintenance activities. Unfortunately, when we look at individual buildings and sub-structures, we find that there are an array of possibilities for the time evolution of these decay processes. Firstly, items can function normally and then fail, either through endogenous malfunctioning, or because of some exogenous factor. For example, a house can be fully operational and then be burnt down through an internal electrical fault, or swept away by a catastrophic flood (blue line in Figure 3.1), this is known as one-hoss shay depreciation in economics. Secondly, structures can degrade progressively through use, leading to linear-like depreciation (grey line in Figure 3.1). This latter profile is particularly true when we consider the monetary value assigned to structures, which declines progressively as the remaining lifetime diminished. This is driven by both the increasing likelihood of failure as things age (Proschan, 1963), and the progressive loss of financial value which can be seen as the sum total of future perceived rents (Banz, 1981). This latter case describes the forwardlooking view of capital value. Between these two end members there are of course an array of possible profiles for the use value of individual structures. For example, the value of an individual house would likely hold for approaching a decade with no maintenance, similarly, a light bulb delivers consistent rentals throughout its lifetime until the element burns out, then the stream of service abruptly ends; the value of a vehicle is most likely to depreciate in a geometric or linear pattern (Storchmann, 2004).

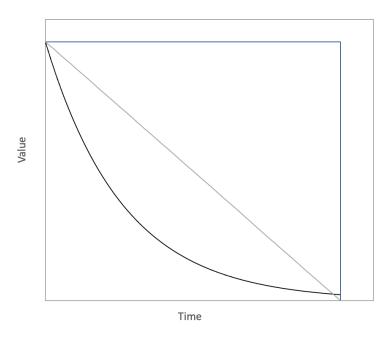


Figure 3.1 Common depreciation patterns: blue line is 'one-hoss shay' depreciation, grey line is straight-line depreciation, black line is geometric depreciation.

What happens in cohorts of similar structures is initially far more complex. Clearly the likelihood of encountering either an endogenous or exogenous catastrophic failure should rise with the amount of time deployed, and this is central to the understanding that the variance of a mortality function might be closely tied to the mean survival time as discussed in Chapter 2. It is also likely that members of a cohort might experience similar trajectories for the decline in value simply because of the shared function and environments of these structures. However, what is less well appreciated is that the turnover of a pool of structures can often be geometric, even though the individual items in the pool express non-geometric life histories (Sliker, 2018). This is certainly the assumption underpinning the ubiquitous use of backward looking capital accounting at company, national and international level wealth accounts. Numerous studies also provided strong evidence for geometric depreciation in many asset cohorts (Jorgenson et al., 1987; Oliner, 1993; Jorgenson and Stiroh, 2000), which is why all inventory methods of asset capital value make the assumption that decay (depreciation) is proportional to the total pool asset value (OECD, 2009; Fraumeni, 1997). Wykoff and Hulten (1980) examined depreciation of sixteen classes of structure using large data sets, including 203 apartments, 526 factories, 1654 offices, 1666 retail buildings, 580 warehouses. They found that their economic values decline more rapidly in early years than the later years of their lifetimes, i.e. something akin to a geometric depreciation pattern. This is important because it means the turnover timescales presented in Chapter 2 can be viewed as cohort-level depreciation rates, and hence we can use these to represent the decay characteristics of a cohort-level Representative Building (RB). This is re-enforced by the fact that the investmenttimescale distribution compiled in Chapter 2 groups all sub-structures with the same turnover timescale, independent of the name of the substructures being aggregated.

3.3 Modelling maintenance

Traditionally, the life of a building is considered to partition into construction, operation, maintenance, and decommissioning/demolition phases (Ngwepe and Aigbavboa, 2015). Construction and demolition are clearly defined points in time/space. However, as with biological organisms, the concepts of operation and maintenance are less clear. Building construction draws together a wide variety of components and in Chapter 2 we viewed these components as cohorts of

Chapter 3: An investment-timescale perspective of the maintenance dynamics of residential buildings.

substructures with varying service lives that range from seconds to centuries. Each of these substructures can legitimately be seen as an investment in its own right: something that, like a building, is constructed, lives and then dies or is repurposed. As a result, the only thing that defines maintenance is that an overall structure and its function is preserved, although clearly this description applies equally to all and any of the substructures. Also, the separation between operational and maintenance investment simply comes down to perception of timescale, which for buildings is defined by timescales more (less) than one year.

By articulating the relationship between turnover rate and the amount of investment, I am able to characterize the turnover dynamics of a building and hence how fresh investments might be scheduled going forward. I name this the investment-timescale distribution of buildings. I arrive at a near continuous yet multi-modal distribution of the turnover dynamics of a representative building. The hierarchy of modes with different timescales could possibly represent prominent classes of investments in the building. Knowing the dynamics of an investment over different timescales helps me approach the temporal distribution of building maintenance in this chapter, as this fuller range of substructure investments and turnover timescales schedule the pattern of maintenance and identify the size of continuous maintenance investments that need to be made for running the structure along the timescale, and hence how it could be distributed over time.

There have been lots of mathematical and simulation models developed in maintenance scheduling. Nielsen and Sørensen (2011) used Bayesian updating to

optimize long term maintenance planning for offshore wind turbines and compared two different maintenance strategies with and without periodic imperfect inspections. Martorell et al. (2005), Miyamoto et al. (2000) and Fwa et al. (1994) have used genetic algorithm to find the optimum maintenance strategy for structures such as roads, bridges and generators. Pongpech et al. (2006) made the assumption that the failure rate of equipment follows a Weibull distribution, created a 4-parameter model of this and came up with a 4-stage procedure to optimise preventive maintenance strategies for used equipment under lease. Billinton and Pan (2000) built a Monte Carlo Simulation model, based on the assumption that a product's useful lifetime is exponentially distributed and its decay follows a Weibull distribution. This was used to assess the failure frequency and the optimal maintenance time period for a system with redundant components. Markovian probabilistic models were used by Marquez and Heguedas (2002) to discover the patterns of maintenance under realistic finite time periods. Although there has not been much research done on stochastic maintenance scheduling over the entire lifetime, some studies considered stochastic depreciation. Wang and Liu (2019) considered the stochasticity of depreciation process, used a probabilistic model and categorized the condition of components into multiple stages with different probabilities using a probability transition matrix to represent a dynamic maintenance framework that makes maintenance decisions with constraints on budget or reliability. After establishing three cost-based criteria for evaluating maintenance options across unlimited time period, Noortwijk (1998) applied gamma processes to simulate stochastic depreciation activities. Liu and Frangopol (2006) performed a comprehensive enumeration-based study of a bridge system to determine how the probabilities

of the failures of bridges might affect the entire highway network. Hu et al. (2022) proposed a Linear Programming-enhanced RollouT (LPRT) that takes both stochastic and constraint deterministic maintenance scheduling on infinite time horizons into account. Common to all these pieces of research is the theme that systematic maintenance scheduling over the entire service life of a system is difficult to simulate and hence prescribe either corrective and preventive maintenance schedules for.

3.4 Aims and objectives

In this chapter I provide a simple model showing the dynamic nature of maintenance in residential buildings to give a general insight into how maintenance activity is scheduled over time for an RB. The aim is to show that despite being deterministic, the interaction between maintenance thresholds and timescale distributions of substructures leads to near stochastic behaviour, hence in part explaining why maintenance is difficult to manage in asset portfolios. The research aims are delivered through the following objectives:

- To simulate the depreciation of building components taking into account performance thresholds leading to maintenance costs;
- To use Return on Investment to evaluate performance and constrain the simulation;
- To evaluate the pattern of maintenance costs resulting from this and compare it with observed maintenance scheduling issues.

3.5 Methodology

3.5.1 Building depreciation and maintenance simulations

Using the investment-timescale profile for an RB, as characterized in Chapter 2, the simulation described here attempts to characterize a wave of new investment in all or part of the UK housing stock, as opposed to the background of general maintenance occurring on this stock.

The RB is assumed to have an investment per unit area of 2500 \pounds/m^2 , which, because of the inclusion of the additional investments required to fully commission a house (see Chapter 2), is marginally higher than current (2023) UK median build costs of 2360 \pounds/m^2 (Costmodelling, 2023). I take the UK median house size to be 94 m² (Ministry of Housing, 2018), which gives a new-built commissioning investment in the RB of 241,000 \pounds . This is 14 percent less than current (2023) UK mean house price of 290,000 \pounds (Land Registry, 2023). I now describe the depreciation and subsequent restoration (maintenance) of the RB post commissioning.

Again borrowing from Chapter 2, the RB is comprised of N = 200 pools of value, where each pool represents grouped investments with the same turnover timescale, T, with timescales spanning 1 – 200 years. The financial value of the i'th pool, K_i , in any year t, post construction is assumed to follow the backwardlooking stock conservation equation

$$K_i(t) = I_i(t) - (1 - T_i^{-1})K_i(t - 1)$$
(1)

where I_i is the annual investment in the *i*'th pool ($\pounds/m^2/yr$), either initially during the construction phase, or subsequently through maintenance investments in the replacement or repair of substructures.

Following the initial investment $I_i(0)$ to create the RB, each pool depreciates from $K_i(0)$ at the geometric rate T_i^{-1} . Over time, and at differing rates, these pools of value decline until some fraction L of the initial commissioned value $K_i(0)$ is left. At this point, I assume the value of the pool is restored so that the maintenance of (investment in) the *i*'th pool is given by

$$I_i(t) = K_i(0) - K_i(t) | K_i(t) < LK_i(0)$$

$$I_i(t) = 0 | K_i(t) \ge L K_i(0)$$
 (2)

These investments to maintain value and hence function in the RB are into everything and anything in the *i*'th pool that share a common turnover timescale *T*, rather than into specific components such as windows or carpets, even if buying new windows and carpets is the outcome of this.

3.5.2 Returns on investment

I use Return On Investment (ROI) to evaluate the maintenance scheme and select an appropriate value of the maintenance threshold, *L*. I define ROI as cumulative rents divided by cumulative investments (construction and maintenance). I assume the RB generates rents either explicitly, or as avoided rents if I am considering owned/mortgaged property. Estimates of UK median rents vary widely, but there appears to be more consensus over the size rent as an annualized return on capital, which is in the region of 5 %/yr (Office for National Statistics, 2023). If the current (2023) median UK house price is 290,000 £ (Land Registry, 2023) this gives an RB annual rent of 14,500 £, or 154 E/m^2/yr . I do not attempt any discounting as I am not interested in the present-day value of future returns to investors. Instead, I am only interested in the actual monetary flows and hence the performance of the RB within the UK economy, independent of any ownership.

Although I explore ROIs associated with all levels of the maintenance threshold *L*, I focus in particular on the threshold value that produces a payback period equal to the average time it takes a UK mortgagee to pay off their mortgage, which is approximately 30 years (Money.co.uk., 2023). I assume ROI = 1 once payed off simply because enough rents have been produced to cover all investment costs at this point.

3.6 Results

Figure 3.2 shows the RB investment-timescale distribution taken from Chapter 2, but without the costs associated with the actual construction process. This is because they are associated with activities such as establishing temporary site compounds that are unlikely to be meaningfully replicated in subsequent maintenance operations.

Figure 3.3a shows the aggregate depreciation of the total RB invested capital value over time, starting from its initial condition of 2,500 \pounds/m^2 and stabilizing at ~2,000 \pounds/m^2 within the first decade. For this my central simulation I have used L = 0.7 which, as I will show, result in the 30 year ROI = 1 condition I take as representative (Figure 3.3c).

Figure 3.2 also shows the change in the investment-timescale profile from new to its equilibrium state some 200 years later. As can be seen, at equilibrium this distribution sits half-way between its new build upper bound of K(0), and the lower bound of LK(0). By way of illustration, also shown is the investment-timescale distribution taken 200 years into the simulation, showing the RB becomes comprised of a quite complex mix of new and old investments (red line in Figure 3.2).

Figure 3.3b shows the associated annual total maintenance investments in relation to annual rents. Despite the deterministic nature of the simulation, it becomes progressively more stochastic with time. I tested this variability by taking a sample from years 100 to 500 and found there is no significant autocorrelation (i.e. the series is serially independent), and that the sample approximates an exponential distribution. This is well illustrated by considering the pdf of annual net profits (Figure 3.4), which are simply annual maintenance investments taken away from the annual rent of $154 \text{ } \text{E}/\text{m}^2/\text{yr}$.

Figure 3.3c shows the time evolution of ROI for a range of values of *L* from zero to one and including 0.7. In each case, ROI increases with time reflecting the fact that rents accumulate faster than investments. Also, in all cases the RB ultimately achieves a state of profit (ROI>1), but the lower the maintenance threshold (i.e. the more that a cohort of components is allowed to decay before triggering maintenance), the greater the ROI and the shorter the payback time. More specifically, when L = 0, no maintenance is required; when L = 1, as long as there is any depreciation, it is restored back to its initial condition.

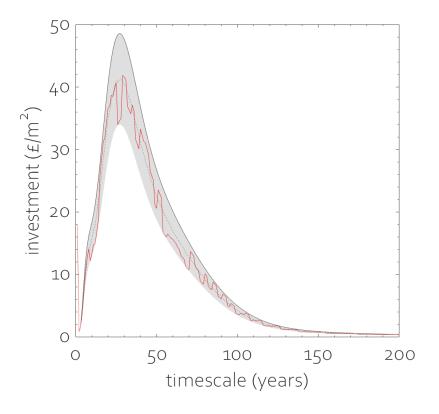


Figure 3.2 Capital value distribution with respect to timescale of the RB. The black line is the investment (capital)-timescale distribution in year zero. The grey patch is the range between no depreciation and full depreciation at the maintenance threshold within which any particular distribution might sit. The dashed line is the mean profile at equilibrium after ~200 years. The red line is a given year's profile. L = 0.7.

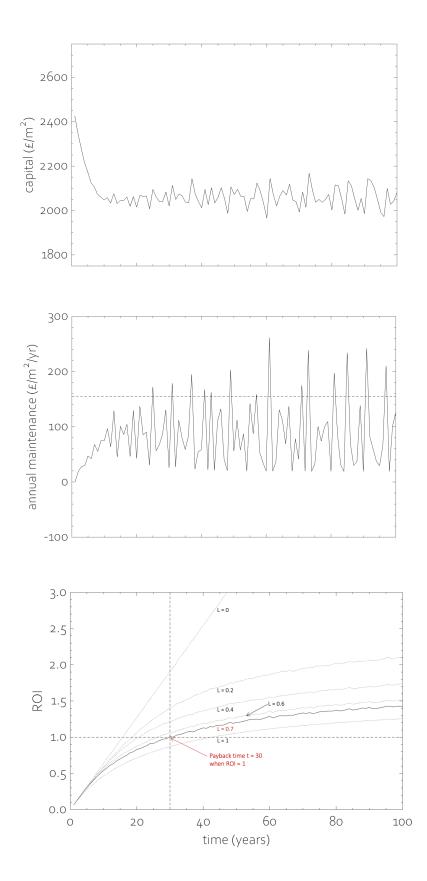


Figure 3.3 a. Aggregate total capital value when L = 0.7. b. Annual investment in maintenance over time. The dashed line is an inflation-free annual rental income $\pounds 154/m^2/yr$. c. ROI over time for different maintenance thresholds L = [0, 0.2, 0.4, 0.6, 0.7, 1]. L = 0.7 is highlighted and used in the central simulation giving payback time of 30 years.

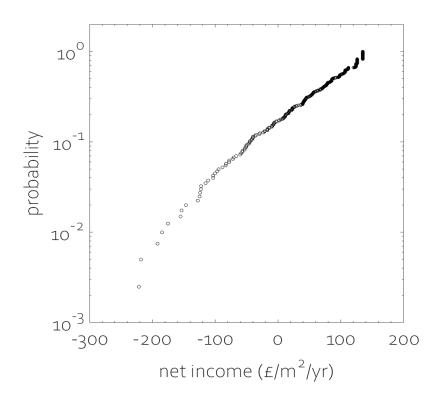


Figure 3.4 The probability distribution of annual net profit.

3.7 Discussion and Conclusions

The simulation I have explored is highly stylized, and describes a somewhat abstract scenario of the forward evolution of a large cohort of buildings all built around the same time. Perhaps the most obvious parallel to this is if, in a net-zero transition, a large wave of new built housing was initiated to replace stock that was not net-zero compatible. Alternatively, although the UK housing stock is a complex mix of new and old properties, as are the subcomponents of these properties, the simulation described above could describe the dynamics of the new-built buildings within this cohort. It certainly should align with the dynamics of all new build in any given year.

The finance and economics of even an individual property can be a relatively complicated arrangement. However, I would argue that our 30 year payback time for UK houses is a reasonable approximation of how that finance is structured in general, given this is approximately how long it takes homeowners to pay down their mortgages (Office for National Statistics, 2020). Interestingly this is also very close to the median expected working life of a person (Ausubel and Grubler, 1995), and the two are clearly related because large debts like house mortgages are invariably paid off through wages, and there would be a tendency to spread such payments out as much as possible.

I also argued that, at the point the debt is resolved, ROI = 1. Through applying this constraint I arrive at a maintenance threshold of 70 percent i.e. total capital is allowed to depreciate by 30 percent from its commissioned state. This too feels reasonable and in line with experience, where in general houses are not preserved in their new-built state, but are instead allowed to partially decay, but to not stray too far from new. I note that the further you stray from new the bigger the ROI, hence the push on landlords to not over-invest in maintaining their properties. This of course is set against the house-users' experience, where newness is often desirable, but not always.

Of course, as society evolves, the things that are bought to maintain properties change and hence the character of any portfolio necessarily evolves alongside this. However, it appears that the investment-timescale distribution, particularly the

85

relative size of the investments across timescales, could be a somewhat stationary property of houses, as it is for entire economies (Chester et al., 2024). If so, then perhaps simulating costs over hundreds of years as I have here may not be so foolish, especially if I consider our monetary units are constant (inflation adjusted) rather than nominal. Added to this mixing of technology, Figure 3.2 also shows that the cohort becomes a rich mix of old and new investments, just like a real house is always a complex, ever-changing mixture of new and old elements throughout its lifetime.

The interaction of the performance threshold with the array of investment timescales generates complex dynamic effects, giving rise to near stochastic maintenance costs over time. I propose that this in part accounts for the difficulties people face when attempting maintenance scheduling for large estates (Ferreira, 2020). Siemes et al. (1985) mentioned the reason for maintenance schedule complexity may be related to the complex collection of decay processes in structures. For both landlords and homeowners, such behavior of buildings is problematic. For example, from Figure 3.4 I find that the probability that outgoings will be greater than rental incomes (or equivalent) is as high as 17 percent. Worse still, although this distribution has an upper bound of zero maintenance costs and hence a net profit equal to the rental income of $154 \text{ E/m}^2/\text{yr}$, it is only bounded by losses equal to $LK(0) = 0.7(2500) = 1750 \text{ } \text{\pounds/m}^2/\text{yr}$ at the lower end i.e. more than 10 times the rental income. Of course, the probability of this worse case is vanishingly small because it would require all 200 pools of value to require restoration simultaneously, but this does highlight the wisdom of the saying 'fix the roof while the sun is shining'. That these risks are exponentially distributed

presumably relates to the geometric depreciation set out in equation (1) and how this behavior interacts across timescales. In Chapter 2 I argued that spreading investments across timescales could act as a hedging strategy, attempting to ensure that returns were similarly spread in time and hence the ups and downs of the economy. However, I see here that this same timescale-spreading behavior also produces potentially important volatility in maintenance outlay.

What is not clear from our simulation is why buildings are generally assigned lifetimes in the region of 80 – 100 years in national accounts (Ji et al., 2021). Certainly there is a large proportion of the UK housing stock that is significantly beyond this threshold (Piddington *et al.*, 2020). I note from Figure 1c that ROI is approaching 1.5 around after a century, so although the net gains are modest, this shows residential buildings are themselves growth engines in an economy, even if traditionally activities in and around buildings are not viewed as investments, but rather are attached to consumption. Through bringing operational costs into the investment-timescale distribution as I have, this also acts to clarify my view that it is difficult, and probably ill conceived, to try and separate operational costs from investments, the ROI would rise and its payback time would shorten accordingly. Even in this way, the financial ROI of an RB would still not be comparable with the overall energy ROIs of economies which is in the region of 2.0 (Jarvis, 2018).

It is particularly vital that we better understand the investment dynamics of buildings as we plan to transition economies to meet climate objectives. Because

87

both the construction industry and housing are such significant contributors to GHG emissions (IEA, 2018), focusing on this portion of economic inertia is much needed. Furthermore, climate change is likely to have an impact on the decay rate of structures, requiring both new design strategies, and account for these climate-induced depreciations in maintenance scheduling (Giordano, 2012). In the 4th chapter of this PhD, I am going to use the investment inertia and dynamic view of maintenance developed here to investigate embedded energy and carbon commitments of residential buildings within the context of UK climate policy.

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96

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4 Building inertia and climate change

Abstract

Residential buildings and their components make a significant contribution to both natural resource depletion and climate change. This burden is necessarily dynamic because, once a decision to build has been made, resources flow into a built structure on a broad range of timescales from seconds to centuries. Traditionally, these dynamics are partitioned into construction, operation and maintenance phases. Here I offer dynamically rich view of the resources and carbon emissions of buildings where the construction phase gives way to a timescale determined dynamic maintenance inventory. I use this inventory to specify the time history of carbon emissions post-construction under two different scenarios. The first Business-As-Usual scenario simply assumes the future replacement of elements of the building is like-for-like in terms of carbon. The second scenario assumes replacement elements decarbonise to net-zero 2050 in line with the current UK policy pledges to the Paris Agreement. I find that, for a new structure built in 2020, only shorter-lived substructures are replaced for achieving 2050 net-zero carbon, accounting for 20% of the building. Whereas the longer-lived (>70 years) high carbon components avoid a large amount of their maintenance carbon liabilities getting replaced. This implies that it may be wise to consider postponing the investments in carbon-intensive constructions now, until more net-zero friendly alternatives are available.

4.1 Introduction

The construction industry is the largest sectoral contributor to GHG emissions, accounting for 40% of carbon emissions globally, as well as 40% of resource consumption and 40% of waste (IEA, 2018). In addition, the design lifetime of a residential building is generally long and hence building decisions represent substantial lock-in in the context of transitioning economies away from carbon dependency (Röck et al., 2020). The carbon footprint of buildings is generally partitioned into either that embedded in the construction process, or that associated with the subsequent operation. Building operational energy use has historically accounted for 80 % of a building's energy and carbon footprint, leading to around 33% of world final energy demand and 30% of global CO₂ emissions (Urge-Vorsatz et al., 2012). As a result, operational emissions have dominated climate impact evaluations and decision making in this sector (Ibn-Mohammed et al., 2013). However, it appears that the amount of operational energy used by buildings has, and is, projected to decrease dramatically as a result of the development of low carbon and energy-saving technologies (Sadineni, Madala & Boehm, 2011). As a result, the significance of embodied energy is growing in building research (Cellura et al. 2014; Monteiro and Freire 2012; Cuéllar-Franca and Azapagic 2012; Bernett, Kral, and Dogan 2021; Asadi et al. 2020). For example, Monahan and Powell (2011) evaluated the embodied carbon of a three bedroom, low-energy semi-detached home in the UK, focusing on the constructing stage. Likewise, Asif et al., (2007) conducted an LCA to compare the environmental implications of five common building materials (wood, aluminium, glass, concrete, and ceramic tiles) while Zhang et al. (2014) presented a life cycle analysis of the embedded carbon in a single-family residential structure in Canada . Hammond and Jones (2008) targeted a variety of home and flat types in the UK again focusing on embedded carbon.

Despite the complexity and time-consuming nature of the environmental assessment of both embodied and operational phases, some studies have considered both. Hacker et al. (2008) took into account carbon from both the constructing and operating phases for an English two-bedroom semi-detached home to compare different weights of thermal mass, concluding that heavier thermal mass has higher embodied carbon and lower operational carbon. Rosa et al. (2012) did a full life cycle analysis of the three most common types of houses (detached, semi-detached and terraced houses) in the UK, the results showed that operational phase has the largest environmental impact and emphasised the significance of choices made during the construction phases, which affects how the house will be used to the end of its life. Zhang et al. (2014) compared the life cycle performance (in terms of carbon emissions and energy use) of different design setups and how they were spread out over the different stages of a building's life over 60 years, and found out operation phase has the biggest environmental impact in building life stages, whereas in the breakdown of building components, walls have the largest amount of carbon emission with roofs being the second most. Also, Keoleian, Blanchard and Reppe (2000) produced a comprehensive LCA for the energy use of a single-family dwelling, taking into account the construction, operation, and demolition phases, compared it with a functionally equivalent energy-efficient house, and the result shows that the majority of energy reduction happens during the operational stage. Cuéllar-Franca and Azapagic (2012)

examined the full life cycle environmental implications of three of the most usual housing styles in the UK, and again concluded that the operational stage has the largest environmental impacts. In each case, a detailed inventory of building materials and appliances, as well as a life cycle cost study, were created and carbon footprints in these studies have all been assigned based on their respective life cycle phases.

Although the combined embodied and operational impacts of buildings have been studied, the dynamics of carbon emissions from buildings has been overlooked, despite these dynamics being important when set against national and global decarbonisation schedules. The expected service lives of buildings are invariably long, so the buildings that are built now will be mostly likely to still be operating in 2050, when the entire UK economy is meant to have reach net-zero carbon. They are also comprised of a large number of sub-structures which themselves have substantial lifetimes, so the same lock-in effects apply to the replacement of these substructures. This dynamic for carbon emissions is captured in the maintenance dynamics of buildings, but these dynamics are complex and because of this, building-related Life Cycle Analysis (LCA) studies have concentrated on a particular stage of the building life cycle largely treating the building in question as static. When viewed dynamically, the distinction between what is embodied and what is operational can become somewhat arbitrary. After all, resource are allocated to (invested in) buildings across a broad spectrum of timescales from seconds to centuries. Although operational energy use and associated carbon liabilities are invariably seen as instantaneous dynamic free processes, they too can be assigned timescales and associated turnover dynamics. A room for example appears to be created and maintained on timescales of decades. However, gas might be invested to warm the room with an effect persisting for hours, or electricity might be invested in a room to change the light quality with an effect persisting for seconds or less. In both cases, resources are still being invested, and returns are expected on these investments over some timescale. Once this is appreciated, I see that the distinction between construction, maintenance and operation that underpins mainstream building performance analysis like LCA is somewhat arbitrary, and that in practice, these three classes are simply an artificial partition of a continuous pattern of investments being made in the creation and use of a built structure, with results that endure on timescales ranging from seconds to centuries.

In this chapter, I plan to use the investment-timescale distributions and maintenance schedules developed in Chapters 2 and 3 to understand the energy and emissions schedules over a representative residential building's life cycle, and how these relate to, for example, the timetable set out to achieve future net-zero targets.

4.2 The net-zero transition and buildings

The Paris Agreement aims to keep global warming well below 2 °C over preindustrial levels, and to pursue measures to keep temperature increases below 1.5 °C (United Nations Framework Convention on Climate Change, 2015). Long-term anthropogenic warming is largely caused by accumulated carbon emissions (Matthews and Caldeira, 2008; Allen et al., 2009; Meinshausen, 2009; Zickfeld et al., 2009). Emissions must be cut by 45% by 2030 and be at zero by 2050 if the Paris Agreement's goal of keeping global warming below 1.5 °C is to be achieved (United Nations Framework Convention on Climate Change, 2018). In accordance with this, the governments of the UK and France, in addition to the European Parliament, have individually approved emission reduction goals that will achieve net-zero by the year 2050 (Stark et al., 2019; European Commission, 2018; European Parliament, 2020). In addition to the decarbonization of new investments, achieving net-zero is likely to require changing significant amounts of existing longer lived carbon-intensive structures over the next thirty years (Mercure et al., 2021).

The investment-timescale distribution of residential buildings could be a good indication on how the economic inertia of buildings affects this transition to net zero. A building is composed of long-lived and short-lived components with the purpose of producing net positive return on investment. The possibility that longer-lived investment might lose its usability before the end of its expected useful lifetime puts both the economic worth of that investment and the economic activity it is related to at risk (Mercure et al., 2018; Kefford et al., 2018) and this in turn affects the pace at which the economy might transition towards the net-zero. The turnover timescale of investment, according to Davidsdottir and Ruth (2004), is the primary driver of long-term changes in carbon emission and energy efficiency trajectories. Thus, it is important to understand the possible impact of investment-timescale dynamics on the goal of reaching net-zero carbon by 2050. Moreover, the turnover timescale of buildings, which will vary between individual buildings, has remained fairly steady roughly at 75 years (Schmalwasser and Schidlowski, 2006), which is significantly greater than the amount of time

remaining until the net-zero deadlines under the Paris Agreement must be reached.

4.3 Aims and objectives

The aim of this chapter is to apply the investment-timescale distribution to both energy and carbon emissions of a Representative Building to understand the temporal dynamics of building carbon emissions and to compare this with the carbon budgets thought to be consistent with the Paris Agreement. Unlike traditional building LCA, I will not partition emissions into construction, operation and maintenance phases. I instead provide a fully dynamic perspective determined by the timescale-determined replacement of substructures. I evaluate this framework by contrasting cumulative emissions from a Business-As-Usual and a net-zero 2050 scenario.

4.4 Methodology

4.4.1 Overview

The focus of this chapter is to calculate the quantity and timing of carbon coming the decision to build a building in 2020. I adopt the view that carbon emissions associated with maintaining a viable building are those produced from restoring substructures as I did for maintenance costs in Chapter 3, and that operational carbon or energy is also in this definition because it is solely the maintenance of shorter-lived substructures. To do this, the BOQ analysis underpinning the investment-timescale distribution in Chapter 2 is extended to include energy use and carbon emissions. From this the carbon and energy timescale distributions are constructed mirroring the investment-timescale distribution constructed in Chapter 2. This is then used to run a dynamic simulation mirroring that used to construct the maintenance costs in Chapter 3, but for carbon. In this simulation 'repairs' are enacted using either the 2020 carbon-money intensities (the BAU scenario) or carbon-money intensities that are declining to zero by 2050 (the net-zero scenario).

4.4.2 Carbon and energy-timescale distribution

Embodied carbon and energy calculation often require an understanding of all the materials associated with the making of products. Given that the BOQ underpinning this thesis has provided specifications for the ~2000 products constituting the representative building, I start by constructing the equivalent to produce a Bill Of Materials (BOM). Embodied energy and carbon were assigned to each material/item in the BOM, using the Inventory of Carbon and Energy (ICE) database (Hammond and Jones, 2011). This database is a widely respected (Waldron et al., 2013; Crawford and Stephen, 2013; Cuéllar-Franca and Azapagic, 2012), and frequently used in building LCA studies (e.g. Moncaster and Symons, 2013; Din and Brotas, 2016; McGrath et al., 2013) given it provides process-based, cradle-to-factory gate energy and carbon intensities for more than 200 construction products. Because of the uncertainty in the literature ICE draws on, the database reports low, mean and high intensity cases and I use these to explore uncertainty in my final dynamic inventories.

As in Chapters 2 and 3, furniture, fixings and white goods are included in the inventory. The principle source of information for extending the BOM to these was the European Commission's Ecodesign Preparatory Studies (Eup-network.de,

2018). Literature values were used for items not otherwise detailed. In absence of literature values, Proprietary Environmental Product Declarations (EPDs) were used as a last resort given potential company bias (Minkov et al., 2015; Achenbach et al., 2016; Pacheco-Torgal et al., 2014). Because the specific material sources and manufacturing processes of the items were unclear, recycling was largely ignored except for metals, where the UK average recycled contents were used.

Utility bills are included in the inventory given these represent investment in our dynamic framework, albeit on timescales less than a year. Per unit floor area UK average house's annual electric, gas and water bills were used. Allocations of bills to different activities were made using the Waste and Resources Action Programme (WRAP) study: Reducing the Environmental and Cost Impacts of Electrical Products (2012), and the European Commission's Ecodesign Preparatory Studies (Eup-network.de, 2018).

Demolition is not included in this study due to general lack of robust data and because literature suggests the energy needed for demolition represents ~1% of the lifetime demand of a building (Crowther, 1999; Stephan, Crawford and De Myttenaere, 2012).

Having assigned energy and carbon costs, I construct the carbon (and energy)timescale distribution as I did in Chapter 2 by replacing monetary costs of items and regrouping them with their estimated service lives. Again, I apply the same Schmalwasser and Schihlowski (2006) mortality function to the discrete itemsbased timescales to give the full carbon (energy) timescale distribution of the Representative Building. As before, this assumes I can aggregate all carbon and energy liabilities with the same timescales.

Finally, I calculate the aggregate carbon, and energy intensities of each annually incremented timescale by dividing the energy and carbon used by the monetary investment in a particular timescale. These intensities are used to estimate emissions in the simulations, particularly in the decarbonisation scenario where carbon intensity falls over time.

4.4.3 Simulations

To explore the time history of carbon emissions associated with the RB I simulate a carbon emissions schedule in line with construction, maintenance and operation costs. In this simulation, the RB is constructed with the carbon-timescale distribution and then maintained following the dynamics set out in Chapter 3. Specifically, the RB is constructed in 2020 incurring full construction emissions (the area under the carbon-timescale distribution). After 2020, maintenance of each timescale class is done when its monetary value falls below 70 % of its construction value, again because this threshold was seen to produce credible return on investment performance in Chapter 3. Maintenance carbon emissions are calculated by multiplying monetary investments in each timescale by the carbon intensity of that timescale.

For the BAU scenario the timescale distribution of the carbon intensity is constant. In the net-zero scenario the intensity of this distribution declines linearly from its 2020 state to zero in 2050 following the idealized scenarios set out (UNEP and UNEP Copenhagen Climate Centre, 2021).

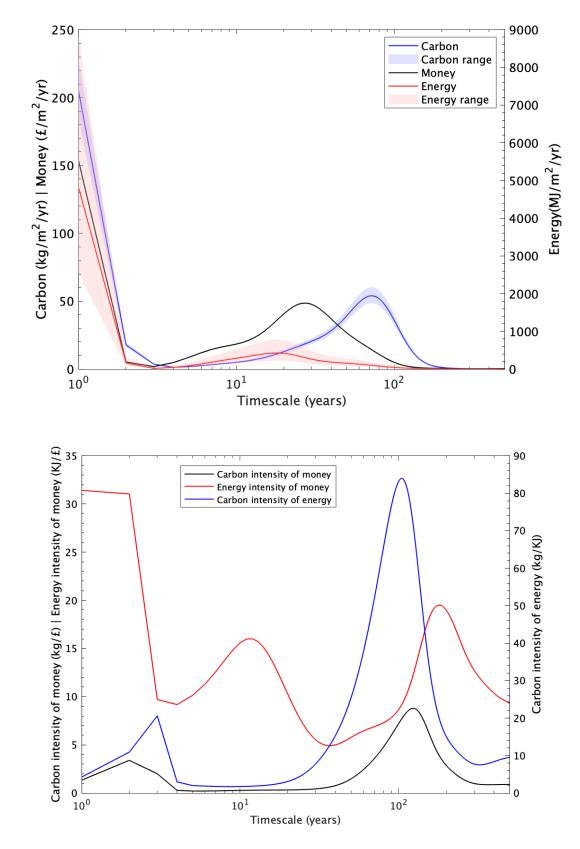
4.5 Results

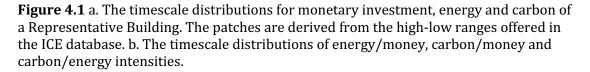
4.5.1 Energy and carbon timescale distributions

Figure 4.1a shows the timescale distributions for energy, carbon and monetary investment in the creation of the RB. As with monetary investments, both energy and carbon produce similar multi-modal timescale distributions. For energy this has two components centred at ~1 and 18 years. Figure 4.1b shows the timescale distributions of the three intensities, carbon/money, carbon/energy and energy/money. The carbon/energy intensity is seen to peak at the ~100 year timescale and is associated with carbon intensive components such as concrete in core fabric of the building. In contrast, the timescale distribution of the energy/money intensity has three modes at 1, 12 and 180 years. The 1 year timescale represents both the construction work and the energy used for the subsequent operation. The 12 year mode possibly because of high energy demand of manufacturing of white goods. The 180 year mode is very likely to again be related to forming the main superstructure of the building.

The carbon liabilities are shifted to shorter timescales than their intensities, peaking in 72 years, reflecting the fact that although the principle carbon intense sub-structures live >100 years, monetary investments in them are low relatively i.e. they are financially cheap compared to their carbon liability. It is also interesting to note that although there are significant ~1 yr carbon liabilities associated with operating the building (Figure 4.1a), relative to investments in concrete products the intensities of this operational carbon is low (Figure 4.1b). This contrasts with energy, which has a maximum intensity at ~1 yr again associated with the construction and operation of the RB. Energy/money intensity

has two further modes at \sim 18 and \sim 120 years, the former largely associated with white goods and the latter the creation of the primary structures.





4.5.2 Cumulative emissions

Figure 4.2a shows the cumulative carbon emissions of the RB post construction under the two scenarios of with, and without, carbon policy limits. It is not surprising to see that, under the BAU scenario, cumulative carbon of an RB simply increases at ~15 kg/m²/yr given there is no decarbonisation of subsequent investments made into the operation and maintenance of the structure. The fluctuations about trend are due to the near stochastic maintenance schedule produced by the timescale distribution where in some years no maintenance is needed while in other years a few timescale groups require maintenance.

Under the net-zero 2050 scenario, cumulative emissions level off at \sim 7tC/m² by 2050 as operational and maintenance annual emissions decline in line with the projected carbon intensity of the wider economy. As shown in Figure 4.2b, in the 30 years between 2020 and 2050 the shorter-lived components require carbon investments for operation and maintenance. However, because of the decarbonisation of the wider economy, the bulk of the carbon liabilities in the longer-lived structures are avoided. This is illustrated in the BAU response post 2050 in Figure 4.2a which shows a steepening in the cumulative emissions as annual maintenance emissions rise in response to the \sim 70 year timescale for the RB being approached. This is important for climate policy given it suggests that there is an interaction between decarbonisation trajectories and the timescales and carbon intensities of new-build projects. This interaction would be further amplified by the nature of the substructures can be decarbonized in line with the wider economy. However, replacements for, for example, concrete-based

substructures like those associated with the peak in carbon liabilities at \sim 70 years might make that difficult.

The carbon time history in Figure 4.2a also shows that the implementation of netzero results in a \sim 60% reduction in the annual carbon emissions by 2030 relative to the BAU scenario, and achieves net-zero carbon by 2050. After 2070 items within the larger timescale classes are not likely to require maintenance by the end of building lifetime.

Figure 4.2b shows the carbon-timescale distribution of a building built in 2020 under the net-zero policy scenario, tracking its journey towards reaching zero emissions by 2050. It depicts the annual carbon emissions from operating and maintaining the building, showing a gradual decline to zero. It is clear that, shorter-lived components are the first to decarbonize due to their more frequent replacement cycles. Therefore, the majority of the decarbonisation is concentrated in short timescale classes, with 1-3 year timescales undergoing complete decarbonisation and other timescales only experiencing partial carbon reduction. In contrast, the larger timescales embedding larger amount of carbon, especially around ~70 years timescale, avoid decarbonization, as their lifetime exceed the timeframe remaining until the net-zero target is reached.

Chapter 4: Building inertia and climate change

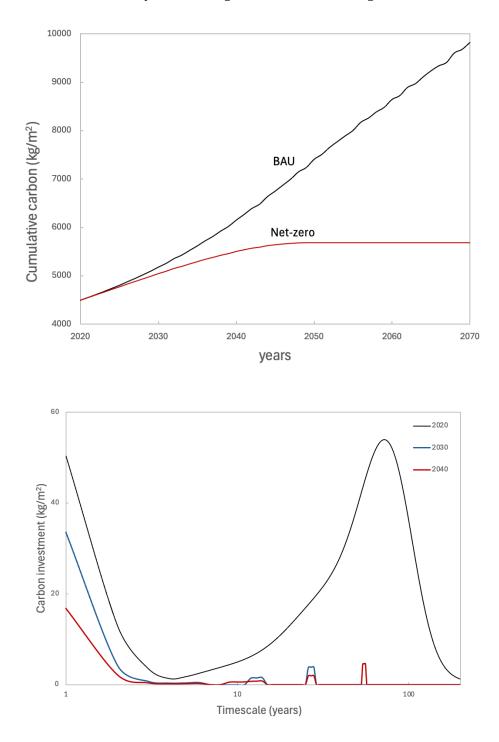


Figure 4.2 a. Cumulative carbon time histories under Business-As-Usual (black line) and net-zero 2050 scenarios (dark red line). b. Carbon-timescale distributions of an RB under the decarbonization scenario, when its newly built in 2020 (black line), in 2030 (blue line) and in 2040 (red line).

4.6 Discussion and Conclusions

Understanding the timescale distributions of recourse and carbon footprints are important, as long-lasting structures like buildings can result in carbon lock-in that will delay their transition to a net-zero carbon economy. That is why the required rapid transition to full decarbonization might require the removal of carbonemitting assets by potentially removing assets ahead of planned retirement – otherwise known as stranded assets (Bos and Gupta, 2019). In this context it is also important to appreciate the interrelated nature of the timescales involved. For example, short term operational energy used to say warm a building depends on much longer timescale investments made into the fabric of the building. As a result, risks of asset stranding can be mitigated either by making adjustments in the construction phase, or through retrofitting structures, for example by adding more insulation.

The carbon-timescale inertia presented here shows not surprisingly that, all else remaining equal, the shorter-lived components would be the easiest to be decarbonized simply because they are replaced at a higher frequency, e.g. operational carbon emissions. This is in line with the findings of aforementioned study (Keoleian et al., 2000) that majority of the energy reduction happens in the operational stage, this is because of the short-lasting nature of operational carbon (energy). According to studies, operational carbon is important in the life cycle of a structure because energy use and carbon in the operational stage can account for up to 30%-90% of the total life cycle (Zhang et al., 2014; Cuéllar-Franca and Azapagic, 2012; Rosa et al., 2012). This is significantly influenced by user behaviors and wider socio-industrial dynamics. Consequently, the finding that

operational carbon emissions (including maintenance) of the RB account for 63% of total carbon emissions over a 50-year lifetime may vary depending on the case. The Climate Change Committee (CCC) has stated that, the UK is not on track to meet its carbon budget targets and stricter steps are needed (Dray, 2021). In response, one of the measures the UK government has taken is the Future Home Standards (FHS) that are coming into force in 2025, requiring new homes produce 75-80% less carbon emissions compared to current levels, by mandating actions such as no gas boilers and instead use low-carbon heating systems like heat pumps. This partially addresses the concern with short-term operational carbon reductions. However, the greatest carbon liabilities which lie in the longer lived (>70 year) skeletal fabric of buildings, often made from concrete, which complicates the pathway towards a decarbonized economy, as their lifetime outlast the time available to reach a net-zero economy. As a result, it appears the investment-timescale distribution is able to articulate the portion of remaining carbon-intensive timescales causing carbon lock-in during the journey of meeting net-zero.

This raises a further related point. Buildings constructed nearer in time to full decarbonisation of the economy will present less carbon liability simply by virtue of fact that the older a building is likely to be not only have used high carbon substructures, but also to be closer to the \sim 70 year threshold when these structures will require significant maintenance. Taken alone this suggests that central planning would probably be wiser to hold off on house building until a lower carbon economy emerged. However, there is an insufficiency of UK houses, as the housing stocks in the UK is the oldest among Europe and was constructed

with outdated materials and standards (Smith, 2021), making the current homes poorly suited to meet future climate targets. The CCC proposes that all new buildings must be constructed to zero carbon standard by 2025 (Climate Change Committee, 2019), addresses the challenge of decarbonizing long-lasting carbon intensive materials, and somewhat aligns with the observation of delaying new constructions until reaching a lower-carbon economy reduces the future carbon liability. However, decarbonizing the existing building stock remains critical, as 80% of the buildings that will exist in 2050 have already been built, with only 20% set to be built in the coming years (Warren et al., 2024). This underscores the urgent need for deep retrofitting of existing buildings, replacing traditional skeletal components with low-carbon alternatives.

The results also raise whether it is a good idea to design and build structures to survive as long as they do, given a rapidly transitioning economy would certainly benefit from the flexibility that short-lived structures afford. For example, modular or adaptable buildings with shorter lifetime that can easily be dismantled and upgraded to integrate new low-carbon technologies. Of course, there are economic and social reasons why investments in buildings are spread over such a large array of timescales, even if these reasons are currently not well articulated in the academic literature.

In conclusion, the investment-timescale framework within the climate context highlights the importance of the trade-off between durability and flexibility in new building design. It underscores the need for balanced, strategic guidelines that promote adaptable structures in response to the accelerating demand for decarbonization.

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5 Conclusion and future work

Building investments may be seen as resources allocated to the creation, maintenance, and operation of building substructures throughout a broad range of their turnover periods. These investments must also last long enough to provide a net-positive, time-weighted future return. This PhD presented the dynamic characteristics of investments in buildings and explored its implication in the dynamic maintenance schedule and its associated profitability, as well as determining the carbon liability of new build under the net-zero carbon policy. This chapter summarises the conclusion made in the thesis, considering the aims and objectives outlined in the previous chapters, and describes study limitations as well as areas of future works.

5.1 Conclusion

Chapter 2 established the investment-timescale distribution by looking into the relationship between the size of investment in building substructures and their turnover timescales. This is achieved by applying a mortality function for each cohort of substructures that have the same average service life, and aggregating them to form an assemblage that I say is representative of a large cohort of buildings – or a Representative Building (RB).

The investment-timescale distribution that is produced in this PhD is the first framework to view buildings through the spectrum of dynamics of their substructures. The definition of substructures is made necessarily wide to attempt include all objects and activities within a building. As a result, the investment-timescale distribution of an RB is a near-continuous, multi-modal distribution but with a first moment of around 40 years. This finding serves as an introduction to the notion that building construction, operation and maintenance are all essentially investments that spread across different turnover timescales from seconds to centuries. The ~40 years' average lifetime of building components very much mirrors average working lifetime of people (Ausubel and Grubler, 1995), showing possible deep connections between the behavior of buildings and the habitants that live inside them. As a result, the research in this thesis looks to contribute to the emerging field called of human-building interaction (HBI) (Alavi et al., 2019).

The investment-timescale distribution of the RB is the composite of 4 subtimescale-distributions with representative service lives of around 1, 11, 30 and 62 years when considering monetary investments. This decomposition is somewhat in line with Brand's (1994) elaboration of building "shearing layers", a concept coined by Duffy and Henney (1989), which are composed of site (>300 years), structure (30-300years), skin (20 years), services (7-15 years), space plan (3-30 years), and stuff (1 day – 1 month) (Brand, 1994). According to Duffy, the reason for this layering is that "... there isn't such thing as a building. A building properly conceived is several layers of longevity of built components", (Brand, 1994). This form of disaggregation of turnover rates has also happened in larger scales. Jaccard and Rivers (2007) disaggregated capital stocks to 3 hierarchies according to their turnover rates into urban form (beyond a century), housing stock (71.5 years) and equipment (20-30 years). The capital-timescale distribution for the US economy shows a similar effect, with the US economy being determined by one year consumptive turnover, as well as 7, 50, 104 years capital turnover (Chester et al., 2024). Therefore it appears this concept of systems being comprised of a range of discrete turnover timescales is important in understanding the functioning of complex structures. It is as important for the functioning of man-made structures as it is for the natural ones, our bodies, for example, consist of about 200 distinct cell types that form various human tissues, each with its own unique rate of turnover. Cell turnover occurs when cells undergo damage or die, requiring the body to generate new cells as replacements.

Chapter 3 constructed a dynamic maintenance schedule, by letting the investments depreciate at a rate inverse to their timescales until they hit a predetermined threshold and then restoring them. From this cohort-level maintenance schedule the overall ROI of the investments during construction, operation and maintenance, and its associated payback time could be evaluated. The resulting dynamic maintenance schedule that is produced by the interaction of investment-timescale distribution and maintenance threshold, exhibits near-stochasticity over time, providing one explanation for why maintenance scheduling has proven so difficult. This stochastic nature of built structures may also be related to the unpredictable fluctuations happen in the economy.

The maintenance threshold was kept at 70% in the simulation, because ROI reaches one when applying this restriction, making the payback time of the RB 30 years. This 70% threshold that allows depreciation of 30% from its initial value, and seems consistent with reality, as properties usually depreciate partially but still not too far from its new state. It is not a coincidence that 30 years' payback time is in line with the homeowners' mortgage payoff time in the UK (Office for National Statistics, 2020). Additionally, this payback time is also close to the average turnover timescale of building substructures from chapter 2, and the average working lifetime of an individual (Ausubel and Grubler, 1995). Again, there appears to be strong connections between these three, not least because mortgages are generally paid off with earnings over working lifetimes.

Chapter 4 extended the implication of the investment-timescale distribution to the climate change by evaluating the dynamics energy use and carbon emissions resulting from turnover timescales. This involved applying the maintenance dynamics from chapter 3 to create a carbon time history under the net-zero policy scenario and compared with Business-As-Usual.

The carbon-timescale inertia shown in chapter 4 reveals that, unsurprisingly, the components with shorter lifetimes are the more readily decarbonised due to their more frequent replacement, emphasizing the importance of carbon-intensive short-lasting investments in achieving a 2050 decarbonization goal for a 2020 level new building. Furthermore, it also shows that the most carbon intensive components, usually found in the skeleton of structure and made with concrete, have a lifetime of >70 years, can be delayed from decarbonisation if the route to a net-zero economy is shorter than 70 years. This is somewhat echoing with what

Mercure et al. (2021) found that the more carbon-intensive economic sectors, such as energy supply and transportation, are the first to be decarbonised in the netzero carbon scenario. This implies that delaying construction until economies have decarbonized is a potentially valuable strategy. This brings up an additional aspect. Buildings built closer to the full decarbonisation of the economy will have less carbon liability simply because the older a building is, the more likely it is to have used high carbon substructures and to be closer to the 70 year threshold when these structures will need significant maintenance. This implies that it would be more prudent for central planning to delay housing construction until a more environmentally friendly economy is established.

5.2 Limitations and future work

The investment-timescale distribution in the built structure is a novel and interesting concept. However, there have been limitations in this PhD that may be addressed and expanded in future research works. The fact that only one BOQ was used because of the profound difficulty in obtaining them and the time required to analyse them question the works reproducibility. Analysing more BOQs from different locations and housing types should lead to a more robust model on building turnover dynamics. Although the carbon- and energy- timescale distributions include lower and higher scenarios, a comprehensive uncertainty analysis could have been conducted by using Monte Carlo simulation for all the distributions.

Given the rapid accumulation of new long-lived carbon-intensive capital assets in rapidly evolving economies such as China and India, focusing on these economies should be a priority when evaluating and preventing carbon lock-in. Fast transition may accelerate the vulnerability of these economies to asset stranding, enhancing the significance of the turnover dynamics of their capital stocks in the discussion of stranded assets.

The investment-timescale distribution could also provide a powerful way of interrogating a range of complex systems other than buildings or built structures. There are approximately 3.72×10^{13} cells in an adult body (Bianco et al., 2013), with a range of turnover rates and survival timescales. The implication of investment-timescale dynamics in the regeneration and death of cells and tissues could help to better understand how the human body functions and interacts with its surroundings.

5.3 Reference

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5.4 Appendices

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Appendix

Title BOQ expansion

Description This workbook contains expanded bill of quantities (BOQ), with assigned carbon emissions, energy and service life.

All service life data is derived from BCIS (2006) Life Expectancy of Building Components. Surveyors' experiences of buildings in use, unless otherwise specified All carbon and energy data are derived from the Inventory of Carbon and Energy (Hammond & Jones, 2011), unless otherwise specified.

 Tabs
 Description

 Money investmen: Financial cost of each item in the BOQ, already included in the original BOQ

 Energy investment Embodied energy calculated using ICE database

 Carbon inventory
 Embodied carbon calculated using ICE database

Abbreviations	
BOQ	Bill of quantities
BOM	Bill of materials
LCI	Life cycle inventory

	Description	<u>Qty</u>	<u>Unit</u>	<u>Rate</u>	<u>f p</u>
	Bill 1 Contractors Site Work				
	<u>SITE WORKS</u>				
	A01 PREAMBLES				
	Any specification clause mentioned in this Bill of Quantities refers to the Specifications prepared by Eric Cole Architecture, Craddys or the Employers Requirements. It should be noted that potentially there are alternative specifications for the same works requiring different products or standards. The Contractor should satisfy themselves that the specification references provided are the requirements that they consider comply with the Employers Requirements and Brief				
A	generally all of the above	1	ITEM	£0.00	£0.00
	A13 DESCRIPTION OF THE WORK Preliminaries and Preambles				
	The Contractor and Sub Contractors should allow for all works identified within the appended Preliminaries Standard Bill; which includes for all attendances, support works and restriction on the works				
В	generally	1	ITEM	£0.00	£0.00
	A40 PRELIMINARIES				
	Time related preliminaries				
	As required for the works, defined and specified by Contractor				
с	generally	0	Week	£0.00	£0.00
	Fixed cost preliminaries				
	As required for the works, defined and specified by Contractor				
D	generally	1	ITEM	£0.00	£0.00
	<u>On costs</u>				
	As required for the works, defined and specified by the Contractor				
E	overheads	1	ITEM	£0.00	£0.00
F	profit	1	ITEM	£0.00	£0.00
G	price increases / inflation	1	ITEM	£0.00	£0.00
	Fees and Charges				
	As required for the works, defined and specified by the Contractor				
н	Planning Fees	1	ITEM	£0.00	£0.00
I	Building Regulation Inspection Fees and Costs	1	ITEM	£0.00	£0.00

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V Principal Designer 1 ITEM £0.00 £0.00 W Principal Contractor 1 ITEM £0.00 £0.00 X Others (specify) 1 ITEM £0.00 £0.00 Page Total 1/2 £0.00	т	Highways Consultant	1	ITEM	£0.00	£0.00
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X Others (specify) 1 ITEM £0.00 Page Total 1/2 £0.00	V	Principal Designer	1	ITEM	£0.00	£0.00
Page Total 1/2 £0.00	W	Principal Contractor	1	ITEM	£0.00	£0.00
	х	Others (specify)	1	ITEM	£0.00	£0.00
Bill 1 Contractors Site Work	Page Total 1/2 £0.00					
	Bill 1 Contractors Site Work					

A54 CLIENT PROVISIONAL SUMS

Include the following defined Employers Provisional Sums, the Contractor must account for the following works in his programme; should the Contractor require any further information to assist in the programming he must contact the CA.

There are no defined provisional sums identified in the documents

А	Contractor to make allowances as required	1	ITEM	£0.00	£0.00		
В	Add for Main Contractors profit:%	0		£0.00	£0.00		
С	Add for Main Contractors overhead:%	0		£0.00	£0.00		
D	Allow for general attendance	1	ITEM	£0.00	£0.00		
	Include the following (un)defined Employers Provisional Sums, the Contractor must account for the following works in his programme; should the Contractor require any further information to assist in the programming he must contact the CA. There are no undefined provisional sums identified in the documents						
E	Contractor to make allowances as required	1	ITEM	£0.00	£0.00		
F	Add for Main Contractors profit:%	0		£0.00	£0.00		
G	Add for Main Contractors overhead:%	0		£0.00	£0.00		
н	Allow for general attendance	1	ITEM	£0.00	£0.00		
	A55 DAYWORKS						
	Include the following undefined Employers Provisional Sums for Dayworks; as defined by the RICS and BEC Labour						
I	Include the sum of £ for the cost of labour	1	ITEM	£0.00	£0.00		
J	Add for Main Contractors profit:%	0		£0.00	£0.00		
к	Add for Main Contractors overhead:%	0		£0.00	£0.00		
	Products						
L	Include the sum of £ for the cost of products	1	ITEM	£0.00	£0.00		
М	Add for Main Contractors profit:%	0		£0.00	£0.00		
Ν	Add for Main Contractors overhead:%	0		£0.00	£0.00		
Equipment							
0	Include the sum of £ for the cost of plant (equipment)	1	ITEM	£0.00	£0.00		
Ρ	Add for Main Contractors profit:%	0		£0.00	£0.00		
Q	Add for Main Contractors overhead:%	0		£0.00	£0.00		
	Page Total 1/3				£0.00		

Bill 1 Contractors Site Work

A56 CONTRACTORS PROVISIONAL SUMS

	The Contractor is to list below all works for which they wish to include a Provisional Sum				
	Defined - scope to be clarified below				
A	Subcontractor personnel transport and materials transport	1	ITEM	£70,500.00	£70,500.00
	Undefined - scope to be clarified below				
В	generally	1	ITEM	£0.00	£0.00
	Page Total 1/4				£70,500.00
	Bill 2 Site Preparation				
	SITE PREPARATION Risk				
	EXCAVATION RISK ITEMS				
	Excavating Risk; (Contractor to note: the following elements have been described but not quantified as this is an element of contractor's risk - Contractor to complete the risk design)				
	To reduce levels				
A	soft spots; including filling all soft spots with approved granular fill material, compacting and proof rolling - to be priced as rate only per cubic metre	0	m3	£0.00	£0.00
	Extra over excavation irrespective of depth for excavating				
В	next existing services - to be priced as rate only per cubic metre	0	m	£0.00	£0.00
С	around existing services crossing excavations - to be priced as rate only per cubic metre	0	m3	£0.00	£0.00
D	archeological digging on site; complete including the risk of time loss and all elements pertaining to the archeological dig	1	ITEM	£0.00	£0.00
	Extra over excavation irrespective of depth for breaking out and removal off site all spoils				
E	rock - to be priced as rate only per cubic metre	0	m3	£0.00	£0.00
F	concrete - to be priced as rate only per cubic metre	0	m3	£0.00	£0.00
G	reinforced concrete - to be priced as rate only per cubic metre	0	m3	£0.00	£0.00
Н	brickwork blockwork or stonework - to be priced as rate only per cubic metre	0	m3	£0.00	£0.00
I	contaminated material - to be priced as rate only per cubic metre	0	m3	£0.00	£0.00
	Disposal Risk				
	Surface water; including the treatment of the water to remove all sediment; pollutants and the like before leaving the site perimeters				
J	off site	1	ITEM	£0.00	£0.00

Excavated material

K	soft spot material - to be priced as rate only per cubic metre of inert	0	m3	£0.00	£0.00
L	extra over off site disposal for the disposal of contaminated material; Contractor to develop	0	m3	£0.00	£0.00
	Page Total 2/1				£0.00
	Bill 2 Site Preparation				
	Site Preparation				
	A13 DESCRIPTION OF THE WORK				
	Demolition activities				
	The Contractor and Sub Contractors should allow for all works identified within the appended Demolitions Standard Bill; which includes for all attendances, isolation of services, provision of hoardings, site surveys and investigations				
А	generally	1	ITEM	£0.00	£0.00
	C21 TOXIC HAZARD WASTE REMOVAL				
	Removal of materials hazardous to health				
	Carry out Type 3 / refurbishment and demolition survey of all areas affected by the works; including those likely to be affected by the services installations				
В	generally	1	ITEM	£0.00	£0.00
	Remove all materials identified in Type 3 / demolition and refurbishment survey as hazardous to health; in manner appropriate to the material and dispose off site to facility suitable for the material				
С	generally	1	ITEM	£0.00	£0.00
	Guano Removal				
	Demonstral all mission and an and a second state of the heir frame.				
	Removal all pigeon guano and associated debris from site				
D		1	ITEM	£0.00	£0.00
D	site	1	ITEM	£0.00	£0.00
D	<u>site</u> generally	1	ITEM	£0.00	£0.00
D	site generally UXO Survey Carry out full UXO survey, and act upon all findings as		ITEM	£0.00 £0.00	£0.00 £0.00
	site generally UXO Survey Carry out full UXO survey, and act upon all findings as may be required				
	site generally UXO Survey Carry out full UXO survey, and act upon all findings as may be required generally				
	site generally UXO Survey Carry out full UXO survey, and act upon all findings as may be required generally All other materials hazardous to Health Identify all other materials retained within the working areas, make safe and or remove from working areas as	1			
E	site generally UXO Survey Carry out full UXO survey, and act upon all findings as may be required generally All other materials hazardous to Health Identify all other materials retained within the working areas, make safe and or remove from working areas as appropriate removal of all other materials not suitable for	1	ITEM	£0.00	£0.00
F	site generally UXO Survey Carry out full UXO survey, and act upon all findings as may be required generally All other materials hazardous to Health Identify all other materials retained within the working, areas, make safe and or remove from working areas as appropriate removal of all other materials not suitable for general waste	1 1 1	ITEM	£0.00 £0.00	£0.00
E F G	site generally generally UXO Survey Carry out full UXO survey, and act upon all findings as may be required generally All other materials hazardous to Health Identify all other materials retained within the working, areas, make safe and or remove from working areas as appropriate removal of all other materials not suitable for general waste generally	1 1 1	ITEM ITEM	£0.00 £0.00 £0.00	£0.00 £0.00 £0.00

Bill 2 Site Preparation

C90 ALTERATIONS - SPOT ITEMS

Demolitions to external areas generally

	Allow for all works to break out, demolish and remove from site; leaving the site with all voids filled with well compacted granular material, safe and level					
A	removal of all stockpiles of debris, waste and the like	1	ITEM	£0.00	£0.00	
	D20 EXCAVATING AND FILLING					
	Site Preparation					
	Protect all tress retained on site					
В	generally	1	ITEM	£0.00	£0.00	
	Removing contaminated ground					
С	Ground infected with Buddleia; allow for the excavation, segregation and subsequent treatment of all spoil, roots and vegetation relating to plant growth generally - Provisional Quantity	50	m2	£0.00	£0.00	
C	· <i>· · ·</i>	50	1112	10.00	10.00	
	Excavating To reduce levels					
D	no details - Provisional Quantity	279	m3	£3.24	£903.96	
U	Disposal	275	115	13.24	1903.90	
	Excavated material					
F						
E	off site; it has been assumed all excavated material to be taken off site; inert non hazardous - Provisional Quantity	140	m3	£35.65	£4,991.00	
E	off site; it has been assumed all excavated material to be taken off site; inert non hazardous -	140 140	m3 m3	£35.65 £6.48	£4,991.00 £907.20	
	off site; it has been assumed all excavated material to be taken off site; inert non hazardous - Provisional Quantity					
	off site; it has been assumed all excavated material to be taken off site; inert non hazardous - Provisional Quantity on site; in stock piles suitable for reuse					
	off site; it has been assumed all excavated material to be taken off site; inert non hazardous - Provisional Quantity on site; in stock piles suitable for reuse Selected excavated material					
F	off site; it has been assumed all excavated material to be taken off site; inert non hazardous - Provisional Quantity on site; in stock piles suitable for reuse Selected excavated material Filling to make up levels; compacting in layers	140	m3	£6.48	£907.20	
F	off site; it has been assumed all excavated material to be taken off site; inert non hazardous - Provisional Quantity on site; in stock piles suitable for reuse Selected excavated material Filling to make up levels; compacting in layers over 250mm average thick	140	m3	£6.48	£907.20	
F	off site; it has been assumed all excavated material to be taken off site; inert non hazardous - Provisional Quantity on site; in stock piles suitable for reuse Selected excavated material Filling to make up levels; compacting in layers over 250mm average thick Surface Treatments	140	m3	£6.48	£907.20	
F	off site; it has been assumed all excavated material to be taken off site; inert non hazardous - Provisional Quantity on site; in stock piles suitable for reuse Selected excavated material Filling to make up levels; compacting in layers over 250mm average thick Surface Treatments Compacting ground	140	m3 m3	£6.48 £8.64	£907.20 £1,209.60	
F	off site; it has been assumed all excavated material to be taken off site; inert non hazardous - Provisional Quantity on site; in stock piles suitable for reuse Selected excavated material Filling to make up levels; compacting in layers over 250mm average thick Surface Treatments Compacting ground generally	140	m3 m3	£6.48 £8.64	£907.20 £1,209.60 £2,035.28	
F	off site; it has been assumed all excavated material to be taken off site; inert non hazardous - Provisional Quantity on site; in stock piles suitable for reuse Selected excavated material Filling to make up levels; compacting in layers over 250mm average thick Surface Treatments Compacting ground generally Page Total 2/3	140	m3 m3	£6.48 £8.64	£907.20 £1,209.60 £2,035.28	
F	off site; it has been assumed all excavated material to be taken off site; inert non hazardous - Provisional Quantity on site; in stock piles suitable for reuse Selected excavated material Filling to make up levels; compacting in layers over 250mm average thick Surface Treatments Compacting ground generally Page Total 2/3 Bill 3 Substructures	140	m3 m3	£6.48 £8.64	£907.20 £1,209.60 £2,035.28	
F	off site; it has been assumed all excavated material to be taken off site; inert non hazardous - Provisional Quantity on site; in stock piles suitable for reuse Selected excavated material Filling to make up levels; compacting in layers over 250mm average thick Surface Treatments Compacting ground generally Page Total 2/3 Bill 3 Substructures Excavation RISK	140	m3 m3	£6.48 £8.64	£907.20 £1,209.60 £2,035.28	

complete the risk design)

To reduce levels

A	soft spots; including filling all soft spots with approved granular fill material, compacting and proof rolling - to be priced as rate only per cubic metre	0	m3	£0.00	£0.00
	Extra over excavation irrespective of depth for excavating				
В	next existing services - to be priced as rate only per				
U	cubic metre	0	m	£0.00	£0.00
С	around existing services crossing excavations - to be priced as rate only per cubic metre	0	m3	£0.00	£0.00
D	archeological digging on site; complete including the risk of time loss and all elements pertaining to the archeological dig	1	ITEM	£0.00	£0.00
	Extra over excavation irrespective of depth for breaking out and removal off site all spoils				
E	rock - to be priced as rate only per cubic metre	0	m3	£0.00	£0.00
F	concrete - to be priced as rate only per cubic metre	0	m3	£0.00	£0.00
G	reinforced concrete - to be priced as rate only per cubic metre	0	m3	£0.00	£0.00
н	brickwork blockwork or stonework - to be priced as rate only per cubic metre	0	m3	£0.00	£0.00
I	contaminated material - to be priced as rate only per cubic metre	0	m3	£0.00	£0.00
	Disposal Risk				
	Disposal Risk Surface water; including the treatment of the water to remove all sediment; pollutants and the like before leaving the site perimeters				
J	Surface water; including the treatment of the water to remove all sediment; pollutants and the like before	1	ITEM	£199.84	£199.84
J	Surface water; including the treatment of the water to remove all sediment; pollutants and the like before leaving the site perimeters	1	ITEM	£199.84	£199.84
J	Surface water; including the treatment of the water to remove all sediment; pollutants and the like before leaving the site perimeters off site	1	ITEM	£199.84 £0.00	£199.84 £0.00
	Surface water; including the treatment of the water to remove all sediment; pollutants and the like before leaving the site perimeters off site Excavated material soft spot material - to be priced as rate only per				
К	Surface water; including the treatment of the water to remove all sediment; pollutants and the like before leaving the site perimeters off site Excavated material soft spot material - to be priced as rate only per cubic metre of inert extra over off site disposal for the disposal of	0	m3	£0.00	£0.00
К	Surface water; including the treatment of the water to remove all sediment; pollutants and the like before leaving the site perimeters off site Excavated material soft spot material - to be priced as rate only per cubic metre of inert extra over off site disposal for the disposal of contaminated material; Contractor to develop	0	m3	£0.00	£0.00 £0.00
К	Surface water; including the treatment of the water to remove all sediment; pollutants and the like before leaving the site perimeters off site Excavated material soft spot material - to be priced as rate only per cubic metre of inert extra over off site disposal for the disposal of contaminated material; Contractor to develop Page Total 3/1	0	m3	£0.00	£0.00 £0.00
К	Surface water; including the treatment of the water to remove all sediment; pollutants and the like before leaving the site perimeters off site Excavated material soft spot material - to be priced as rate only per cubic metre of inert extra over off site disposal for the disposal of contaminated material; Contractor to develop Page Total 3/1 Bill 3 Substructures	0	m3	£0.00	£0.00 £0.00
К	Surface water; including the treatment of the water to remove all sediment; pollutants and the like before leaving the site perimeters off site Excavated material soft spot material - to be priced as rate only per cubic metre of inert extra over off site disposal for the disposal of contaminated material; Contractor to develop Page Total 3/1 Bill 3 Substructures D20 EXCAVATING AND FILLING	0	m3	£0.00	£0.00 £0.00
К	Surface water; including the treatment of the water to remove all sediment; pollutants and the like before leaving the site perimeters off site Excavated material soft spot material - to be priced as rate only per cubic metre of inert extra over off site disposal for the disposal of contaminated material; Contractor to develop Page Total 3/1 Bill 3 Substructures D20 EXCAVATING AND FILLING Excavating	0	m3	£0.00	£0.00 £0.00
ĸ	Surface water; including the treatment of the water to remove all sediment; pollutants and the like before leaving the site perimeters off site Excavated material soft spot material - to be priced as rate only per cubic metre of inert extra over off site disposal for the disposal of contaminated material; Contractor to develop Page Total 3/1 Bill 3 Substructures D20 EXCAVATING AND FILLING Excavating Ground beams; from formation level	0	m3 m3	£0.00 £0.00	£0.00 £0.00 £199.84
ĸ	Surface water; including the treatment of the water to remove all sediment; pollutants and the like before leaving the site perimeters off site Excavated material soft spot material - to be priced as rate only per cubic metre of inert extra over off site disposal for the disposal of contaminated material; Contractor to develop Page Total 3/1 Bill 3 Substructures D20 EXCAVATING AND FILLING Excavating Ground beams; from formation level not exceeding 1.00m deep	0	m3 m3	£0.00 £0.00	£0.00 £0.00 £199.84

with approved well compacted material; including all design, maintenance and removal as required

С	pits	4	m2	£6.48	£25.92	
D	trenches	980	m2	£4.32	£4,233.60	
	Earthwork support					
	To faces of excavation; including all additional backfilling with well compacted granular material, making good as required, designed, supplied and installed, maintained and removed by specialist Sub Contractor					
E	1.00m maximum depth; distance between opposing faces not exceeding 2.00m	980	m2	£3.24	£3,175.20	
F	1.00m maximum depth; distance between opposing faces 2.00 to 4.00m	4	m2	£5.40	£21.60	
	Disposal					
	Excavated material					
G	off site; it has been assumed all excavated material to be taken off site; to be treated as inert hazardous material	350	m3	£35.65	£12,477.50	
	Surface Treatments					
	Compacting ground					
н	generally	668	m2	£0.76	£507.68	
	Compacting bottoms of excavations					
Ι	generally	433	m2	£0.76	£329.08	
	D30 PILING					
	Bored Cast-in-place piles; as Craddys drawings					
	Bored cast-in-place piles to site generally; in various locations; deemed to include the transport to site and from site of all plant, materials and equipment required for the piling operations; all plant movements on site; all setting out; concrete, reinforcement and formwork; all ancillary piling operations required to satisfy the piling design; designed and installed by specialist Sub <u>Contractor</u>					
J	generally 300mm diameter	117	Nr	£834.44	£97,629.48	
	Page Total 3/2				£120,681.02	
	Bill 3 Substructures					
	Items extra over piling					
	Contractor to make allowance for any required pile probing on the line of the existing deep drainage line					
A	generally	1	ITEM	Included	Included	
	Move piling rig to different piling points					
	Make allowance to move piling rig from position to position including moving to new position as identified on engineers pile layout;					
В	generally; 117nr piles	1	ITEM	Included	Included	
	Cutting off tops of piles					

Cutting off tops of piles

	Cutting off tops of piles; Heights to be developed by				
	contractor as to construction methods on site				
С	300mm diameter piles; cutting length to be developed by contractor; below top of pilemat	117	Nr	£19.44	£2,274.48
	Disposal				
	Surplus excavated material; based on piles to be 12.00m deep; material taken to be inert non hazardous				
D	disposal off site	99	m3	£35.65	£3,529.35
	Authorised delays				
	<u>Rig standing time</u>				
Е	generally	12	hr	Included	Included
	Pile tests; as required by the design				
	Testing piles to the satisfaction of the Employers Representative for the works				
F	as required by the design	1	ITEM	Included	Included
	Attendances on piling				
	Piling mat; designed to suit the piling rig(s) for the project; provide, lay and level (note area measured allows for the full site area); Contractor to to note: the pilemat is the same size as the building footprint; no allowance has been made for any additional pilemat beyond the building footprint; Contractor to note: Make allowance for excavation for the pilemat, removal of soil and import of suitable pilemat material - Top of concrete foundations is formation level for excavation				
G	based on marked up drawing, taken to be nominally 600mm thick; assumed to be constructed using imported approved well compacted granular material; compaction to engineers requirements; top of pile mat taken to be 600mm above top of pile caps	1117	m2	£34.57	£38,614.69
	Page Total 3/3				£44,418.52
	Bill 3 Substructures				
	Disposal of piling mat on completion of the piling operations; it is assumed that the pilemat is to be removed completely; and making allowance for compacting and preparing for new works				
A	generally	1117	m2	£22.69	£25,344.73
	General attendances on the piling Sub Contractor				
В	as required	1	ITEM	£297.07	£297.07
	Special attendances on the piling Sub Contractor				
С	as required	1	ITEM	£297.07	£297.07

E10 MIXING / CASTING / CURING IN SITU CONCRETE

Plain concrete grade Gen 1

	Blinding concrete				
D	not exceeding 150mm thick	11	m3	£149.07	£1,639.77
	Filling to hollow walls				
E	not exceeding 150mm thick	27	m3	£149.07	£4,024.89
	Plain concrete grade Gen 3				
	Mass fill concrete				
F	generally	2	m3	£156.64	£313.28
	Reinforced concrete grade FND2z				
	Foundations				
G	generally	228	m3	£182.56	£41,623.68
	Isolated foundations				
н	generally	1	m3	£182.56	£182.56
	Grouting				
	<u>Combextra or similar approved non shrink grout to</u> holding down bolt assemblies and plates				
I	generally	18	Nr	£19.44	£349.92
	E20 FORMWORK FOR IN SITU CONCRETE				
	Formwork, basic finish				
	Sides of ground beams and edges of beds				
J	not exceeding 250mm high	8	m	£23.77	£190.16
К	500 to 1000mm high	1202	m	£30.25	£36,360.50
	<u>Circular mortices</u>				
L	forming holding down bolt assembly cones and the like; measured per assembly	18	Nr	£27.01	£486.18
	Page Total 3/4				£111,109.81
	Bill 3 Substructures				
	Cordek anti heave boards				
	Claymaster board; 50mm thick to sides of foundations				
A	500 to 1000mm high	134	m	£20.52	£2,749.68
	Cordek Cellcore HXB 18/24 heave protection				
В	to underside of foundations	79	m2	£16.20	£1,279.80
	E30 REINFORCEMENT FOR IN SITU CONCRETE				
	Reinforcement - no details				
	<u>High tensile steel deformed square bar reinforcement</u> to B.S.4449 grade 460; bars				
С	H10	3.83	Т	£1,593.36	£6,102.57
D	H12	0.55	т	£1,636.57	£900.11

E	H16	3.28	т	£1,712.18	£5,615.95	
F	H20	4.95	т	£1,795.36	£8,887.03	
G	H25	4.66	т	£1,847.21	£8,608.00	
	E41 WORKED FINISHES/CUTTING TO IN SITU CONCRETE					
	Worked finishes					
	Power floating					
Н	generally	3	m2	£10.80	£32.40	
	E42 ACCESSORIES CAST INTO IN SITU CONCRETE					
	Casting in holding down bolts					
	Cast in holding down bolts supplied by others, complete with all formwork, setting out and the like					
I	measured as sets	18	Nr	£27.01	£486.18	
	E60 PRECAST/COMPOSITE CONCRETE DECKING					
	Beam and Block; as specification notes					
	RMC pre cast concrete beam and dense aggregate block floor; including all grouting joints, straps, infills and the like, designed, manufactured and installed by specialist Sub Contractor; laid on blockwork sleeper walls					
J	nominally 150mm thick	671	m2	£69.00	£46,299.00	
	Extra over for					
К	holes for services and drainage	52	Nr	£5.00	£260.00	
L	provision of additional supports for stair cases	6	Nr	£100.00	£600.00	
М	provision of additional supports for lift shaft	1	Nr	£100.00	£100.00	
	Page Total 3/5				£81,920.72	
	Bill 3 Substructures					
	F10 BRICK/BLOCK WALLING					
	Blockwork; as specification notes					
	Dense aggregate blockwork; 7.3N/mm2 nominally 100mm thick; in cement mortar; stretcher bond; laid flat					
A	100mm thick	415	m2	£22.80	£9,462.00	
В	215mm thick; assumed to be 100mm blocks laid flat	76	m2	£45.58	£3,464.08	
С	215mm thick; assumed to be 100mm blocks laid flat; in piers	2	m2	£45.58	£91.16	
	Extra over blockwork for					
D	cutting blockwork to course 100mm thick	619	m	£5.00	£3,095.00	
E	cutting blockwork to course 215mm thick	113	m	£10.00	£1,130.00	
	Brickwork below DPC					

	Engineering bricks; manufacturer and product reference to be agreed; 7.5N/mm2 compressive strength; half lap stretcher bond; flush joints; walls					
F	half brick thick	62	m2	£72.20	£4,476.40	
	F30 ACCESSORIES AND SUNDRY ITEMS FOR BRICK, BLOCK AND STONE WALLING					
	Forming cavities; as specification notes					
	Forming cavities in hollow walls; complete with Ancon					
	stainless steel HRT4 safety ties at the rate of five per square metre					
G	125mm wide	220	m2	£3.60	£792.00	
	Forming cavities in hollow walls; complete with Ancon stainless steel HRT4 safety ties at the rate of five per square metre; and rigid insulation board; Celotex CG5000 50mm thick					
н	100mm wide	19	m2	£11.54	£219.26	
	Forming cavities in hollow walls; complete with Ancon stainless steel HRT4 safety ties at the rate of five per square metre; and rigid insulation board; Celotex CG5000 75mm thick					
I	125mm wide	55	m2	£16.04	£882.20	
	Damp proof courses; as specification notes					
	Visqueen Zedex Housing grade damp proof course: bedding in cement mortar					
J	not exceeding 225mm wide	87	m2	£16.45	£1,431.15	
	Page Total 3/6				£25,043.25	
	Bill 3 Substructures					
	Telescopic vents					
	Glidevale Limited ZLAB airbrick with ZLPS periscope vent; colour Anthracite; building in as work proceeds					
А	generally	223	Nr	£16.50	£3,679.50	
	Page Total 3/7				£3,679.50	
	Bill 4 Frame					
	Frame					
	A44 TEMPORARY WORKS					
	Temporary Bracing and propping					
	Provision of all required temporary bracing, propping and other equipment required to maintain stability of the steel frame during erection until complete as necessary, designed, manufactured, installed and removed by specialist Sub Contractor					
A	generally	1	ITEM	Included	Included	
	F31 PRECAST CONCRETE SILLS/LINTELS/COPINGS/FEATURES					

Pre cast concrete GEN3 padstones

Pre cast concrete padstones, building in as work proceeds

	·					
В	440 x 215 x 100mm	18	Nr	£60.00	£1,080.00	
С	600 x 215 x 100mm	5	Nr	£77.50	£387.50	
D	900 x 215 x 100mm	3	Nr	£130.00	£390.00	
Ε	440 / 440 x 215 x 100mm L shaped	3	Nr	£135.00	£405.00	
	G10 STRUCTURAL STEEL FRAMING					
	Fabricated steelwork to B.S.4360					
F	All steelwork is to be designed, manufactured, supplied and erected by specialist Sub Contractor; including, but not limited to, all surface treatments; factory applied finishes; localised repairs and the like as required following installation; making good following installation; in accordance with specifications prepared by Craddys and the National Steelwork Specifications Supply and erect all steelwork required for the Coombe Shute, Stoke Gabriel Housing project; including all galvanising as may be required The following is presented for the purpose of check quantities; and is measured from the drawings provided; and makes no allowance for design development; resizing for optimum efficiency and the like; and is the total of steelwork shown on the drawings	1	ITEM	£35,137.64	£35,137.64	
G	Columns weight not exceeding 40kg/m	0.77	т	Included	Included	
н	weight not exceeding 40kg/m; square hollow					
	section	0.19	Т	Included	Included	
Ι	weight not exceeding 40kg/m; galvanised	0.41	Т	Included	Included	
J	weight not exceeding 40kg/m; galvanised; square hollow section	0.75	т	Included	Included	
	Page Total 4/1				£37,400.14	
	Bill 4 Frame					
	Beams					
A	weight not exceeding 40kg/m	6.21	т	Included	Included	
В	weight not exceeding 40kg/m; square hollow section	0.06	т	Included	Included	
С	weight not exceeding 40kg/m; galvanised	1.51	т	Included	Included	
D	weight not exceeding 40kg/m; galvanised; rectangular hollow section	0.44	т	Included	Included	
E	weight 40 to 100kg/m	0.7	т	Included	Included	
	Holding down bolts					

Fittings

G	generally; assessed at 17.5% of all steelwork	1.92	т	Included	Included
	Framing and erection				
	<u>On site</u>				
н			_		
	all works required to erect steel framework on site	12.96	Т	Included	Included
	Cold bridging				
	Allow for all works necessary to eliminate cold bridging within the design of the steel frame; by use of proprietary fittings and equipment				
I	generally - no details	1	ITEM	Included	Included
	G12 ISOLATED STRUCTURAL METAL MEMBERS				
	Isolated structural and secondary steelwork				
	Steelwork designed, manufactured, supplied and installed by specialist Sub Contractor				
J	additional framing and supports to external and internal walls	1	ITEM	Included	Included
К	additional framing and supports to roof structure, including all cleader rails and the like	1	ITEM	Included	Included
L	additional framing and supports to curtain walling, removable panels and the like	1	ITEM	Included	Included
М	additional framing and supports to mechanical and electrical installations	1	ITEM	Included	Included
Ν	windposts, WP3, nominally 2.40m long	2	Nr	£415.00	£830.00
	M60 PAINTING/CLEAR FINISHING EXTERNALLY				
	Bitumen paint to steelwork				
	Prepare, touch up primer and apply two coats of approved bitumen based paint (RIW or similar) to steelwork, general surfaces				
0	generally over 300mm - provisional quantity	5	m2	£16.20	£81.00
	Page Total 4/2				£911.00
	Bill 4 Frame				
	Painting to external steelwork				
	Prepare, touch up primer and apply two coats of approved exterior grade gloss paint to steelwork, general surfaces				
A	generally over 300mm - provisional quantity	35	m2	£10.00	£350.00
	M61 INTUMESCENT COATINGS FOR FIRE PROTECTION OF STEELWORK				
	Intumescent painting				
	Nulifire or similar approved intumescent paint finish to exposed surfaces; to achieve one hour fire rating; general surfaces of structural metalwork				

general surfaces of structural metalwork

В	over 300mm girth - Provisional Quantity - measured to all surfaces of all steelwork	239	m2	£8.00	£1,912.00
	Page Total 4/3				£2,262.00
	Bill 5 Upper Floors				
	Upper Floors				
	E60 PRECAST/COMPOSITE CONCRETE DECKING				
	Pre cast concrete floors				
	RMC or similar approved hollow core pre cast concrete floor planks; including all grouting of ends of hollows,				
	all grouting joints, straps, infills and the like, designed, manufactured and installed by specialist Sub Contractor; laid on blockwork walls				
A	nominally 150mm thick	48	m2	£69.00	£3,312.00
	RMC or similar approved hollow core acoustic rated pre cast concrete floor planks; including all grouting of ends of hollows, all grouting joints, straps, infills and the like, designed, manufactured and installed by specialist Sub Contractor; laid on blockwork walls				
В	nominally 150mm thick	407	m2	£69.00	£28,083.00
	G20 CARPENTRY/TIMBER FRAMING/FIRST FIXING				
	<u>TJI floor joists</u>				
	Designed floor joists, to suit span, locations and loadings for the domestic properties, including the design, manufacture, supply and installation, complete with all joist hangers, fixings, supports, bracings, blockings and the like as required to complete installation				
С	to suit upper floor area of 50.49m2; unit 1	1	ITEM	£2,253.00	£2,253.00
D	to suit upper floor area of 56.18m2; unit 2	1	ITEM	£2,343.00	£2,343.00
E	to suit upper floor area of 54.39m2; unit 3	1	ITEM	£2,178.00	£2,178.00
F	to suit upper floor area of 54.39m2; unit 4	1	ITEM	£2,178.00	£2,178.00
G	to suit upper floor area of 54.41m2; unit 10	1	ITEM	£3,052.00	£3,052.00
	Extra over for				
н	trimmers or additional joists to suit unit 1, 2.44m long	2	Nr	£12.00	£24.00
I	trimmers or additional joists to suit unit 3, 3.12m long	2	Nr	£15.00	£30.00
J	trimmers or additional joists to suit unit 4, 3.12m long	2	Nr	£15.00	£30.00
	Sawn softwood				
	Sawn softwood, for exterior use; preservative treated; grade C24				
К	50 x 150mm joists	98	m	£4.90	£480.20
L	50 x 150mm joists; fixed to steel frame with and including bolts	41	m	£5.35	£219.35

Page	Total	5/1
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Bill 5 Upper Floors

Fixings; galvanised mild steel

	Straps; to suit upper floors; plugged and screwed to masonry walls; nailed to joists				
A	nominally 1750mm long, 50 x 3mm; bent once	129	Nr	£9.00	£1,161.00
	Joist hangers, external quality, nailed				
В	to suit 150 x 50mm joists	160	Nr	£2.40	£384.00
	<u>K11 RIGID SHEET</u> FLOORING/SHEATHING/LININGS/CASINGS				
	Floor boarding				
	Chipboard to B.S5669 part 2; tongued and grooved flooring panels, all joints secret screwed to joists and glued, all joints offset; floors				
С	over 300mm wide	270	m2	£8.03	£2,168.10
	<u>K20 TIMBER BOARD</u> FLOORING/SHEATHING/LININGS/CASINGS				
	Balcony flooring - no details				
	Assumed to be hardwood ribbed decking boards; screw fixed to timber joists; 125 x 19mm section; with nominal 5mm gap between boards; complete with anti slip finish; preservative treated				
D	over 300mm wide	23	m2	£94.30	£2,168.90
	P10 SUNDRY INSULATION/PROOFING WORK/FIRE STOPS				
	<u>Fire breaks</u>				
	Rockwool or similar approved cavity fire breaks; at perimeter of upper floors; nominally 200 x 300mm section				
E	horizontal	327	m	£20.75	£6,785.25
	Page Total 5/2				£12,667.25
	<u>Bill 6 Roof</u>				
	Roof				
	G20 CARPENTRY/TIMBER FRAMING/FIRST FIXING				
	<u>Structural softwood</u>				
	Sawn softwood, preservative treated; grade C24; pitched roof members				
A	150 x 50mm, C24 timber joists at 400mm centres; to porches	41	m	£4.90	£200.90
В	150 x 50mm, C24 timber joists at 400mm centres; to dormers	65	m	£5.10	£331.50
С	175 x 50mm, C24 timber joists at 400mm centres; to unit 5 to 9	913	m	£5.88	£5,368.44
D	250 x 25mm, C24 timber ridges; to unit 5 to 9	15	m	£6.38	£95.70

Sawn softwood, preservative treated; grade C24; dormer wall construction

E	100 x 50mm, C24 timber joists at 400mm centres	267	m	£4.37	£1,166.79
	Sawn softwood, preservative treated; bolted to timber				
_	beams; plates	20		CE 27	6161 10
F	100 x 50mm	30	m	£5.37	£161.10
	Sawn softwood, preservative treated; bolted to steel beams; plates				
G	100 x 50mm	183	m	£5.37	£982.71
	Sawn softwood, preservative treated; bolted to masonry with resin anchors at 300mm centres; plates				
н	100 x 50mm	10	m	£5.37	£53.70
	Sawn softwood, preservative treated; bedded in mortar; plates				
I	100 x 50mm	287	m	£4.82	£1,383.34
J	100 x 50mm; to verges	60	m	£4.37	£262.20
	Sawn softwood, preservative treated; framing to eaves and verges				
К	nominally 50 x 50mm	1235	m	£3.04	£3,754.40
L	nominally 50 x 50mm; plugged and screwed to masonry walls	378	m	£3.04	£1,149.12
	Trusses; as Employers Requirements				
	Trusses; as Employers Requirements Roof trusses, designed, manufactured, supplied and installed by specialist Sub Contractor, complete with all bracings, fixings, central walkway boards; openings for access hatches and the like as required to complete installation				
М	Roof trusses, designed, manufactured, supplied and installed by specialist Sub Contractor, complete with all bracings, fixings, central walkway boards; openings for access hatches and the like as required to complete installation	90	m2	£35.00	£3,150.00
M	Roof trusses, designed, manufactured, supplied and installed by specialist Sub Contractor, complete with all bracings, fixings, central walkway boards; openings for access hatches and the like as required to complete installation	90	m2 m2	£35.00 £35.00	
	Roof trusses, designed, manufactured, supplied and installed by specialist Sub Contractor, complete with all bracings, fixings, central walkway boards; openings for access hatches and the like as required to complete installation total roof area - on plan; garage units for 7 to 9				
	Roof trusses, designed, manufactured, supplied and installed by specialist Sub Contractor, complete with all bracings, fixings, central walkway boards; openings for access hatches and the like as required to complete installation total roof area - on plan; garage units for 7 to 9 total roof area - on plan; timber store				£280.00
	Roof trusses, designed, manufactured, supplied and installed by specialist Sub Contractor, complete with all bracings, fixings, central walkway boards; openings for access hatches and the like as required to complete installation total roof area - on plan; garage units for 7 to 9 total roof area - on plan; timber store Page Total 6/1				£280.00
N	Roof trusses, designed, manufactured, supplied and installed by specialist Sub Contractor, complete with all bracings, fixings, central walkway boards; openings for access hatches and the like as required to complete installationtotal roof area - on plan; garage units for 7 to 9 total roof area - on plan; timber storePage Total 6/1Bill 6 Roof	8	m2	£35.00	£280.00 £18,339.90
N	Roof trusses, designed, manufactured, supplied and installed by specialist Sub Contractor, complete with all bracings, fixings, central walkway boards; openings for access hatches and the like as required to complete installation total roof area - on plan; garage units for 7 to 9 total roof area - on plan; timber store Page Total 6/1 Bill 6 Roof total roof area - on plan; car port total roof area - on plan; units 1 and 2, including 4	8 56	m2 m2	£35.00 £35.00	£280.00 £18,339.90 £1,960.00
N A B	Roof trusses, designed, manufactured, supplied and installed by specialist Sub Contractor, complete with all bracings, fixings, central walkway boards; openings for access hatches and the like as required to complete installation total roof area - on plan; garage units for 7 to 9 total roof area - on plan; timber store Page Total 6/1 Bill 6 Roof total roof area - on plan; car port total roof area - on plan; units 1 and 2, including 4 dormers total roof area - on plan; units 3 and 4, including	8 56 168	m2 m2 m2	£35.00 £35.00 £34.76	£280.00 £18,339.90 £1,960.00 £5,839.68
N A B C	Roof trusses, designed, manufactured, supplied and installed by specialist Sub Contractor, complete with all bracings, fixings, central walkway boards; openings for access hatches and the like as required to complete installation total roof area - on plan; garage units for 7 to 9 total roof area - on plan; timber store Page Total 6/1 Bill 6 Roof total roof area - on plan; car port total roof area - on plan; units 1 and 2, including 4 dormers total roof area - on plan; units 3 and 4, including central shallow pitched valley	8 56 168 157	m2 m2 m2 m2	£35.00 £35.00 £34.76 £26.25	£280.00 £18,339.90 £1,960.00 £5,839.68 £4,121.25
N A B C	Roof trusses, designed, manufactured, supplied and installed by specialist Sub Contractor, complete with all bracings, fixings, central walkway boards; openings for access hatches and the like as required to complete installationtotal roof area - on plan; garage units for 7 to 9 total roof area - on plan; timber storePage Total 6/1Bill 6 Rooftotal roof area - on plan; car port total roof area - on plan; units 1 and 2, including 4 dormerstotal roof area - on plan; units 3 and 4, including central shallow pitched valleytotal roof area - on plan; unit 10	8 56 168 157	m2 m2 m2 m2	£35.00 £35.00 £34.76 £26.25	£280.00 £18,339.90 £1,960.00 £5,839.68 £4,121.25
N A B C	Roof trusses, designed, manufactured, supplied and installed by specialist Sub Contractor, complete with all bracings, fixings, central walkway boards; openings for access hatches and the like as required to complete installationtotal roof area - on plan; garage units for 7 to 9 total roof area - on plan; timber storePage Total 6/1Bill 6 Rooftotal roof area - on plan; car port total roof area - on plan; units 1 and 2, including 4 dormerstotal roof area - on plan; units 3 and 4, including central shallow pitched valley total roof area - on plan; unit 10	8 56 168 157	m2 m2 m2 m2	£35.00 £35.00 £34.76 £26.25	£280.00 £18,339.90 £1,960.00 £5,839.68 £4,121.25

	Straps: assumed to be galvanised mild steel; fixed to timber and masonry					
F	assumed to be 1700 x 50 x 3mm, bent once; to verges	50	Nr	£9.20	£460.00	
G	assumed to be 1200 x 50 x 3mm, bent once; to plates	228	Nr	£8.38	£1,910.64	
	Joist hangers, shoes, brackets and the like					
н	as required to complete installation	1	ITEM	£500.00	£500.00	
	H62 NATURAL SLATING					
	Roof slating; as planning drawings					
	Natural slate roofing (no details): complete with approved battens (38 x 25mm) fixed to and including approved felt / breather membrane and the like to complete installation					
I	pitch 25 degrees	68	m2	£45.00	£3,060.00	
J	pitch 35 degrees	914	m2	£35.00	£31,990.00	
	Abutments; complete with all additional battens, including over sized or cut slates to suit					
к	pitched at 35 degrees	71	m	£12.00	£852.00	
L	horizontal to tops of pitch	10	m	£8.00	£80.00	
М	horizontal to bottom of pitch	23	m	£8.00	£184.00	
	Eaves: complete with tilting fillet, ventilation, dressing felt / breather membrane into gutter					
Ν	including approved slip course of slates	318	m	£13.00	£4,134.00	
	Verges; complete with undercloak, dressed tiles and mortar as required; including oversized slates to suit					
0	generally	60	m	£23.00	£1,380.00	
	Page Total 6/2				£60,945.89	
	Bill 6 Roof					
	Ridges; dry ridge system with all fixings, ventilation and the like, including additional battens					
А	generally	103	m	£31.00	£3,193.00	
	Hips: dry ridge system with all fixings, ventilation and the like, including additional battens					
В	generally	185	m	£45.00	£8,325.00	
	Valleys; cutting to both sides of valley (liner measured elsewhere) complete with all additional battens					
С	generally	54	m	£34.00	£1,836.00	
	Holes					
D	generally	1	ITEM	£100.00	£100.00	
	<u>Hip irons</u>					

	H71 LEAD SHEET COVERINGS/FLASHINGS				
	Code 4 lead flashings; as Employer Requirements				
	Flashings to abutments; complete with dressing into masonry as required; finishing with one coat of patination oil				
F	stepped flashing to pitched abutment from roof tiles to masonry; dressing up face of masonry and over slates; girth nominally 350mm	15	m	£53.00	£795.00
G	horizontal flashing to abutment from roof tiles to masonry; dressing up face of masonry and over slates; girth nominally 300mm	7	m	£33.00	£231.00
Н	horizontal flashing to flat roof skirting to masonry; dressing up face of masonry and over skirting; girth nominally 300mm	42	m	£33.00	£1,386.00
I	soakers to flashing to pitched abutment from roof tiles to masonry; dressing under and over slates and up face of masonry; nominally soakers of 300 x 400mm	61	Nr	£5.00	£305.00
	Code 5 lead flashings				
	Flashings to valleys; complete with dressing onto timber battens and over plywood; finishing with one coat of patination oil				
J	valley lining; nominally 450mm girth; bent five times; fixed to battens; in lengths not exceeding 1.50m, with 150mm lap	54	m	£69.00	£3,726.00
	Page Total 6/3				£20,149.00
	<u>Bill 6 Roof</u>				
A	secret gutter valley lining; nominally 450mm girth; bent five times; fixed to battens; in lengths not exceeding 1.50m, with 150mm lap	64	m	£69.00	£4,416.00
	J42 SINGLE LAYER PLASTICS ROOF COVERINGS				
	Flat roof coverings; no details				
	Assumed to be Sarnafil or similar approved single ply warm roof covering; complete with all required vapour barriers, insulation, breather membranes, fleeces, fixings, trims, seals and the like; laid on pre cast concrete planks; designed, manufactured and installed by specialist Sub Contractor				
В	pitch not exceeding 4 degrees	44	m2	£81.00	£3,564.00
С	pitch 5 degrees; with standing seam effect rolls at 600mm centres	32	m2	£81.00	£2,592.00
	Skirtings; complete with all required insulation and the like; dressing up face of walls / parapets and the like; make good as required; including all cappings, trims, formers				
D	not exceeding 200mm girth	42	m	£30.00	£1,260.00

36 Nr £7.00 £252.00

Е

generally

	Flashings; complete with all required insulation and the				
	like; dressing up roof trusses behind slates; make good as required; including all cappings, trims, formers				
E	400 to 600mm girth	44	m	£30.00	£1,320.00
	Eaves; complete with all required insulation and the like; dressing over and into gutter; make good as				
	required; including all cappings, trims, formers				
F	200 to 400mm girth	9	m	£30.00	£270.00
	Approved paving slabs, on and including pedestals as required to provide working terrace to flat roof, no details				
G	pitch not exceeding 4 degrees	34	m2	£40.00	£1,360.00
	Page Total 6/4				£14,782.00
	Bill 6 Roof				
	K11 RIGID SHEET FLOORING/SHEATHING/LININGS/CASINGS				
	Softwood and plywood fascias and soffits; as Employers Requirements				
	Softwood fascias; fixed to timber framing (measured elsewhere); complete with all trims, supports and the like to complete installation; assumed to be 22mm thick				
A	fascia, nominally 250mm deep	318	m	£8.15	£2,591.70
В	verge fascia, nominally 250mm deep	60	m	£9.15	£549.00
	Softwood soffits; fixed to timber framing (measured elsewhere); complete with all trims, ventilators, supports and the like to complete installation				
С	soffit, nominally 250mm wide; assumed to be 15mm thick	378	m	£9.15	£3,458.70
	Dormer window framing				
	WBP plywood; fixed to timber frame (measured elsewhere); vertical, nominally 18mm thick				
D	to dormer faces and cheeks; over 300mm wide	40	m2	£25.64	£1,025.60
E	to dormer faces and cheeks; not exceeding 300mm wide	25	m	£11.29	£282.25
	Render board				
	Cementious render board, on and including approved battens to provide ventilation gap fixed to plywood substrate				
F	to dormer faces and cheeks; over 300mm wide	40	m2	£20.69	£827.60
G	to dormer faces and cheeks; not exceeding 300mm wide	25	m	£12.17	£304.25
	M60 PAINTING/CLEAR FINISHING EXTERNALLY				

Painting fascias and soffits; as Employers Requirements

	Assumed to be Dulux Trade Exterior Gloss, prime, prepare, apply two undercoats and two finish coats; general surfaces					
н	over 300mm girth	189	m2	£12.50	£2,362.50	
	P10 SUNDRY INSULATION/PROOFING WORK/FIRE STOPS					
	Roof insulation; as Employers Requirements					
	Assumed to be Rockwool or similar approved mineral fibre insulation quilt, nominally 400mm thick overall					
I	horizontal, between joists nominally 150mm thick	429	m2	£2.10	£900.90	
J	horizontal, over joists nominally 100mm thick	429	m2	£1.80	£772.20	
К	horizontal, over joists nominally 150mm thick	429	m2	£2.10	£900.90	
	Page Total 6/5				£13,975.60	
	<u>Bill 6 Roof</u>					
	Assumed to be Rockwool or similar approved mineral fibre insulation quilt, nominally 100mm thick overall					
A	vertical, between studs nominally 100mm thick	40	m2	£4.00	£160.00	
	Assumed to be Kingspan or similar approved rigid insulation boards, nominally 175mm thick overall					
В	pitched, between joists nominally 75mm thick	287	m2	£23.00	£6,601.00	
С	pitched, between joists nominally 100mm thick	287	m2	£25.00	£7,175.00	
	R10 RAINWATER PIPEWORK/GUTTERS					
	Gravity rainwater drainage system; as Employers Requirements					
	Black uPVC rainwater pipes; complete with all elbows, connections, brackets, fixings and the like as required					
D	nominally 75mm diameter	233	m	£6.91	£1,610.03	
	Extra over for					
E	connection to below ground drainage	41	Nr	£12.25	£502.25	
F	off set bends, 250mm	41	Nr	£9.10	£373.10	
	Black uPVC rainwater gutters; complete with all elbows, connections, brackets, fixings and the like as required					
G	half round, nominally 100mm diameter	318	m	£8.13	£2,585.34	
	Extra over for					
Н	ends	46	Nr	£5.10	£234.60	
I	running outlets	41	Nr	£7.15	£293.15	
J	bends	29	Nr	£7.15	£207.35	
	Testing and commissioning					

Testing and commissioning

Allow for all works to carry out full test and commission of rain water goods

	of rain water goods				
К	as required	1	ITEM	£600.00	£600.00
	Page Total 6/6				£20,341.82
	Bill 7 Stairs				
	Stairs				
	L30 STAIRS /WALKWAYS /BALUSTRADES				
	Wrot softwood staircases; as Employers Requirements				
	Softwood framed staircases; with MDF treads and plywood risers; complete framed installation; including wall and open strings; supplied with and including approved balustrades to all open strings and stairwell openings, Oak Burbridge Section Handrails, Circular Oak ball feature to square newel posts; designed, manufactured and installed by specialist Sub Contractor				
A					
	treads nominally 900mm wide; floor to floor height of 2775mm; ground to first floor; comprising of five treads, quarter landing, one tread, quarter landing and five treads; balustrade to landing return; unit 1	1	Nr	£2,818.00	£2,818.00
В	treads nominally 900mm wide; floor to floor height of 2775mm; ground to first floor; comprising of thirteen treads; balustrade to landing return; unit 2	1	Nr	£2,660.00	£2,660.00
С	treads nominally 900mm wide; floor to floor height of 2775mm; ground to first floor; comprising of thirteen treads; balustrade to landing return; unit 3	1	Nr	£2,709.00	£2,709.00
D					
	treads nominally 900mm wide; floor to floor height of 2775mm; ground to first floor; comprising of thirteen treads; balustrade to landing return; unit 4	1	Nr	£2,709.00	£2,709.00
E	treads nominally 900mm wide; floor to floor height of 2775mm; ground to first floor; comprising of three winder treads, six straight treads and three winder treads; unit 10	1	Nr	£3,676.00	£3,676.00
	Pre cast concrete stairs; no details				
	Complete installation of precast concrete stair and landings; designed to approved British Standards and Engineers requirements; landings suitable to receive screed as required; to incorporate lifting eyes for craning as required; including all secondary steelwork, fixings and the like; designed, manufactured and installed by specialist Sub Contractor; fixed as manufacturers recommendations to adjacent structures				
F	stairs to units 5 to 9; comprising of three flights of two, six and five treads with two quarter landings with one corner splayed; 950mm wide treads; 2650m overall rise; ground to first floor	1	Nr	£5,340.00	£5,340.00
	Page Total 7/1	-			£19,912.00

Bill 7 Stairs

A	stairs to units 5 to 9; comprising of three flights of two, six and five treads with two quarter landings with one corner splayed; 950mm wide treads; 2625m overall rise; first to second floor	1	Nr	Included	Included							
	Balustrading; no details											
	Assumed to be polyester powder coated mild steel framed with vertical pilasters; complete with handrail to match; fixed to concrete; designed, manufactured and installed by specialist Sub Contractor											
В	raking	10	m	£436.55	£4,365.50							
С	horizontal	4	m	£476.47	£1,905.88							
	Extra over for											
D	ends	4	Nr	£40.22	£160.88							
Е	connection to balustrade	2	Nr	£40.22	£80.44							
F	bends	6	Nr	£40.22	£241.32							
G	ramps	14	Nr	£80.44	£1,126.16							
	<u>Handrails; no details</u>											
	Assumed to be polyester powder coated handails on brackets to masonry walls; designed, manufactured and installed by specialist Sub Contractor											
н	raking	8	m	£173.32	£1,386.56							
I	horizontal	8	m	£173.32	£1,386.56							
	Extra over for											
J	ends	2	Nr	£40.22	£80.44							
к	bends	8	Nr	£40.22	£321.76							
L	ramps	10	Nr	£80.44	£804.40							
	M60 PAINTING/CLEAR FINISHING											
	Painting stair strings											
	Assumed to be ICI Dulux Trade Satinwood or similar approved; touch up primer, undercoat and two coats of finish paint											
М	over 300mm girth	5	m2	£15.00	£75.00							
	Painting staircases and balustrades											
	Prepare, touch up primer and apply one undercoat and one gloss finishing coat of oil paint; general surfaces; strings											
N	over 300mm girth	9	m2	£15.00	£135.00							
	Page Total 7/2				£12,069.90							
	Bill 7 Stairs											
A	not exceeding 300mm girth	27	m	£4.00	£108.00							

	Prepare, touch up primer and apply one undercoat and one gloss finishing coat of oil paint; balustrades; measured both sides				
В	over 300 girth	66	m2	£15.00	£990.00
	P20 UNFRAMED ISOLATED TRIMS/SKIRTINGS/SUNDRY ITEMS				
	Cover panels to stair strings				
	Assumed to be MDF; factory primed; mechanically fixed to pre cast concrete stair strings				
С	nominally 19mm thick; 350mm high; all edges rounded	12	m	£20.17	£242.04
	Page Total 7/3				£1,340.04
	Bill 8 External Walls				
	EXTERNAL WALLS				
	F10 BRICK/BLOCK WALLING				
	Blockwork; as specification notes				
	Dense aggregate blockwork; 7.3N/mm2 nominally_				
	100mm thick; in cement mortar; stretcher bond				
A	100mm thick	2228	m2	£22.80	£50,798.40
В	100mm thick, fair faced one side	94	m2	£24.30	£2,284.20
С	100mm thick, fair faced both sides	40	m2	£26.30	£1,052.00
D	215mm thick; two skins of 100mm blockwork tied together with ties at the rate of five per square metre and central joint fully filled with mortar; fair faced one side	6	m2	£56.11	£336.66
E	100mm thick, in piers, overall 215mm thick; fair faced to three sides	5	m2	£50.11	£250.55
F	100mm thick, in piers, overall 215mm thick; fair faced to four sides	4	m2	£51.11	£204.44
G	100mm thick, in piers, overall 335mm thick; fair faced to three sides	2	m2	£77.91	£155.82
н	100mm thick, in piers, overall 440mm thick; fair faced to three sides	1	m2	£104.21	£104.21
	Extra over blockwork for				
I	cutting blockwork to course 100mm thick	501	m	£5.00	£2,505.00
J	cutting blockwork to course 100mm thick; raking	21	m	£10.00	£210.00
	Brickwork below DPC				
	Engineering bricks; manufacturer and product reference to be agreed; 7.5N/mm2 compressive strength; half lap stretcher bond; flush joints; walls				
К	half brick thick	59	m2	£70.82	£4,178.38
	F20 NATURAL STONE RUBBLE WALLING				

	Assumed to be limestone or similar walling to match boundary walls; in cement mortar; complete with					
	facing to suit wall thickness, including trimming and the					
	like of stone; random courses; brushed finish					
L	nominally 100mm thick	22	m2	£143.35	£3,153.70	
	Page Total 8/1				£65,233.36	
	Bill 8 External Walls					
	F22 CAST STONE ASHLAR WALLING/DRESSINGS					
	Stonework; as elevation drawings; no details					
	Assumed to be cast stone to match adjacent environment; bedding in mortar; building in as work proceeds; nominally 425mm wide; 55mm deep; splayed top edge with two throats to underside; coppings					
A	generally	26	m	£97.00	£2,522.00	
	Assumed to be cast stone to match adjacent environment; bedding in mortar; building in as work proceeds; nominally 125mm thick; 215mm deep; splayed bottom edge with throating; lintels					
В	to suit opening 1248mm wide	2	Nr	£270.00	£540.00	
	Assumed to be cast stone to match adjacent environment; bedding in mortar; building in as work proceeds; nominally 150mm thick; 215mm deep; splayed top edge and stools to both ends with					
	throating to underside; sills					
С	to suit opening 685mm wide	9	Nr	£95.00	£855.00	
D	to suit opening 1135mm wide	6	Nr	£138.00	£828.00	
E	to suit opening 1248mm wide	19	Nr	£150.00	£2,850.00	
F	to suit opening 1360mm wide	2	Nr	£157.50	£315.00	
G	to suit opening 1698mm wide	1	Nr	£205.00	£205.00	
Н	to suit opening 1810mm wide	4	Nr	£212.00	£848.00	
I	to suit opening 2710mm wide	1	Nr	£310.00	£310.00	
	F30 ACCESSORIES AND SUNDRY ITEMS FOR BRICK, BLOCK AND STONE WALLING					
	Forming cavities; as specification notes					
	Forming cavities in hollow walls; complete with Ancon stainless steel HRT4 safety ties at the rate of five per square metre; and approved cavity wall insulation 75mm thick					
J	125mm wide	1187	m2	£14.06	£16,689.22	
	Cavity trays; as specification notes					
	Visqueen Zedex Housing grade damp proof course; bedding in cement mortar					
К	over 225mm wide	311	m2	£16.45	£5,115.95	

Cavity closers; no details

re	ssumed to be Kingspan or similar approved nermabate cavity closer system, complete with all equired insulation, brackets and the like; suitable for se in party walls				
	100mm wide, vertical	248	m	£8.15	£2,021.20
Pa	age Total 8/2				£33,099.37
Bi	ill 8 External Walls				
	100mm wide, horizontal	150	m	£8.15	£1,222.50
<u>w</u>	/eepholes				
	ytons Rytweep or similar approved; building in as ork proceeds				
	generally	611	Nr	£1.78	£1,087.58
Li	ntels				
	i Lintels, building in as work proceeds; reference L1/S r similar; to suit structural opening of				
	to suit structural opening 572mm wide; in cavity wall	6	Nr	£23.17	£139.02
	to suit structural opening 685mm wide; in cavity wall	16	Nr	£25.39	£406.24
	to suit structural opening 910mm wide; in cavity wall	1	Nr	£32.63	£32.63
	to suit structural opening 1022mm wide; in cavity wall	6	Nr	£33.63	£201.78
	to suit structural opening 1135mm wide; in cavity wall	10	Nr	£36.06	£360.60
	to suit structural opening 1248mm wide; in cavity wall	28	Nr	£41.92	£1,173.76
	to suit structural opening 1360mm wide; in cavity wall	5	Nr	£45.32	£226.60
	to suit structural opening 1585mm wide; in cavity wall	2	Nr	£58.17	£116.34
	to suit structural opening 1698mm wide; in cavity wall	2	Nr	£60.18	£120.36
	to suit structural opening 1810mm wide; in cavity wall	7	Nr	£84.37	£590.59
	i Lintels, building in as work proceeds; reference L/HD or similar; to suit structural opening of				
1	to suit structural opening 2373mm wide; in cavity wall	2	Nr	£111.14	£222.28
	to suit structural opening 2485mm wide; in 215mm thick wall	5	Nr	£145.06	£725.30
	to suit structural opening 2598mm wide; in cavity wall	1	Nr	£150.06	£150.06
D-	age Total 8/3				£6,775.64

Bill 8 External Walls

A	to suit structural opening 2710mm wide; in cavity wall	1	Nr	£150.06	£150.06	
В	to suit structural opening 2935mm wide; in cavity wall	6	Nr	£155.47	£932.82	
	G20 CARPENTRY/TIMBER FRAMING/FIRST FIXING					
	Sawn softwood; to timber store					
	Sawn softwood; preservative treated, assumed to be grade C24, wall or partition members					
С	125 x 125mm posts	18	m	£10.80	£194.40	
D	125 x 50mm rails	26	m	£5.45	£141.70	
	Sawn softwood; to car port					
	Sawn softwood; preservative treated, assumed to be grade C24, wall or partition members					
E	150 x 150mm posts	18	m	£11.33	£203.94	
F	300 x 200mm beams	40	m	£37.50	£1,500.00	
G	200 x 150mm bracings - assumed to be dowelled mortice and tenon jointed	20	m	£19.35	£387.00	
Н	200 x 150mm curved entrance bracings - assumed to be dowelled mortice and tenon jointed	3	m	£33.35	£100.05	
	Sawn softwood; to Unit 9					
	Sawn softwood; preservative treated, assumed to be grade C24, wall or partition members					
I	50 x 100mm	73	m	£4.17	£304.41	
	Fixings					
	Assumed to be stainless steel shoes, resin bolted to					
	concrete floor slab; complete with all required fixings, bolts and the like					
J	concrete floor slab; complete with all required fixings,	8	Nr	£87.50	£700.00	
J K	concrete floor slab; complete with all required fixings, bolts and the like	8	Nr Nr	£87.50 £87.50	£700.00 £700.00	
	concrete floor slab; complete with all required fixings, bolts and the like to suit 125 x 125mm post					
	concrete floor slab; complete with all required fixings, bolts and the like to suit 125 x 125mm post to suit 150 x 150mm post					
к	concrete floor slab; complete with all required fixings. bolts and the like to suit 125 x 125mm post to suit 150 x 150mm post Truss clips; to accept rails; nailed as required	8	Nr	£87.50	£700.00	
к	concrete floor slab; complete with all required fixings. bolts and the like to suit 125 x 125mm post to suit 150 x 150mm post Truss clips; to accept rails; nailed as required to suit 125 x 50mm rails	8	Nr	£87.50	£700.00 £99.88	
к	concrete floor slab; complete with all required fixings. bolts and the like to suit 125 x 125mm post to suit 150 x 150mm post Truss clips; to accept rails; nailed as required to suit 125 x 50mm rails Page Total 8/4	8	Nr	£87.50	£700.00 £99.88	
к	concrete floor slab; complete with all required fixings. bolts and the like to suit 125 x 125mm post to suit 150 x 150mm post Truss clips; to accept rails; nailed as required to suit 125 x 50mm rails Page Total 8/4 Bill 8 External Walls H30 FIBRE CEMENT PROFILED SHEET.	8	Nr	£87.50	£700.00 £99.88	

Abutments; as required, no details; to roof profile, to head and sill в f829.40 generally 26 m £31.90 Trims to windows and the like С £159.50 generally 5 m £31.90 **Holes** D no details 1 ITEM £1,000.00 £1,000.00 H41 GLASS REINFORCED PLASTICS PANEL CLADDING / FEATURES Chimney; no details Approved timber framed or Glass Reinforced Plastic off site manufactured chimney unit with brickwork to match below DPC; including capping and two chimney pots, blanking panels and the like; all framing, flashings, trims and all necessary fixings to complete installation Е generally 2 Nr £800.00 £1,600.00 Entrance Porch; no details Approved timber framed or Glass Reinforced Plastic off site manufactured entrance porch with slate roofing to match main roof; including supporting framing fixed to masonry walls; all framing, flashings, trims and all necessary fixings to complete installation F generally; 2.00m wide; 900mm projection, to unit 2 £609.95 £609.95 1 Nr generally; 2.30m wide; 900mm projection, to units G £609.95 £1,219.90 3 and 4 2 Nr н generally; 3.47m wide; 600mm projection, to units 5 to 9 1 Nr £609.95 £609.95 Page Total 8/5 £9,672.86 Bill 8 External Walls K21 TIMBER STRIP / BOARD FINE FLOORING / LININGS Timber boarding; as Employers Requirements James Hardiplank timber effect Fibre Cement boarding; complete with all required battens, counter battens, framing and the like to complete installation in strict compliance with the manufacturers recommendations; <u>walls</u> £7,192.91 over 300mm wide 109 Α m2 £65.99 в not exceeding 300mm wide 32 £34.30 £1.097.60 m С over 300mm wide; to soffits; complete with 100mm m2 £78.66 £707.94 of apporved insulation board 9 Abutments; complete with all additional framing and <u>the like</u> D to render 22 m £17.09 £375.98

	Finished external angles; complete with feature trim and the like				
E	external angles generally	59	m	£13.59	£801.81
	Sills; complete with feature trim and the like				
F	sills generally	48	m	£13.59	£652.32
	Holes				
G	generally	1	ITEM	£100.00	£100.00
	Raking cutting to tops of walls				
н	generally	20	m	£4.00	£80.00
	Timber boarding; to timber store				
	Assumed to be preservative treated tongue and groove horizontal boarding; in 19 x 150mm planks, secret fixed to timber framing; walls				
I	over 300mm wide	21	m2	£65.79	£1,381.59
	Finished external angles; complete with feature trim and the like				
J	external angles generally	13	m	£20.30	£263.90
	Sills; complete with feature trim and the like				
К	sills generally	8	m	£7.84	£62.72
	Raking cutting to tops of walls				
L	generally	6	m	£4.84	£29.04
	Timber boarding; to car port				
	Assumed to be preservative treated tongue and groove horizontal boarding; in 19 x 150mm planks, secret fixed to timber framing; walls				
М	over 300mm wide	44	m2	£65.79	£2,894.76
	Page Total 8/6				£15,640.57
	Bill 8 External Walls				
	Finished external angles; complete with feature trim and the like				
A	external angles generally	5	m	£13.09	£65.45
	Finished ends; complete with feature trim and the like				
В	open abutments generally	5	m	£13.09	£65.45
	Sills; complete with feature trim and the like				
С	sills generally	20	m	£13.09	£261.80
	L30 STAIRS /WALKWAYS /BALUSTRADES				
	Juliet Balcony; no details				
	Assumed to be stainless steel framed balustrading, with safety laminated glass infill panels; fixed to masonry walls with approved brackets; designed, manufactured				

walls with approved brackets; designed, manufactured and installed by specialist Sub Contractor

Balustrades; no details

	Assumed to be stainless steel framed balustrading, with safety laminated glass infill panels; clamp fixed at base to masonry walls with approved brackets; designed, manufactured and installed by specialist Sub Contractor				
E	500mm high; to unit 10	6	m	£607.95	£3,647.70
F	1100mm high; to unit 3 and 4	17	m	£623.25	£10,595.25
G	1500mm high; to unit 3 and 4; obscure glass	3	m	£1,001.89	£3,005.67
	Extra over for				
н	ends / abutments to walls	5	Nr	£95.91	£479.55
I	bends	4	Nr	£95.91	£383.64
J	junctions	1	Nr	£95.91	£95.91
К	Assumed to be stainless steel framed balustrading, with safety laminated glass infill panels; clamp fixed at base to masonry walls with approved brackets; designed, manufactured and installed by specialist Sub Contractor 1100mm high; to unit 3 and 4 Extra over for	24	m	£586.86	£14,084.64
L	ends / abutments to walls	8	Nr	£95.91	£767.28
м	bends	8	Nr	£95.91	£767.28
	Page Total 8/7	U		255.51	£36,368.93
	Bill 8 External Walls				
	M20 PLASTERED /RENDERED /ROUGHCAST COATINGS				
	Through colour render; as Employers Requirements				
	Proprietary two coat render system; to blockwork, through colour, applied in strict accordance with the				

manufacturers recommendations by specialist Sub

Contractor

	contractor				
A	over 300mm wide	954	m2	£26.00	£24,804.00
В	not exceeding 300mm wide	338	m	£8.00	£2,704.00
	Waterproof proprietary two coat render system; to blockwork, through colour, applied in strict accordance with the manufacturers recommendations by specialist Sub Contractor				
С	over 300mm wide	80	m2	£52.00	£4,160.00
D	not exceeding 300mm wide	26	m	£10.00	£260.00
	Approved beads to suit render system				
Е	external angle beads	495	m	£1.15	£569.25
F	bellcast stop bead	230	m	£1.15	£264.50

£32,761.75

Bill 9 Windows and External Doors

Windows and external doors

L10 WINDOWS / ROOFLIGHTS / SCREENS / LOUVRES

Templates

	Allow for taking site dimensions and producing templates for windows as required; at the discretion of the Contractor				
A	generally to all openings	1	ITEM	£0.00	£0.00
	Drawings				
	Before commencement of manufacture fully detailed and annotated manufacturing drawings are to be submitted for approval				
В	generally	1	ITEM	£0.00	£0.00
	Cleaning of all window assemblies				
	Allow for works required in response to a Risk Assessment on the safe access and cleaning of all window assemblies				
С	generally	1	ITEM	£0.00	£0.00
	Manifestation				
	<u>Contractor to make provision for appropriate</u> manifestation to windows as required				
D	generally	1	ITEM	£0.00	£0.00
	Windows; as employers requirements				
	Sashless Windows Company Limited; white flush casement timber windows; handles to match style of internal door handles and be of brushed stainless steel; complete unit comprising all framing, EPDM seals (minimum of 300mm wide), ironmongery, opening restrictors, insulated infill panels, aluminium sill and head flashings, sill and head ends, sealant internally and externally, trickle vents and the like as required to complete the installation; designed, manufactured and installed by specialist Sub Contractor; to suit structural opening of approximately				
E	570 x 1210mm; plots 5, 6, 7, 8 and 9; reference W03, W05, W08, W13, W19 and W21; comprising of 1Nr obscure glazed fixed pane	6	Nr	£10,004.50	£60,027.00
F	685 x 685mm; plot 10; reference W08; comprising of 1Nr side opening pane	1	Nr	£35.00	£35.00
G	685 x 685mm; plot 10; references W04 and W07; comprising of 1Nr obscure glazed side opening pane	2	Nr	£35.00	£70.00
	Page Total 9/1				£60,132.00
	Bill 9 Windows and External Doors				
A	685 x 1060mm; plots 3 and 4; references W02, W05, W07, W08, W13 and W14; comprising of 1Nr obscure glazed fixed pane	6	Nr	£35.00	£210.00

В	685 x 1060mm; plots 1 and 2; references W04, W15 and W16; comprising of 1Nr obscure glazed fixed pane	3	Nr	£35.00	£105.00
С	685 x 1210mm; plot 10; reference W01; comprising of 1Nr side opening pane	1	Nr	£35.00	£35.00
D	685 x 1210mm; plot 10; reference W02; egress window comprising of 1Nr side opening pane	1	Nr	£35.00	£35.00
E	685 x 1210mm; plot 10; reference W05; comprising of 1Nr obscure glazed side opening pane	1	Nr	£35.00	£35.00
F	685 x 1810mm; plot 10; reference W06; comprising of 1Nr obscure glazed fixed pane	1	Nr	£38.00	£38.00
G	1023 x 1210mm; plots 5, 6, 7, 8 and 9; references W24, W25 and W26; comprising of 1Nr side opening pane and 1Nr fixed pane	3	Nr	£38.00	£114.00
Н	1023 x 1210mm; plots 5, 6, 7, 8 and 9; reference W23; egress window comprising of 1Nr side opening pane and 1Nr fixed pane	1	Nr	£38.00	£38.00
I	1135 x 1060mm; plots 1 and 2; reference W09; comprising of 2Nr side opening panes	1	Nr	£38.00	£38.00
J	1135 x 1360mm; plots 1 and 2; references W05, W06 and W11; comprising of 2Nr side opening panes	3	Nr	£38.00	£114.00
К	1135 x 1360mm; plots 1 and 2; reference W12; egress window comprising of 2Nr side opening panes	1	Nr	£38.00	£38.00
L	1135 x 1660mm; plots 1 and 2; reference W08; comprising of 2Nr side opening panes	1	Nr	£38.00	£38.00
М	1248 x 685mm; plots 1 and 2; reference W10; comprising of 1Nr obscure glazed bottom opening pane	1	Nr	£35.00	£35.00
N	1248 x 1210mm; plots 3 and 4; references W01 and W06; comprising of 1Nr side opening pane and 1Nr fixed pane	2	Nr	£38.00	£76.00
Pa	ge Total 9/2				£949.00
<u>Bil</u>	9 Windows and External Doors				
A	1248 x 1210mm; plots 5, 6, 7, 8 and 9; references W04, W06, W07, W11, W12, W16, W20, W22 and W33; comprising of 1Nr side opening pane and 1Nr fixed pane	9	Nr	£38.00	£342.00
В	1248 x 1210mm; plots 3 and 4; references W03, W04, W09, W10, W11 and W12; egress window comprising of 1Nr side opening pane and 1Nr fixed	c	Nia	620.00	6220.00
С	pane 1248 x 1210mm; plots 5, 6, 7, 8 and 9; references W01, W02, W09, W10, W14, W15, W17 and W18;	6	Nr	£38.00	£228.00
	egress window comprising of 1Nr side opening pane and 1Nr fixed pane	8	Nr	£38.00	£304.00
D	1248 x 1210mm; plot 10; reference W12; comprising of 1Nr side opening pane and 1Nr fixed pane	1	Nr	£38.00	£38.00

E	1360 x 1210mm; plots 1 and 2; references W13 and W17; egress window comprising of 2Nr side opening panes and 1Nr fixed pane	2	Nr	£38.00	£76.00
F	1360 x 1210mm; plot 10; reference W10; comprising of 2Nr side opening panes and 1Nr fixed pane	1	Nr	£38.00	£38.00
G	1698 x 1210mm; plots 1 and 2; reference W02; comprising of 2Nr obscure glazed side opening panes and 1Nr obscure glazed fixed pane	1	Nr	£38.00	£38.00
н	1698 x 1210mm; plot 10; reference W11; comprising of 2Nr obscure glazed side opening panes and 1Nr obscure glazed fixed pane	1	Nr	£38.00	£38.00
I	1810 x 1210mm; plots 1 and 2; reference W01; comprising of 2Nr side opening panes and 1Nr fixed pane	1	Nr	£38.00	£38.00
J	1810 x 1210mm; plot 10; reference W09; comprising of 2Nr side opening panes and 1Nr fixed pane	1	Nr	£38.00	£38.00
К	1810 x 1210mm; plots 1 and 2; reference W03, W07 and W14; egress windows comprising of 2Nr side opening panes and 1Nr fixed pane	3	Nr	£38.00	£114.00
L	1810 x 1210mm; plot 10; reference W03; egress windows comprising of 2Nr side opening panes and 1Nr fixed pane	1	Nr	£38.00	£38.00
	Page Total 9/3				£1,330.00
	Bill 9 Windows and External Doors				
	Velux windows: as employers requirements				
	Velux windows; as employers requirements				
	Velux windows; as employers requirements Velux Integra or similar approved; centre pivot rooflight; complete unit comprising all framing, EPDM seals (minimum of 300mm wide), ironmongery, opening restrictors, insulated infill panels, aluminium sill and head flashings, sill and head ends, sealant internally and externally, trickle vents and the like as required to complete the installation; designed, manufactured and installed by specialist Sub Contractor; to suit structural opening of approximately				
А	Velux Integra or similar approved; centre pivot rooflight; complete unit comprising all framing, EPDM seals (minimum of 300mm wide), ironmongery, opening restrictors, insulated infill panels, aluminium sill and head flashings, sill and head ends, sealant internally and externally, trickle vents and the like as required to complete the installation; designed, manufactured and installed by specialist Sub	3	Nr	£585.00	£1,755.00
A B	Velux Integra or similar approved; centre pivot rooflight; complete unit comprising all framing, EPDM seals (minimum of 300mm wide), ironmongery, opening restrictors, insulated infill panels, aluminium sill and head flashings, sill and head ends, sealant internally and externally, trickle vents and the like as required to complete the installation; designed, manufactured and installed by specialist Sub Contractor; to suit structural opening of approximately 550 x 980mm; plots 5, 6, 7, 8 and 9; references	3	Nr	£585.00 £690.00	£1,755.00 £4,140.00
	Velux Integra or similar approved; centre pivot rooflight; complete unit comprising all framing, EPDM seals (minimum of 300mm wide), ironmongery, opening restrictors, insulated infill panels, aluminium sill and head flashings, sill and head ends, sealant internally and externally, trickle vents and the like as required to complete the installation; designed, manufactured and installed by specialist Sub Contractor; to suit structural opening of approximately 550 x 980mm; plots 5, 6, 7, 8 and 9; references W35, W36 and W37 660 x 1398mm; plots 5, 6, 7, 8 and 9; references				
	Velux Integra or similar approved; centre pivot rooflight; complete unit comprising all framing, EPDM seals (minimum of 300mm wide), ironmongery, opening restrictors, insulated infill panels, aluminium sill and head flashings, sill and head ends, sealant internally and externally, trickle vents and the like as required to complete the installation; designed, manufactured and installed by specialist Sub Contractor; to suit structural opening of approximately550 x 980mm; plots 5, 6, 7, 8 and 9; references W35, W36 and W37660 x 1398mm; plots 5, 6, 7, 8 and 9; references W27, W28, W29, W30, W31 and W32				

Triangle roof element; as employers requirements

D	No details of manufacturer or product reference; complete unit comprising all framing, EPDM seals (minimum of 300mm wide), ironmongery, opening, restrictors, insulated infill panels, aluminium sill and head flashings, sill and head ends, sealant internally and externally, trickle vents and the like as required to complete the installation; designed, manufactured and installed by specialist Sub Contractor; to suit structural opening of approximately 2900 x 1020mm (maximum height); plots 5, 6, 7, 8 and 9; reference W40 Page Total 9/4 Bill 9 Windows and External Doors L20 DOORS /SHUTTERS /HATCHES	1	Nr	£165.00	£165.00 £7,498.00	
	Templates					
	Allow for taking site dimensions and producing templates for all doors and door and screen combinations as required; at the discretion of the <u>Contractor</u>					
А	generally to all openings	1	ITEM	£0.00	£0.00	
	Drawings					
	Before commencement of manufacture fully detailed and annotated manufacturing drawings are to be submitted for approval					
В	generally	1	ITEM	£0.00	£0.00	
	Cleaning of all door assemblies					
	Allow for works required in response to a Risk Assessment on the safe access and cleaning of all doors assemblies					
С	generally	1	ITEM	£0.00	£0.00	
	Manifestation					
	Manifestation to doors					
D	generally	1	ITEM	£0.00	£0.00	
	Patio / French doorset; as employers requirements					
F	Profile 22 uPVC or similar approved; glazed with Ovolo beads; complete installation including all packing, trims, framing, flashings, EPDM seals (minimum of 300mm wide), vapour barriers, connections, concealed fixings, sealant, antifinger traps, weathered threshold, safety devices, pockets, ironmongery, accessories and the like deemed necessary to complete the installation; designed, manufactured and installed by specialist Sub- Contractor; to suit structural openings of approximately					

E 1810 x 2110; plot 10; reference ED02; safety glazed single door with 2Nr safety glazed side lights and 2Nr top hung opening vents

1 Nr £1,183.15 £1,183.15

F	2730 x 2110; plots 1 and 2; reference ED05; double door with 6Nr side lights and 2Nr top hung opening vents	1	Nr	£1,183.15	£1,183.15
G					
U	2940 x 2110; plots 3 and 4; references ED05 and ED06; safety glazed double door with 6Nr safety glazed side lights and 2Nr top hung opening vents	2	Nr	£1,183.15	£2,366.30
	Page Total 9/5				£4,732.60
	Bill 9 Windows and External Doors				
A	2940 x 2110; plots 5, 6, 7, 8 and 9; references ED02, ED03, ED04, ED05, ED06 and ED07; safety glazed double door with 2Nr safety glazed side lights and 2Nr top hung opening vents	6	Nr	£1,291.98	£7,751.88
	Front doorset; as employers requirements				
	Sashless Window Company Limited or similar approved; European Oak with a Light Oak finish; PAS 24 door; complete installation including all packing, trims, framing, flashings, EPDM seals (minimum of 300mm wide), vapour barriers, connections, concealed fixings, sealant, antifinger traps, weathered threshold, safety devices, pockets, ironmongery, accessories and the like deemed necessary to complete the installation; designed, manufactured and installed by specialist Sub- Contractor; to suit structural openings of approximately				
В					
	1023 x 2110; plots 1 and 2; reference ED02; single door with 1Nr obscure glazed vision panel	1	Nr	£95.00	£95.00
С					
	1023 x 2110; plots 1 and 2; reference ED01; single door with 2Nr obscured safety glazed vision panels	1	Nr	£95.00	£95.00
D	·····				
	1023 x 2110; plots 3 and 4; reference ED01; single door with 1Nr obscure glazed vision panel	1	Nr	£95.00	£95.00
Е					
	1023 x 2110; plots 3 and 4; reference ED02; single door with 4Nr obscure glazed vision panels	1	Nr	£95.00	£95.00
F	1023 x 2110; plot 10; reference ED01; single door				
	deemed to include 4Nr obscure glazed vision panels	1	Nr	£95.00	£95.00
	Page Total 9/6				£8,226.88
	Bill 9 Windows and External Doors				
	Front doorset to apartments; FD30S; as employers requirements				

Vicaima Oak EX5.1 or similar approved; assumed to be PAS 24; timber veneered; complete installation including all packing, trims, framing, flashings, EPDM seals (minimum of 300mm wide), vapour barriers, connections, concealed fixings, sealant, antifinger traps, weathered threshold, safety devices, pockets, ironmongery, accessories and the like deemed necessary to complete the installation; designed, manufactured and installed by specialist Sub-Contractor; to suit structural openings of approximately

A	1023 x 2110; plots 5, 6, 7, 8 and 9; references ED08,				
	ED09, ED10, ED12 and ED13; single door	5	Nr	£638.95	£3,194.75

Front doorset to common parts; as employers requirements

	No details of manufacturer or product reference; solid oak high quality bespoke glazed feature front door; assumed to be PAS 24; complete installation including all packing, trims, framing, flashings, EPDM seals (minimum of 300mm wide), vapour barriers, connections, concealed fixings, sealant, antifinger traps, weathered threshold, safety devices, pockets, ironmongery, accessories and the like deemed necessary to complete the installation; designed, manufactured and installed by specialist Sub- Contractor; to suit structural openings of approximately				
В	1023 x 2110; plots 5, 6, 7, 8 and 9; reference ED01, single door	1	Nr	£95.00	£95.00
	Bi-fold doorset; as employers requirements				
	Visofold 1000 Series or similar approved; white aluminium doors; complete installation including all packing, trims, framing, flashings, EPDM seals (minimum of 300mm wide), vapour barriers, connections, concealed fixings, sealant, antifinger traps, weathered threshold, safety devices, pockets, ironmongery, accessories and the like deemed necessary to complete the installation; designed, manufactured and installed by specialist Sub- Contractor; to suit structural openings of approximately				
С	2373 x 2110; plots 1 and 2; references ED03 and	2		60 775 0C	05 554 70
	ED04; safety glazed	2	Nr	£2,775.86	£5,551.72
	Page Total 9/7				£8,841.47
	Bill 9 Windows and External Doors				
A	3610 x 2110; plots 3 and 4; references ED03 and ED04; safety glazed	2	Nr	£3,577.66	£7,155.32
В	2598 x 2110; plot 10; reference ED03	1	Nr	£2,835.32	£2,835.32
	Garage doorset; as employers requirements				
	Garador or standard 8070 frame or similar approved; recessed with Sherwood metal door with laminated oak finish; complete installation including all packing, trims, framing, flashings, connections, concealed fixings, sealant, weathered threshold, safety devices, pockets, ironmongery, accessories and the like deemed necessary to complete the installation; designed, manufactured and installed by specialist Sub- Contractor; to suit structural openings of approximately				
С	2579 x 2194; plot 10; reference ED04	1	Nr	£1,500.00	£1,500.00
D	2485 x 2185; garage block; reference ED01, 02, 03, 04	4	Nr	£1,195.00	£4,780.00

Shed door; as drawing 15.131.GA.001

	External timber door to match timber boarding; cross ledged and braced; complete installation including all packing, trims, framing, concealed fixings, sealant, antifinger traps, weathered threshold, safety devices, ironmongery, accessories and the like deemed necessary to complete the installation; designed, manufactured and installed by specialist Sub- Contractor; to suit structural openings of approximately					
E	1022.5 x 2110; garage block; reference ED05	1	Nr	£1,094.00	£1,094.00	
	M60 PAINTING/CLEAR FINISHING					
	Painting timber window boards; no details					
	No details of manufacturer or product reference; assumed to prepare surfaces and apply one initial coat and two finishing coats as recommended by the manufacturer					
F	not exceeding 300mm girth	33	m	£4.00	£132.00	
	Page Total 9/8				£17,496.64	
	Bill 9 Windows and External Doors					
	P20 UNFRAMED ISOLATED TRIMS/SKIRTINGS/SUNDRY ITEMS					
	Window boards; as Employers Requirements					
	MDF window boards; factory primed; including all required softwood packers and the like					
A	generally; 25 x 250mm; bullnosed profile	33	m	£21.00	£693.00	
	Veneered timber window boards; factory primed; including all required softwood packers and the like					
В	generally; 25 x 250mm; bullnosed profile	66	m	£27.00	£1,782.00	
	Page Total 9/9				£2,475.00	
	Bill 10 Internal Walls					
	INTERNAL WALLS					
	F10 BRICK/BLOCK WALLING					
	Blockwork; as specification notes					
	Dense aggregate blockwork; 7.3N/mm2 nominally 100mm thick; in cement mortar; stretcher bond; laid flat					
A	100mm thick	162	m2	£22.80	£3,693.60	
В	100mm thick; in party walls	446	m2	£22.80	£10,168.80	
С	215mm thick; assumed to be 100mm blocks laid flat	16	m2	£45.58	£729.28	
	Extra over blockwork for					
D	cutting blockwork to course 100mm thick	137	m	£5.00	£685.00	
E	cutting blockwork to course 100mm thick; raking	78	m	£10.00	£780.00	
F	cutting blockwork to course 215mm thick	6	m	£10.00	£60.00	

	F30 ACCESSORIES AND SUNDRY ITEMS FOR BRICK, BLOCK AND STONE WALLING					
	Forming cavities; as specification notes					
	Forming cavities in hollow walls; complete with Ancon stainless steel HRT4 safety ties at the rate of five per square metre; and approved cavity wall insulation 100mm thick					
G	100mm wide	263	m2	£18.91	£4,973.33	
	Cavity closers; no details					
	Assumed to be Kingspan or similar approved Thermabate cavity closer system, complete with all required insulation, brackets and the like; suitable for use in party walls					
н	100mm wide, vertical	21	m	£8.15	£171.15	
	Lintels					
	Pre cast concrete lintels; 100 x 215mm deep; building in as work proceeds					
I	to suit structural opening 930mm wide	8	Nr	£31.75	£254.00	
J	to suit structural opening 1025mm wide	10	Nr	£32.75	£327.50	
к	to suit structural opening 1115mm wide	3	Nr	£35.97	£107.91	
L	to suit structural opening 1275mm wide	1	Nr	£39.65	£39.65	
	G20 CARPENTRY/TIMBER FRAMING/FIRST FIXING					
	Sawn softwood					
	Sawn softwood Sawn softwood, preservative treated, grade C24, wall or partition members					
М	Sawn softwood, preservative treated, grade C24, wall	3718	m	£4.10	£15,243.80	
M N	Sawn softwood, preservative treated, grade C24, wall or partition members	3718 274	m	£4.10 £4.10	£15,243.80 £1,123.40	
	Sawn softwood, preservative treated, grade C24, wall or partition members nominally 45 x 89mm nominally 45 x 89mm; fixed to screed or floor					
	Sawn softwood, preservative treated, grade C24, wall or partition members nominally 45 x 89mm nominally 45 x 89mm; fixed to screed or floor boards				£1,123.40	
	Sawn softwood, preservative treated, grade C24, wall or partition members nominally 45 x 89mm nominally 45 x 89mm; fixed to screed or floor boards Page Total 10/1				£1,123.40	
	Sawn softwood, preservative treated, grade C24, wall or partition members nominally 45 x 89mm nominally 45 x 89mm; fixed to screed or floor boards Page Total 10/1 Bill 10 Internal Walls K10 PLASTERBOARD DRY LINING / PARTITIONS /				£1,123.40	
	Sawn softwood, preservative treated, grade C24, wall or partition members nominally 45 x 89mm nominally 45 x 89mm; fixed to screed or floor boards Page Total 10/1 Bill 10 Internal Walls K10 PLASTERBOARD DRY LINING / PARTITIONS / CEILINGS				£1,123.40	
	Sawn softwood, preservative treated, grade C24, wall or partition members nominally 45 x 89mm nominally 45 x 89mm; fixed to screed or floor boards Page Total 10/1 Bill 10 Internal Walls K10 PLASTERBOARD DRY LINING / PARTITIONS / CEILINGS Partition linings; as Employers Requirements Standard assumed 12.5mm thick plasterboard linings to				£1,123.40	
	Sawn softwood, preservative treated, grade C24, wall or partition members nominally 45 x 89mm nominally 45 x 89mm; fixed to screed or floor boards Page Total 10/1 Bill 10 Internal Walls K10 PLASTERBOARD DRY LINING / PARTITIONS / CEILINGS Partition linings; as Employers Requirements Standard assumed 12.5mm thick plasterboard linings to timber framing (framing measured elsewhere), complete with all fixings, sealant, trims and the like; all joints taped and filled to receive plaster skim (skim				£1,123.40	
Ν	Sawn softwood, preservative treated, grade C24, wall or partition members nominally 45 x 89mm nominally 45 x 89mm; fixed to screed or floor boards Page Total 10/1 Bill 10 Internal Walls K10 PLASTERBOARD DRY LINING / PARTITIONS / CEILINGS Partition linings; as Employers Requirements Standard assumed 12.5mm thick plasterboard linings to timber framing (framing measured elsewhere), complete with all fixings, sealant, trims and the like; all joints taped and filled to receive plaster skim (skim measured elsewhere)	274	m	£4.10	£1,123.40 £38,357.42	

	Gyproc Soundblock board linings, two layers assumed 12.5mm thick to timber framing (framing measured elsewhere), complete with all fixings, sealant, trims and				
	the like; all joints staggered between layers, taped and				
	filled to receive plaster skim (skim measured elsewhere)				
с	generally - measured over openings	38	m2	£11.70	£444.60
	Angles; complete with all required additional boarding and the like; measured to both sides of walls				
D	generally	417	m	£2.00	£834.00
E	generally, 45 degree	83	m	£2.00	£166.00
	Fair ends; complete with all required additional boarding and the like				
F	generally	42	m	£3.00	£126.00
	Abutments; to masonry walls; complete with all required sealant and the like; measured to both sides of walls				
G	generally	635	m	£1.00	£635.00
	Extra over partitions for				
н	deflection heads; nominally 15mm allowance	341	m	£1.20	£409.20
I	putty pads to partitions; allowance only	211	Nr	£4.50	£949.50
1	provision of plywood linings between stud framing to accept heavy fixings, future equipment and the like	431	m2	£9.85	£4,245.35
K	installation of approved acoustic insulation between studs assumed to be Isover 50mm thick	847	m2	£2.70	£2,286.90
L	forming opening for single leaf floors	65	Nr	£5.00	£325.00
М	forming opening for pairs of doors	13	Nr	£5.00	£65.00
Ν	forming opening for wardrobe doors	6	Nr	£5.00	£30.00
	Page Total 10/2				£19,671.05
	Bill 10 Internal Walls				
	Soil pipe casings; no details				
	Allow for forming soil pipe casings, comprising of approved 38 x 38mm timber framing at 600mm centres vertically, with vertical framing at all corners and abutments; lining with two layers of Gyproc Soundblock board, staggered joints, all joints taped and filled for skim plaster (measured elsewhere); filling all voids with approved acoustic insulation				
A	two faces, overall girth not exceeding 600mm	86	m	£35.65	£3,065.90
В	three faces, overall girth 600 to 900mm	4	m	£43.67	£174.68
	Page Total 10/3				£3,240.58
	Bill 11 Internal Doors				
	Internal Doors				

Internal Doors

L20 DOORS /SHUTTERS /HATCHES

	Internal Doorsets; as Employers Requirements			
	Vicaima or similar approved; internal doors to ground floors, product reference Vicaima Oak with veneer inlay; EX5.1/01 or equal and approved; including cut outs for ironmongery as necessary, fitting of all necessary acoustic and fire sealing and the like as required to complete the installation; to suit door type of			
A	single door to plot 1 and 2; 838 x 1981mm; reference ID01, ID02, ID03, ID05, ID06	5	Nr	£253.43
В	single door to plot 1 and 2; 626 x 1981mm; reference ID07	1	Nr	£303.98
С	double door to plot 1 and 2; 839 x 2100mm; reference ID09	1	Nr	£474.75
D	single door to plot 3 and 4; 838 x 1981mm; reference ID02, ID03, ID06, ID07, ID08	5	Nr	£241.48
E	single door to plot 3 and 4; 686 x 1981mm; reference ID01, ID05, ID10	3	Nr	£248.38
F	single door to plots 5,6,7,8 and 9; 838 x 1981mm; reference ID01, ID03, ID04, ID07, ID11, ID13, ID14, ID16; assumed to be fire rated 30 minutes	8	Nr	£256.43
G	single door to plot 5,6,7,8 and 9; 726 x 1981mm; reference ID17; assumed to be fire rated 30 minutes	1	Nr	£285.08
н	double door to plot 5,6,7,8 and 9; 1062 x 1981mm; reference ID06, ID10; assumed to be fire rated 30 minutes	2	Nr	£485.20
I	single door to plot 10; 838 x 1981mm; reference ID01, ID02, ID04, ID07, ID09	5	Nr	£244.48
J	single door to plot 10; 626 x 1981mm; reference ID06	1	Nr	£306.98
v	single door to plot 10: 762 x 1081mm; reference			

£1,267.15

£303.98

£474.75

£1,207.40

£745.14

£2,051.44

£285.08

£970.40

£1,222.40

£306.98

£9,977.05

£806.12

£403.06

Nr

 K
 single door to plot 10; 762 x 1981mm; reference
 1
 Nr
 £239.43
 £239.43

 L
 double door to plot 10; 1070 x 1981mm; reference
 2
 Nr
 £451.45
 £902.90

Page Total 11/1

Bill 11 Internal Doors

 Vicaima or similar approved; internal doors to living

 rooms, product reference Vicaima Oak with fully glazed

 infill panel; EX5.1/1/DFG16 or equal and approved;

 including cut outs for ironmongery as necessary, fitting

 of all necessary acoustic and fire sealing and the like as

 required to complete the installation; to suit door type

 of

 A
 single door to plot 1 and 2; 838 x 1981mm;

 reference ID04, ID08
 2

В	single door to plot 3 and 4; 838 x 1981mm;				
	reference ID04, ID09	2	Nr	£403.06	£806.12
С	single door to plot 5,6,7,8 and 9; 838 x 1981mm; reference ID05, ID12, ID22, ID29; assumed to be fire				
	rated 30 minutes	4	Nr	£592.43	£2,369.72

D	single door to plot 10; 838 x 1981mm; reference ID11	1	Nr	£592.43	£592.43
	<u>Vicaima or similar approved; internal doors to first</u> floors, product reference Vicaima Oak N1000 plain doors with no inlay; EX5.1/01 or equal and approved; including cut outs for ironmongery as necessary, fitting of all necessary acoustic and fire sealing and the like as required to complete the installation; to suit door type of				
E	single door to plot 1 and 2; 838 x 1981mm; reference ID10, ID11, ID12, ID13, ID15, ID18, ID19, ID20, ID21, ID22	10	Nr	£205.97	£2,059.70
F	single door to plot 3 and 4; 838 x 1981mm; reference ID12, ID13, ID14, ID15, ID16, ID17, ID18, ID21, ID22, ID23, ID24	11	Nr	£205.97	£2,265.67
G	single door to plot 3 and 4; 762 x 1981mm; reference ID19	1	Nr	£201.40	£201.40
н	single door to plot 5,6,7,8 and 9; 838 x 1981mm; reference ID18, ID20, ID21, ID24, ID27, ID30, ID31, ID33, ID34, ID35, ID36, ID37, ID38; assumed to be fire rated 30 minutes	13	Nr	£217.92	£2,832.96
I	single door to plot 5,6,7,8 and 9; 626 x 1447mm; reference ID39, ID42, ID45; assumed to be fire rated 30 minutes	3	Nr	£249.02	£747.06
J	double door to plot 5,6,7,8 and 9; 1062 x 1981mm; reference ID23, ID28; assumed to be fire rated 30 minutes	2	Nr	£482.46	£964.92
К	single door to plot 10; 838 x 1981mm; reference ID12	1	Nr	£205.97	£205.97
	Page Total 11/2				£13,852.07
	Bill 11 Internal Doors				
	Vicaima or similar approved; internal doors to boiler cupboards, product reference Vicaima performance door; including cut outs for ironmongery as necessary, fitting of all necessary acoustic and fire sealing and the like as required to complete the installation; to suit door type of				
A	single door to plot 1 and 2; 838 x 1981mm; 33 dB acoustic rating; fire rated; reference ID14	1	Nr	£254.52	£254.52
В	single door to plot 1 and 2; 726 x 1981mm; 33 dB acoustic rating; fire rated; reference ID17	1	Nr	£299.49	£299.49
C	double door to plot 3 and 4; 839 x 1981mm; 33 dB acoustic rating; fire rated; reference ID11	1	Nr	£262.52	£262.52
D	single door to plot 3 and 4; 762 x 1981mm; 33 dB acoustic rating; fire rated; reference ID20	1	Nr	£299.49	£299.49
E	single door to plot 5,6,7,8 and 9; 926 x 1447mm; 33 dB acoustic rating; fire rated; reference ID02, ID15, ID19, ID32, ID43	5	Nr	£541.68	£2,708.40
	Internal Doorsets - Sliding Wardrobe; as manufacturers specifications				

specifications

Sliderobe or similar approved; internal sliding wardrobe doors to bedrooms; no product reference; including all standard components, cut outs for ironmongery as necessary, fitting of all necessary acoustic and fire sealing and the like as required to complete the installation; to suit

F	sliderobe door to plot 1 and 2; 2Nr sliding leaves within structural opening of 1828.8 x 2375mm; reference ID23	1	Nr	£620.00	£620.00
G	sliderobe door to plot 1 and 2; 2Nr sliding leaves within structural opening of 1440 x 2375mm; reference ID24, ID25	2	Nr	£620.00	£1,240.00
н	sliderobe door to plot 3 and 4; 2Nr sliding leaves within structural opening of 2435 x 2375mm; reference ID25, ID26	2	Nr	£620.00	£1,240.00
I	sliderobe door to plot 5,6,7,8 and 9; 2Nr sliding leaves within structural opening of 1828.8 x 2000mm; reference ID40, ID41	2	Nr	£620.00	£1,240.00
J	sliderobe door to plot 10; 2Nr sliding leaves within structural opening of 1825 x 2025mm; reference ID10	1	Nr	£620.00	£620.00
	Page Total 11/3				£8,784.42
	Bill 11 Internal Doors				
	Access Hatches; as employers requirements				
	UPVC White loft hatch; no product reference; with hook on system for extension ladder; provide a 900 x 900mm hatch or similar approved; insulated; full factory finish; including cut outs for ironmongery as necessary, fitting of all necessary acoustic and fire sealing and the like as required to complete the installation; to suit access hatch of				
A	plot 1 and 2; 900 x 900 mm	2	Nr	£135.00	£270.00
В	plot 3 and 4; 900 x 900 mm	2	Nr	£135.00	£270.00
С	plot 10; 900 x 900 mm	1	Nr	£135.00	£135.00
	M60 PAINTING/CLEAR FINISHING				
	Painting timber; as employers requirements				
	Dulux water based satin paint or similar approved; colour white; prepare surfaces and apply number of coats as recommended by the manufacturer				
D	plot 1 and 2; not exceeding 300mm girth	101	m	£2.65	£267.65
E	plot 3 and 4; not exceeding 300mm girth	115	m	£2.65	£304.75
F	plot 5,6,7,8 and 9; not exceeding 300mm girth	174	m	£2.65	£461.10
G	plot 10; not exceeding 300mm girth	53	m	£2.65	£140.45
	P20 UNFRAMED ISOLATED TRIMS/SKIRTINGS/SUNDRY				

ITEMS

Architraves; as employers requirements

Hardwood architraves; 20 x 75mm to match skirtings; finished with DUlux water based satin paint as M60; including all fixings as required to complete installation

	mendaning an inxings as required to complete instantation				
н	plot 1 and 2; not exceeding 300mm girth	187	m	£6.70	£1,252.90
I	plot 3 and 4; not exceeding 300mm girth	229	m	£6.70	£1,534.30
J	plot 5,6,7,8 and 9; not exceeding 300mm girth	349	m	£6.70	£2,338.30
к	plot 10; not exceeding 300mm girth	106	m	£6.70	£710.20
	P21 IRONMONGERY				
	Ironmongery; Internal Doorsets as employers requirements				
	Denleigh Ironmongery or similar approved; product reference LR220; Doorset pack to internal doors; including 3Nr 100mm hinges (grade to match weight of door), 1Nr lever latch, 1Nr door stop				
L	single doors; plot 1 and 2; generally	13	Nr	£56.70	£737.10
М	double doors; plot 1 and 2; generally	2	Nr	£35.00	£70.00
Ν	single doors; plot 3 and 4; generally	15	Nr	£58.64	£879.60
	Page Total 11/4				£9,371.35
	Bill 11 Internal Doors				
А	double doors; plot 3 and 4; generally	2	Nr	£35.00	£70.00
В	single doors; plot 5,6,7,8 and 9; generally	18	Nr	£68.91	£1,240.38
С	double doors; plot 5,6,7,8 and 9; generally	18	Nr	£35.00	£630.00
D	single doors; plot 10; generally	6	Nr	£63.98	£383.88
E	double doors; plot 10; generally	4	Nr	£35.00	£140.00
	Denleigh Ironmongery or similar approved; product reference LR220; Doorset pack to bathroom doors; including 3Nr 100mm hinges (grade to match weight of door), 1Nr lever latch, 1Nr thumb turn indicator bolt, 1Nr door stop				
F	single doors; plot 1 and 2; generally	7	Nr	£29.00	£203.00
G	single doors; plot 3 and 4; generally	8	Nr	£29.00	£232.00
н	single doors; plot 5,6,7,8 and 9; generally	11	Nr	£29.00	£319.00
I	single doors; plot 10; generally	3	Nr	£29.00	£87.00
	P22 SEALANT JOINTS				
	Bedding and pointing to door frames				
	Bedding and pointing with approved polysulphide sealant; to suit fire and acoustic rating				
J	plot 1 and 2	101	m	£1.25	£126.25
К	plot 3 and 4	115	m	£1.25	£143.75
L	plot 5,6,7,8 and 9; fire rated 30 minutes	174	m	£1.99	£346.26

М

plot 10

53 m £1.25 £66.25

Page Total 11/5

£3,987.77

Bill 12 Wall Finishes

Wall Finishes

K10 PLASTERBOARD DRY LINING / PARTITIONS / CEILINGS

Linings to Blockwork; as Employers Requirements

	Standard assumed 12.5mm thick plasterboard linings fixed with plasterboard dabs to masonry (measured elsewhere), complete with all fixings, sealant, trims and					
	the like; all joints taped and filled to receive plaster skim (skim measured elsewhere)					
A	generally, over 300mm wide	1654	m2	£8.40	£13,893.60	
В	generally, not exceeding 300mm wide	356	m	£5.30	£1,886.80	
	Moisture resistant or cement particle board linings assumed 12.5mm thick to timber framing (framing measured elsewhere), complete with all fixings, sealant, trims and the like; all joints taped and filled to receive plaster skim (skim measured elsewhere)					
С	generally; over 300mm wide	218	m2	£6.40	£1,395.20	
D	generally, not exceeding 300mm wide	66	m	£4.25	£280.50	
	Bathroom pipe casings and boxings; no details					
	Allow for forming pipe casings and low level boxings, comprising of approved 38 x 38mm timber framing at 600mm centres vertically, with vertical framing at all corners and abutments and 450mm centres horizontally; lining with one layer of Gyproc Soundblock board and one layer of moisture resistant board, staggered joints, all joints taped and filled for skim plaster (measured elsewhere)					
E	generally; over 300mm wide	80	m2	£43.04	£3,443.20	
F	generally; not exceeding 300mm wide	27	m	£23.87	£644.49	
	M20 PLASTERED /RENDERED /ROUGHCAST COATINGS					
	<u>Plaster skim to plasterboard; as Employers</u> <u>Requirements</u>					
	<u>Plaster; one coat skim of gypsum board finish plaster;</u> <u>3mm thick; trowelling smooth; walls</u>					
G	over 300mm wide	3666	m2	£5.00	£18,330.00	
н	not exceeding 300mm wide	645	m	£3.00	£1,935.00	
	Beads					
	Galvanised steel beads; fixed with plasterboard screws					
I	thin angle bead	778	m	£1.65	£1,283.70	
	Page Total 12/1				£43,092.49	
	Bill 12 Wall Finishes					

M40 STONE /CONCRETE /QUARRY /CERAMIC TILING/MOSAIC

Ceramic tiling to bathrooms; as Employers Requirements

Large format ceramic wall tiles; complete with approved adhesive and coloured grout; no details

A	over 300mm wide	312	m2	£46.00	£14,352.00	
В	not exceeding 300mm wide	42	m	£13.80	£579.60	
	Beads					
	<u>Stainless steel perimeter trim beads, bedding in</u> adhesive					
С	generally	209	m	£9.00	£1,881.00	
	<u>Sealant</u>					
	Approved sanitary grade white sealant to internal joints and the like					
D	generally; 8 x 8mm fillet	305	m	£0.92	£280.60	
	M60 PAINTING/CLEAR FINISHING					
	Painting to plaster; as Employers Requirements					
	Assumed to be Dulux Trade Diamond Matt Emulsion or similar, prepare, seal, apply undercoat and two finishing coats					
Е	over 300 girth	3459	m2	£4.35	£15,046.65	
	Assumed to be Dulux Trade Diamond Silk Emulsion or similar, prepare, seal, apply undercoat and two finishing coats					
F	over 300 girth	283	m2	£4.35	£1,231.05	
	Page Total 12/2				£33,370.90	
	Bill 13 Floor Finishes					
	Floor Finishes					
	<u>K20 TIMBER BOARD</u> FLOORING/SHEATHING/LININGS/CASINGS					
	Timber flooring; as employers requirements					
	Harlech select oak lacquered , 5mm thick veneered floor or similar approved; pre-finished 189mm wide; timber floor is to be of type suitable for use above an under floor heating system; including all required sealant and the like as required to complete the installation					
A	over 300mm wide	176	m2	£130.00	£22,880.00	
	M10 SAND CEMENT /CONCRETE SCREEDS /FLOORING					
	Screed construction; no details					

No details of manufacturer or product reference; complete installation as recommended by manufacturer

В	level or to falls only not exceeding 15 degrees from horizontal	803	m2	£14.00	£11,242.00
C	level or to falls only not exceeding 15 degrees from horizontal; to garage; Provisional Quantity	16	m2	£14.00	£224.00
D	level or to falls only not exceeding 15 degrees from horizontal; landings	3	m2	£14.00	£42.00
	Extra over for				
E	perimeter isolation strip including mastic sealant where required	1095	m	£1.50	£1,642.50
F	forming recess for entrance matting	4	m2	£10.00	£40.00
G	construction joints	1	ITEM	Included	Included
н	forming holes for shower gullies	1	ITEM	Included	Included
Ι	Visqueen 1000gauge DPM separating membrane	803	m2	£1.00	£803.00
J	2000 gauge DPM	483	m2	£1.50	£724.50
	Trowelling smooth				
К	generally	803	m2	Included	Included
	M12 TROWELLED BITUMEN /RESIN /RUBBER /LATEX FLOORING				
	Latex cement; no details				
	Latex smoothing compound				
L	level or to falls only not exceeding 15 degrees from horizontal - Provisional Quantity	738	m2	£6.54	£4,826.52
М	level or to falls only not exceeding 15 degrees from horizontal - Provisional Quantity; landings	3	m2	£6.54	£19.62
	Page Total 13/1				£42,444.14
	Bill 13 Floor Finishes				
	Liquid DPM; Assumption				
	Liquid damp proof membrane; trowelling smooth; vinyl and rubber floors				
A	level or to falls only not exceeding 15 degrees from horizontal - Provisional Quantity	738	m2	£8.74	£6,450.12
В	level or to falls only not exceeding 15 degrees from horizontal - Provisional Quantity; landings	3	m2	£8.74	£26.22
	M40 STONE /CONCRETE /QUARRY /CERAMIC TILING/MOSAIC				
	Ceramic floor tiling; as employers requirements				
	No details of manufacturer or product reference; tiles to be laid on a de-coupling membrane such as ditramat;				
	floors				
С	level or to falls	104	m2	£66.00	£6,864.00
	<u> Tiled skirting - no details; Provisional Quantity</u>				

D	generally	184	m	£11.45	£2,106.80	
	M50 RUBBER /PLASTIC /CORK /LINO /CARPET TILING /SHEETING					
	Carpet; as employers requirements					
	New Oaklands 80/20/50oz or similar approved on and including PU foam underlay; colour assumed to be chosen by client; including all perimeter grippers, joints and the like as required to complete the installation					
E	over 300mm wide	778	m2	£44.45	£34,582.10	
F	risers; not exceeding 300mm wide	96	m	£14.99	£1,439.04	
G	treads; not exceeding 300mm wide	79	m	£14.99	£1,184.21	
Н	winder treads; over 300mm wide average	2	m2	£19.99	£39.98	
	Stair nosings; no details					
	No details; complete installation as specified/recommended by manufacturer or as approved					
I	generally - to all staircases	91	m	£19.99	£1,819.09	
J	generally; winder stairs	6	m	£29.99	£179.94	
	Page Total 13/2				£54,691.50	
	Bill 13 Floor Finishes					
	Edgings, Cover strips and Trims; as Employers Requirements					
	No details of manufacturer or product reference; secure with edge of covering gripped; matching fasteners used where exposed; including all fixings, adhesives, accessories and the like as required to complete the installation					
A	generally; wood to carpet; to match wood flooring	62	m	£17.50	£1,085.00	
В	generally; wood to tile; to match wood flooring	8	m	£17.50	£140.00	
С	generally; wood to wood; to match wood flooring	11	m	£17.50	£192.50	
D	generally; carpet to tile; metal in gold or silver	17	m	£9.50	£161.50	
	M60 PAINTING/CLEAR FINISHING					
	Painting skirtings; no details					
	Dulux Trade water based satin or similar approved; white; prepare and prime surfaces before application					
E	not exceeding 300mm girth	839	m	£2.85	£2,391.15	
	Paint to enhanced skirtings in hallways					
F	not exceeding 300mm girth	103	m	£3.00	£309.00	

N10 GENERAL FIXTURES / FURNISHINGS / EQUIPMENT

	Entrance matting; as Employers Requirements				
	Coir entrance matwell mat; colour assumed to be chosen by client; I;aid flush with floor finishes				
G	over 300mm wide	4	m2	£81.10	£324.40
	Entrance matting frame; as Employers Requirements				
	To suit entrance matting				
н	generally	17	m	£24.35	£413.95
	P10 sundry insulation/ proofing work/ firestops				
	Insulation; as drawing number ECL.DET.01				
	<u>Rigid insulation boards; to achieve U Values; tight butt</u> joints; 150mm thick				
I	over 300mm wide	483	m2	£12.95	£6,254.85
	Page Total 13/3				£11,272.35
	Bill 13 Floor Finishes				
	P20 UNFRAMED ISOLATED TRIMS/SKIRTINGS/SUNDRY ITEMS				
	Skirtings; as employers requirements				
	No details of manufacturer or product reference; MDF 20mm x 120mm deep square edge; prepare and prime ready for on-site painting (measured elsewhere); woodscrews assumed to be countersunk and pelleted at 450mm centres				
A	18mm x 144mm	839	m	£8.06	£6,762.34
	No details of manufacturer or product reference; enhanced skirtings to be considered subject to architectural design				
В	generally; to hallways	103	m	£8.57	£882.71
	P22 sealant joints				
	Sealant to tiled and timber floors; as employers requirements				
	Sealant joint between bottom of skirting and tiled / timber floors, nominally 6 x 6mm fillet				
С	generally	305	m	£1.25	£381.25
	Sealant joint between top of skirting walls, nominally 6 <u>x 6mm fillet</u>				
D	generally	943	m	£1.25	£1,178.75
	P99 SUNDRIES				
	Protection				
	Temporary protection of finishes/floors				
E	generally	1057	m2	£2.50	£2,642.50
F	generally; treads	79	m	£3.00	£237.00
G	generally; risers	91	m	£3.00	£273.00

н	generally; winder treads	2	m2	£2.50	£5.00
I	generally; winder risers	6	m	£3.00	£18.00
	Cleaning				
	<u>Cleaning covered floors; floors free from paint spills,</u> plaster snots, stains and the like				
J	generally	1057	m2	£1.50	£1,585.50
К	generally; treads	79	m	£1.00	£79.00
L	generally; risers	91	m	£1.00	£91.00
м	generally; winder treads	2	m2	£1.50	£3.00
N	generally; winder risers	6	m	£1.00	£6.00
	Page Total 13/4				£14,145.05
	Bill 14 Ceiling Finishes				
	Ceiling Finishes				
	K10 PLASTERBOARD DRY LINING / PARTITIONS / CEILINGS				
	Plasterboard ceiling; as employers requirements				
	board to be fixed to timber joists; joints taped with filled to receive plaster skim coat finish (measured elsewhere); complete installation including all channels, noggins, clips, hangers, trims, penetrations,				
	sealing, insulation, beads, fixings, accessories and the like as recommended by the manufacturer to complete the installation				
А	sealing, insulation, beads, fixings, accessories and the like as recommended by the manufacturer to complete	293	m2	£5.70	£1,670.10
A	sealing, insulation, beads, fixings, accessories and the like as recommended by the manufacturer to complete the installation	293 13	m2 m2	£5.70 £7.25	£1,670.10 £94.25
	sealing, insulation, beads, fixings, accessories and the like as recommended by the manufacturer to complete the installation generally generally; raking				,
	sealing, insulation, beads, fixings, accessories and the like as recommended by the manufacturer to complete the installation generally				,
В	sealing, insulation, beads, fixings, accessories and the like as recommended by the manufacturer to complete the installation generally generally; raking Extra over for pattresses; (allowed for 1nr per 5m2 of ceiling	13	m2	£7.25	£94.25
B C	sealing, insulation, beads, fixings, accessories and the like as recommended by the manufacturer to complete the installation generally generally; raking Extra over for pattresses; (allowed for 1nr per 5m2 of ceiling areas) - Provisional Quantities	13 61	m2 Nr	£7.25 £4.50	£94.25 £274.50
B C D	sealing, insulation, beads, fixings, accessories and the like as recommended by the manufacturer to complete the installation generally generally; raking Extra over for pattresses; (allowed for 1nr per 5m2 of ceiling areas) - Provisional Quantities flush access panels Contractor to make allowance for fixing around	13 61 1	m2 Nr ITEM	£7.25 £4.50 £500.00	£94.25 £274.50 £500.00
B C D E	sealing, insulation, beads, fixings, accessories and the like as recommended by the manufacturer to complete the installation generally generally; raking Extra over for pattresses; (allowed for 1nr per 5m2 of ceiling areas) - Provisional Quantities flush access panels Contractor to make allowance for fixing around	13 61 1	m2 Nr ITEM	£7.25 £4.50 £500.00	£94.25 £274.50 £500.00
B C D E	sealing, insulation, beads, fixings, accessories and the like as recommended by the manufacturer to complete the installation generally generally; raking Extra over for pattresses; (allowed for 1nr per 5m2 of ceiling areas) - Provisional Quantities flush access panels Contractor to make allowance for fixing around services	13 61 1	m2 Nr ITEM	£7.25 £4.50 £500.00 £500.00	£94.25 £274.50 £500.00 £500.00
B C D E	sealing, insulation, beads, fixings, accessories and the like as recommended by the manufacturer to complete the installation generally generally; raking Extra over for pattresses; (allowed for 1nr per 5m2 of ceiling areas) - Provisional Quantities flush access panels Contractor to make allowance for fixing around services moisture resistant board in lieu of standard board	13 61 1	m2 Nr ITEM	£7.25 £4.50 £500.00 £500.00	£94.25 £274.50 £500.00 £500.00
B C D E	sealing, insulation, beads, fixings, accessories and the like as recommended by the manufacturer to complete the installation generally generally; raking Extra over for pattresses; (allowed for 1nr per 5m2 of ceiling areas) - Provisional Quantities flush access panels Contractor to make allowance for fixing around services moisture resistant board in lieu of standard board Plasterboard ceiling; as employers requirements Lafarge standard 15mm vapour check wallboard or similar approved; fixed to timber joists; joints taped and filled to receive plaster skim coat finish (measured elsewhere); complete installation including all channels, noggins, clips, hangers, trims, penetrations, sealing, insulation, beads, fixings, accessories and the like as recommended by the manufacturer to complete	13 61 1	m2 Nr ITEM	£7.25 £4.50 £500.00 £500.00	£94.25 £274.50 £500.00 £500.00

Extra over for

I	pattresses; (allowed for 1nr per 5m2 of ceiling areas) - Provisional Quantities	84	Nr	£4.50	£378.00
J	flush access panels	1	ITEM	£500.00	£500.00
К	Contractor to make allowance for fixing around services	1	ITEM	£500.00	£500.00
L	moisture resistant board in lieu of standard board	49	m2	£1.35	£66.15
	Page Total 14/1				£7,828.75
	Bill 14 Ceiling Finishes				
	Plasterboard suspended ceiling; no details				
	Assumed to be an British Gypsum Casoline MF. suspended ceiling system or similar approved; Gypframe hangers fixed to pre cast concrete plank soffit; nominally 150mm suspension depth; lined with one layer of 15mm Soundbloc plasterboard; taped and jointed to receive plaster skim coat finish (measured elsewhere); including 100mm of acoustic insulation over; complete installation including all channels, noggins, clips, hangers, trims, penetrations, sealing, insulation, beads, fixings, accessories and the like as recommended by the manufacturer to complete the installation				
А	generally	340	m2	£21.30	£7,242.00
В	generally; raking	5	m2	£25.00	£125.00
	Extra over for				
С	pattresses; (allowed for 1nr per 5m2 of ceiling areas) - Provisional Quantities	69	Nr	£4.50	£310.50
D	flush access panels	1	ITEM	£500.00	£500.00
E	Contractor to make allowance for fixing around services	1	ITEM	£500.00	£500.00
F	moisture resistant board in lieu of standard board	30	m2	£1.35	£40.50
	M20 PLASTERED /RENDERED /ROUGHCAST COATINGS				
	Plaster skim; as employers requirements				
	<u>Plaster skim coat finish; nominally 3mm thick; to</u> plasterboard; trowelled smooth				
G	over 300mm wide	906	m2	£5.00	£4,530.00
Н	over 300mm wide; raking to soffits	205	m2	£5.00	£1,025.00
	M31 FIBROUS PLASTER				
	Plaster coving; as employers requirements				

No details of manufacturer or product reference; assumed to be a standard Gyproc coving system or similar approved; painted to match ceiling (measured elsewhere); complete installation including all sealant to both edges, temporary works and the like as required to complete the installation

I	generally; 125mm girth	1109	m	£3.85	£4,269.65
J	corners	470	Nr	£0.50	£235.00
	Page Total 14/2				£18,777.65
	Bill 14 Ceiling Finishes				
	M60 PAINTING/CLEAR FINISHING				
	Paint to plasterboard ceilings; as employers requirements				
	Dulux Pure brilliant White emulsion or similar approved; prepare surfaces and apply one mist and two full coats of matt emulsion as recommended by the manufacturer				
A	over 300mm wide	1009	m2	£3.35	£3,380.15
	Paint to plaster coving; as employers requirements Dulux Pure brilliant White emulsion or similar				
	approved; prepare surfaces, prime and apply one mist and two full coats of matt emulsion as recommended by the manufacturer				
В	not exceeding 300mm wide	1109	m	£1.00	£1,109.00
	Paint to bathroom ceilings; as employers requirements				
	Dulux Pure brilliant White emulsion or similar approved for wet environments; prepare surfaces and apply one mist and two full coats of matt emulsion as recommended by the manufacturer				
С	over 300mm wide	103	m2	£4.35	£448.05
	Page Total 14/3				£4,937.20
	Bill 15 Fixtures & Fittings				
	FIXTURES AND FITTINGS				
	N10 GENERAL FIXTURES/ FURNISHINGS/ EQUIPMENT				
	Attendance on Client fit-out				
	Provide all required general and special attendance for Client fit-out works; no scope of works identified, allow as required				
A	generally	1	ITEM	£0.00	£0.00
	Mirrors				
	<u>Class C mirrors, silver backed, fixed to walls with</u> adhesive pads				
В	assumed to be 0.60 x 0.90m	10	Nr	£60.00	£600.00
С	1.20 x 1.60m	10	Nr	£211.20	£2,112.00

Airing cupboard shelves; as Employers Requirements

	PAR softwood shelving units, with wall mounted battens, full depth; allowance for area of 2.00m2 each					
D	generally	20	Nr	£64.78	£1,295.60	
	Portable fire extinguishers; assumption					
	Portable fire extinguishers; Contractor to submit proposal of type, capacity and supports for approval; supplier and design all to be confirmed / agreed					
E	generally	1	ITEM	£650.00	£650.00	
	Fire blankets; assumption					
	Fire blankets; Contractor to submit proposal of type and size for approval; supports by mounting brackets; supplier and design all to be confirmed / agreed					
F	generally	1	ITEM	£650.00	£650.00	
	N11 DOMESTIC KITCHEN FITTINGS					
	Kitchen installations; as Employers Requirements					
	Manhattan Kitchens or similar approved; units in accordance with kitchen designs drawings; colours and handles to clients approvals; one wall unit to be lockable; 1 nr 600mm removable base unit; complete installation including all fixings, brackets, connection, plumbing, sealant, accessories and the like as required to complete the installation; designed, manufactured and installed by specialist sub-contractor					
G	generally	10	Nr	£0.00	£0.00	
	Page Total 15/1				£5,307.60	
	Bill 15 Fixtures & Fittings					
	Worktops; as Employers Requirements					
	Manhattan 40mm thick worktop or similar approved; with strip joints: complete installation including all fixings, ends, sealant, accessories and the like as required to complete the installation; designed, manufactured and installed by specialist sub-contractor					
A	with strip joints; complete installation including all fixings, ends, sealant, accessories and the like as required to complete the installation; designed,	10	Nr	£0.00	£0.00	
А	with strip joints; complete installation including all fixings, ends, sealant, accessories and the like as required to complete the installation; designed, manufactured and installed by specialist sub-contractor	10	Nr	£0.00	£0.00	
A	with strip joints; complete installation including all fixings, ends, sealant, accessories and the like as required to complete the installation; designed, manufactured and installed by specialist sub-contractor as required to suit kitchens	10	Nr	£0.00 £0.00	£0.00 £0.00	
	with strip joints; complete installation including all fixings, ends, sealant, accessories and the like as required to complete the installation; designed, manufactured and installed by specialist sub-contractor as required to suit kitchens Extra over for					
	with strip joints; complete installation including all fixings, ends, sealant, accessories and the like as required to complete the installation; designed, manufactured and installed by specialist sub-contractor as required to suit kitchens Extra over for cut outs for sinks					
	with strip joints; complete installation including all fixings, ends, sealant, accessories and the like as required to complete the installation; designed, manufactured and installed by specialist sub-contractor as required to suit kitchens Extra over for cut outs for sinks Sinks; as Employers Requirements No details of manufacturer or product reference; stainless steel single bowl and drainer of 0.9mm minimum thickness; Bristan Java single flow monoblock mixer (chrome); including all plumbing, connections, wastes, traps, sealant, fixings and the like as required					

	No details of manufacturer or product reference; washer / dryer; including all connections, plumbing and the like as required to complete the installation				
D	generally; assumed to be 1Nr per apartment	10	Nr	£0.00	£0.00
	Vent-Axia Solo Plus extractor or similar approved; flush mounted; isolator switch with humidistat and condensation control; including all fixings, accessories and the like as required to complete the installation				
E	generally; assumed to be 1Nr per apartment	10	Nr	£0.00	£0.00
	Spaces for appliances; as finishes schedule				
	Spaces for appliances; including all connections,				
	plumbing and the like as required to complete the installation				
F	space for oven	10	Nr	£0.00	£0.00
G	space for fridge freezer	10	Nr	£0.00	£0.00
	N14 GENERAL SIGNAGE SYSTEMS				
	General directional signage; assumption				
	Provide and fix general directional signage as required				
Н	generally	1	ITEM	£250.00	£250.00
	External building signage; assumption				
	Provide and fix external signage as required				
I	generally	1	ITEM	£250.00	£250.00
	Page Total 15/2				£500.00
	Bill 15 Fixtures & Fittings				
	N15 fire and safety signage systems				
	Fire signage systems				
	No details of manufacturer or product reference; adhesive vinyl sheet sign; wall mounted, self adhesive; dimensions as architects recommendations; assumed to provide a suitable fire signage system to all fire escape route areas as required including ceiling / wall mounting brackets as required				
A	generally	1	ITEM	£250.00	£250.00
	Illuminated fire exit signage system				
	Provide a suitable fire signage system to all fire escape route areas as required; including ceiling / wall mounting brackets as required; manufacturer, product reference, symbols and dimensions all to be determined				
В	generally	1	ITEM	£250.00	£250.00
	Page Total 15/3				£500.00
	Bill 17 Above Ground Drainage				
	Above Ground Drainage				

	R11 FOUL DRAINAGE ABOVE GROUND				
	Above ground drainage installations; as detailed in the specifications, Employers Requirements (and drawings) for the Mechanical Engineering Services; for The Mill Pool, Coombe Shute				
	Include a sum for the execution of the Above Ground Drainage Installations generally for the construction of the housing units; including the completion of the design as required; the manufacture, supply and installation of all components required for the completion of the installation; by specialist Sub Contractor				
A	in accordance with the design criteria provided by the employer's representative - Units 1 and 2	1	ITEM	Included	Included
В	in accordance with the design criteria provided by the employer's representative - Units 3 and 4	1	ITEM	Included	Included
С	in accordance with the design criteria provided by the employer's representative - Units 5 to 9	1	ITEM	Included	Included
D	in accordance with the design criteria provided by the employer's representative - Unit 10	1	ITEM	Included	Included
E	attendance on the installation of the above ground drainage	1	ITEM	Included	Included
F	special attendance on the installation of the above ground drainage	1	ITEM	Included	Included
	Page Total 17/1				£0.00
	Bill 18 Mechanical Installations				
	MECHANICAL INSTALLATIONS				
	S, T, U MECHANICAL INSTALLATIONS				
	Mechanical Installations; as detailed in the specifications, Employers Requirements (and drawings) for the Mechanical Engineering Services; for The Mill Pool, Combe Shute				
	Include a sum for the execution of the Mechanical Installations generally for the construction of the housing units; including the completion of the design as required; the manufacture, supply and installation of all components required for the completion of the installation; by specialist Sub Contractor				
A	in accordance with the design criteria provided by the employer's representative - Units 1 and 2	1	ITEM	£99,590.00	£99,590.00
В	in accordance with the design criteria provided by the employer's representative - Units 3 and 4	1	ITEM	Included	Included
С	in accordance with the design criteria provided by the employer's representative - Units 5 to 9	1	ITEM	Included	Included

D	in accordance with the design criteria provided by					
	the employer's representative - Unit 10	1	ITEM	Included	Included	
E	attendance on the Mechanical Installation contractor	1	ITEM	Included	Included	
F	special attendance on the Mechanical Installation contractor	1	ITEM	Included	Included	
	Page Total 18/1				£99,590.00	
	Bill 19 Electrical Installations					
	ELECTRICAL INSTALLATIONS					
	V, W ELECTRICAL INSTALLATIONS					
	Electrical Installations; as detailed in the specifications, Employers Requirements (and drawings) for the Electrical Engineering Services; for The Mill Pool, Coombe Shute					
	Include a sum for the execution of the Electrical Installations generally for the construction of the housing units; including the completion of the design as required; the manufacture, supply and installation of all components required for the completion of the					
	installation; by specialist Sub Contractor					
A	in accordance with the design criteria provided by the employer's representative - Units 1 and 2	1	ITEM	£74,724.24	£74,724.24	
В	in accordance with the design criteria provided by the employer's representative - Units 3 and 4	1	ITEM	Included	Included	
С	in accordance with the design criteria provided by the employer's representative - Units 5 to 9	1	ITEM	Included	Included	
D	in accordance with the design criteria provided by the employer's representative - Unit 10	1	ITEM	Included	Included	
E	lightning protection installation in accordance with the design criteria provided by the employer's representative	1	ITEM	Included	Included	
F	attendance on the Electrical Installation contractor	1	ITEM	Included	Included	
G	special attendance on the Electrical Installation contractor	1	ITEM	Included	Included	
	Page Total 19/1				£74,724.24	
	Bill 20 Lift Installation					
	LIFT INSTALLATIONS					
	<u>X10 LIFTS</u>					

Lift Installations; as detailed in the Employers Requirements and specifications (and drawings) for the Lift Installations and associated works for the design and construction of The Mill Pool, Coombe Shute

	Platform lift; supplied, manufactured, designed and installed by a client approved manufacturer; complete with internal finishes, handrails, DDA compliant controls and access all as required; access doors; all operating equipment as required; by specialist Sub Contractor				
A	access lift; three floors served, ground, first and second floor; opening on one side; including all front enclosure	1	Nr	£21,385.00	£21,385.00
	Extra over for				
В	fire fighting lift if required	1	ITEM	Declined	Declined
	Installation generally				
	Testing				
С	allow for testing on completion and provide test certificate	1	ITEM	Included	Included
	Commissioning				
D	allow for commissioning on completion	1	ITEM	Included	Included
	Operating and maintenance manuals				
E	provide number of copies as detailed in the Employers Requirements	1	ITEM	Included	Included
	Main Contractors Attendances / Works				
	<u>All works</u>				
F	Provision and installation of lifting beam fixed to structure as required	1	Nr	Declined	Declined
G	Marking positions of and cutting or forming holes mortices and chases in the structure	1	ITEM	Declined	Declined
н	Lighting to lift shaft	1	Nr	Declined	Declined
I	Ventilation to top of shaft, provision of suitable external louvre or vent, complete with ducting as may be required	1	Nr	Declined	Declined
J	Installation and fixing in of Halfen or similar slot channels to accept lift framework	1	ITEM	Declined	Declined
к	Installation or secondary steelwork / timber to allow for installation of lift framework to upper levels	1	ITEM	Declined	Declined
L	Painting within passenger lift shaft with sealer and one coat white masonry paint as required	54	m2	£4.00	£216.00
	Page Total 20/1				£21,601.00
	Bill 21 BWIC with Services				
	BWIC WITH SERVICES				
	M60 PAINTING/CLEAR FINISHING				
	Painting conner ninework				

Painting copper pipework

No details of manufacturer or product reference; assumed to prepare, prime and apply one undercoat and two finishing coats of paint; general surfaces

A	not exceeding 300mm girth - Provisional Quantity	160	m	£2.65	£424.00	
	P12 FIRE STOPPING					
	Fire stopping works					
	Fire stopping works provided; assumed requirements and specification; Fire stopping generally comprising of Rockwool Intumescent mineral wool; fixed in place					
	with intumescent sealant and pastes; and for larger					
	holes filled with proprietary quick setting fire proof cement based slurries					
В	generally; at locations of penetrations through					
	internal walls	1	ITEM	Included	Included	
С	generally; within cavities of external walls	1	ITEM	Included	Included	
D	generally; penetrations in cavities to ceiling	1	ITEM	Included	Included	
	P22 SEALANT JOINTS					
	<u>Air Sealing</u>					
	Carry out all works required to achieve air pressure test					
	standards, as appropriate to the Employers Requirements					
E	provision of sealant and the like to all locations to					
	achieve air sealing	1	ITEM	Included	Included	
	P31 BUILDERS WORK IN CONNECTION WITH SERVICES					
	Works as required to enable the completion of services					
	installations					
	As required for the completion of the services					
	installation, including the forming of chases, holes,					
	sinkings, pits, pattresses, blockings, trenches and the like, fire sealing on completion as may be necessary					
F	all BWIC for the electrical installations as defined by					
	the performance specification for the electrical works	1	ITEM	£10,000.00	£10,000.00	
G	all BWIC for the mechanical installations as defined					
	by the performance specification for the mechanical works	1	ITEM	Included	Included	
н						
	all BWIC for the above ground drainage and rainwater pipes as defined by the performance					
	specification for the mechanical works	1	ITEM	Included	Included	
	Page Total 21/1				£10,424.00	
	Bill 21 BWIC with Services					
А	all BWIC for the lightning protection installations as					
	defined by the performance specification for the mechanical works	1	ITEM	Included	Included	
в	provision of lightning protection rod pits and					
	housing; Provisional Quantity	9	Nr	Included	Included	
	Page Total 21/2				£0.00	

Bill 22 External Works

Excavation RISK

EXCAVATION RISK ITEMS

Excavating Risk; (Contractor to note: the following elements have been described but not quantified as this is an element of contractor's risk - Contractor to complete the risk design)

To reduce levels

A	soft spots; including filling all soft spots with approved granular fill material, compacting and proof rolling - to be priced as rate only per cubic metre	0	m3	£0.00	£0.00
	Extra over excavation irrespective of depth for excavating				
В	next existing services - to be priced as rate only per cubic metre	0	m	£0.00	£0.00
С	around existing services crossing excavations - to be priced as rate only per cubic metre	0	m3	£0.00	£0.00
D	archeological digging on site; complete including the risk of time loss and all elements pertaining to the archeological dig	1	ITEM	£0.00	£0.00
	Extra over excavation irrespective of depth for breaking out and removal off site all spoils				
E	rock - to be priced as rate only per cubic metre	0	m3	£0.00	£0.00
F	concrete - to be priced as rate only per cubic metre	0	m3	£0.00	£0.00
G	reinforced concrete - to be priced as rate only per cubic metre	0	m3	£0.00	£0.00
Н	brickwork blockwork or stonework - to be priced as rate only per cubic metre	0	m3	£0.00	£0.00
I	contaminated material - to be priced as rate only per cubic metre	0	m3	£0.00	£0.00
	Disposal Risk				
	Surface water; including the treatment of the water to remove all sediment; pollutants and the like before				
	leaving the site perimeters				
J	off site	1	ITEM	£199.84	£199.84
	Excavated material				
К	soft spot material - to be priced as rate only per cubic metre of inert	0	m3	£0.00	£0.00
L	extra over off site disposal for the disposal of contaminated material; Contractor to develop	0	m3	£0.00	£0.00
	Page Total 22/1				£199.84
	Bill 22 External Works				
	External Works				
	D20 EXCAVATING AND FILLING				

Excavating

Trenches; over 300mm wide

A	1.00m maximum depth	119	m3	£12.96	£1,542.24
	<u>Pits, tree pits 12 nr</u>				
В	1.00m maximum depth	12	m3	£16.20	£194.40
	Working space allowance to excavations; complete with all additional excavation, disposal, backfilling with well compacted approved granular material, all additional earthwork support and the like				
С	pits	48	m2	£6.48	£311.04
D	trenches	226	m2	£3.24	£732.24
	Earthwork support				
	To faces of excavation; including all additional backfilling with well compacted granular material, making good as required, designed, supplied and installed, maintained and removed by specialist Sub Contractor				
E	1.00m maximum depth; distance between opposing faces not exceeding 2.00m	274	m2	£3.24	£887.76
	Disposal				
	Excavated material				
F	off site; it has been assumed all excavated material to be taken off site; to be treated as inert hazardous material	131	m3	£35.65	£4,670.15
	Imported topsoil				
	Filling to excavations				
G	over 250mm average thick	12	m3	£36.73	£440.76
	Filling to make up levels				
Н	not exceeding 250mm average thick	78	m3	£36.73	£2,864.94
I	over 250mm average thick	71	m3	£36.73	£2,607.83
	Surface Treatments				
	Compacting ground				
J	generally	12	m2	£0.76	£9.12
	Compacting bottoms of excavations				
К	generally	148	m2	£0.76	£112.48
	E10 MIXING / CASTING / CURING IN SITU CONCRETE				
	<u>Plain concrete grade Gen 1</u>				
	Blinding concrete				
L	not exceeding 150mm thick	7	m3	£149.07	£1,043.49
	Page Total 22/2				£15,416.45
	Bill 22 External Works				
	Reinforced concrete grade FND2z				

Foundations

А	generally	61	m3	£182.56	£11,136.16
	E20 FORMWORK FOR IN SITU CONCRETE				
	Formwork, basic finish				
	Sides of ground beams and edges of beds				
В	250 to 500mm high	202	m	£23.77	£4,801.54
С	250 to 500mm high; curved on plan	54	m	£25.93	£1,400.22
	E30 REINFORCEMENT FOR IN SITU CONCRETE				
	Steel fabric reinforcement to B.S.4483				
	Fabric				
D	generally, B785	136	m2	£14.04	£1,909.44
	F10 BRICK/BLOCK WALLING				
	Blockwork				
	Dense aggregate blockwork; nominally 7.3 N/mm2 ion cement mortar; no details; walls				
E	assumed to be 215mm thick	20	m2	£45.58	£911.60
	F20 NATURAL STONE RUBBLE WALLING				
	Stonework boundary walls				
	Natural stone rubble walling, assumed to match adjacent walls; faced both sides; complete with all required facework; in lime mortar				
F	nominally 350mm thick	173	m2	£385.04	£66,611.92
	Cappings to stone walls; hit and miss faced stones to provide rampart format to match adjacent walls				
G	generally	89	m	£98.04	£8,725.56
Н	generally; curved on plan	27	m	£108.04	£2,917.08
	L30 STAIRS /WALKWAYS /BALUSTRADES				
	External handrails; no details				
	Assumed to be polyester powder coated galvanised mild steel handrails; fixed to masonry walls as required, designed, manufactured and installed by specialist Sub Contractor				
I	raking	6	m	£176.24	£1,057.44
	Extra over for				
J	ends	8	Nr	£40.22	£321.76
	Page Total 22/3				£99,792.72
	Bill 22 External Works				
	Q10 KERBS /EDGINGS /CHANNELS /PAVING ACCESSORIES				
	Kerbs; as drawing 0011				

Pre cast concrete kerbs, edgings and channels to B.S..340; bedding and flush jointing in cement mortar (1:3); plain concrete (1:3:6) foundations and haunching

А	kerbs, HB2	63	m	£33.49	£2,109.87
В	kerbs, HB2; curved on plan; radius over 12.00m	5	m	£37.81	£189.05
С					
_	kerbs, BN; conservation format to match pavings	139	m	£38.89	£5,405.71
D	kerbs, BN; conservation format to match pavings;	0		640.64	6427.40
_	curved on plan; radius not exceeding 12.00m	9	m	£48.61	£437.49
E	kerbs, BN; conservation format to match pavings; curved on plan; radius over 12.00m	33	m	£51.85	£1,711.05
F	path edgings	201	m	£20.52	£4,124.52
G	path edgings; curved on plan	7	m	£22.69	£158.83
	Extra over for				
Н	drop kerbs; HB2 to BN	2	Nr	£32.41	£64.82
	Q20 HARDCORE /GRANULAR /CEMENT BOUND BASES /SUB BASES TO ROADS /PAVINGS				
	Granular material type 1				
	Filling to make up levels				
I	not exceeding 250mm average thick	52	m3	£42.13	£2,190.76
J	over 250mm average thick	290	m3	£42.13	£12,217.70
	Granular material type 6F2				
	Filling to make up levels				
К	not exceeding 250mm average thick	207	m3	£36.73	£7,603.11
	Surface treatments				
	Compacting filling				
L	generally	2002	m2	£0.76	£1,521.52
	Q21 IN SITU CONCRETE ROADS /PAVINGS				
	Reinforced concrete external slabs				
	Beds; air entrained concrete PAV 2				
Μ	not exceeding 150mm thick	6	m3	£178.24	£1,069.44
	Basic finish formwork				
	Edges of beds				
Ν	not exceeding 250mm high	53	m	£23.77	£1,259.81
	Steel fabric reinforcement to B.S4483				
	Fabric				
0	reference A252	37	m2	£14.04	£519.48
	Page Total 22/4				£40,583.16
	Bill 22 External Works				

Designed joints

	Isolation joints; comprising of 25mm thick bitumen impregnated woodfibre board; with 25 x 25mm sealant to top				
А	to suit 150mm thick slab	53	m	£12.96	£686.88
	Worked finishes; no details				
	Assumed to be brush and spade finish				
В	generally	37	m2	£6.48	£239.76
	Separation membrane				
	Assumed to be 1000 gauge polythene sheeting on and including 25mm of sand blinding				
С	generally	37	m2	£4.32	£159.84
	Q22 COATED MACADAM /ASPHALT ROADS /PAVINGS				
	Tarmac road surfacing as drawing 2301				
	Binder course open bin 40/60 AC20; to BS EN 13108-1				
D	level or to falls; 60mm thick	828	m2	£15.77	£13,057.56
	Q23 GRAVEL /HOGGIN /WOODCHIP ROADS /PAVINGS				
	<u>Gravel margins - no details</u>				
	Assumed to be locally sourced rounded gravel to match location; laid on and including weed suppressant membrane; spread and level and compact				
E	level or to falls; nominally 75mm thick	13	m2	£16.20	£210.60
	Q25 SLAB BRICK BLOCK SETT COBBLE PAVINGS				
	Block paving; to roads and parking bays				
	Marshalls Tegular Block Paving Harvest or similar approved standard 200 x 100 x 80mm block pavings; on and including 30mm thick sand laying bed; pavings				
F	level or to falls	801	m2	£59.41	£47,587.41
	Extra over for parking delineation				
G	level or to falls	113	m	£16.20	£1,830.60
	Block paving; to pavements				
	Marshalls Tegular Block Paving Harvest or similar approved standard 200 x 100 x 80mm block pavings; on and including 30mm thick sand laying bed; pavings				
н	level or to falls	85	m2	£59.41	£5,049.85
	Page Total 22/5				£68,822.50
	Bill 22 External Works				

Rumble strip

	Comprising of Charcon or similar cropped finish granite blocks 100 x 100 x 100mm; bedding and pointing in				
	Ultracrete flow point rapid setting mortar to concrete				
	bed (measured elsewhere)				
A	level or to falls	5	m2	£64.81	£324.05
	Paving slabs				
	Assumed to be Marshalls Saxon or similar approved standard 450 x 450 x 50mm block pavings; on and including 30mm thick sand laying bed; pavings				
В	level or to falls; to roads	28	m2	£48.61	£1,361.08
	Assumed to be Marshalls Saxon or similar approved standard 450 x 450 x 50mm block pavings; on and including 30mm thick sand laying bed; pavings				
С	level or to falls; to pavements and access routes	91	m2	£48.61	£4,423.51
D	level or to falls; to private pavements and access routes	64	m2	£48.61	£3,111.04
	Extra over for				
E	forming steps; set of two risers; nominally 900mm wide	2	Nr	£124.23	£248.46
F	forming steps; set of five risers; nominally 900mm wide	1	Nr	£297.07	£297.07
G	forming steps; set of eight risers; nominally 900mm wide	1	Nr	£621.14	£621.14
	Q30 SEEDING/TURFING				
	Cultivating				
	Surface of ground				
Н	nominally 100mm thick to seeded areas	518	m2	N/A	N/A
	Surface applications				
	General surfaces; weed killer and fertiliser	540	2		
I	generally Seeding	518	m2	N/A	N/A
	General surfaces; approved grass seed				
J	generally; amenity area grass seed	518	m2	N/A	N/A
	Page Total 22/6				£10,386.35
	Bill 22 External Works				
	Maintenance				
	Provision of maintenance of all soft landscaped areas; for a period of twelve months from Practical Completion or final planting works whichever is the latter; complete with all regular trimming, cutting and the like, disposing of all arisings; replacement of all loses				
A	generally	1	ITEM	N/A	N/A

Q31 PLANTING

Cultivating

Surface of filling, topsoil; No detail; Contractor to submit proposal for approval

В	nominally 250mm deep - infill planting	159	m2	N/A	N/A
	Surface applications				
	General surfaces; weed killer and fertiliser				
С	generally	159	m2	N/A	N/A
	Planting of trees, shrubs and the like				
	Planting requirements to suit site plan				
D	Shrub and hedge planting	159	m2	N/A	N/A
E	Trees	12	Nr	N/A	N/A
	Maintenance				
	Provision of maintenance of all soft landscaped areas; for a period of twelve months from Practical Completion or final planting works whichever is the latter; complete with all regular trimming, cutting and the like, disposing of all arisings; replacement of all loses				
F	generally	1	ITEM	N/A	N/A
	Q40 FENCING				
	Close boarded Fencing				
	Softwood close boarded fencing, comprising of softwood feather edge boards 100 x 25mm; three 75 x 50mm rails and 100 x 100mm posts at 2.40m centres; timber gravel boards; including all foundations, temporary works and the like				
G	1200mm high	32	m	£29.36	£939.52
н	1800mm high	17	m	£34.72	£590.24
I	2000mm high, boundary fence	43	m	£38.96	£1,675.28
	Extra over for				
J	single leaf gates, complete with additional posts and ironmongery, 1800mm high	5	Nr	£197.49	£987.45
	Page Total 22/7				£4,192.49
	Bill 22 External Works				
	Gates				
	Set of approved cast iron gates; including posts, foundations, ironmongery and the like; factory finished as may be required; no details; to entrance of communal garden				
A	assumed to be 1200mm high; nominally 1800mm wide	1	Nr	£2,000.00	£2,000.00
	Bin store access				

	Set of approved fencing and cast iron gates; including posts, foundations, ironmongery and the like; factory finished as may be required; no details; to entrance of communal bin store					
В	assumed to be 1200mm high; gate nominally 1200mm wide, with two sets of fencing to match nominally 300mm long each	1	Nr	£1,200.00	£1,200.00	
	Q50 SITE/STREET FURNITURE/EQUIPMENT					
	External seat					
	Limited information; assumed to be of timber construction on galvanised steel frame; complete with all required foundations and the like, temporary works and disposal of surplus materials					
С	generally	1	Nr	£662.04	£662.04	
	Page Total 22/8				£3,862.04	
	Bill 23 Foul Drainage					
	Preambles and EXCAVATION RISK ITEMS					
	A13 DESCRIPTION OF THE WORK					
	Drainage activities					
	The Contractor and Sub Contractors should allow for all works identified within the appended Drainage Standard Bill; which includes for all attendances, site surveys and investigations					
A	generally	1	ITEM	£216.05	£216.05	
	The Contractor and Sub Contractor should familiarise themselves as to the condition of the existing drainage lines. The contractor to make allowance for possible repairs to the existing drainage lines including revamping existing manholes to suit					
В	generally	1	ITEM	£216.05	£216.05	
	R12 FOUL DRAINAGE BELOW GROUND					
	Trench excavation risk					
	Extra over excavation irrespective of depth for breaking out - to be priced as rate only per cubic metre					
С	rock	0	m3	£0.00	£0.00	
D	concrete	0	m3	£0.00	£0.00	
E	reinforced concrete	0	m3	£0.00	£0.00	
F	brickwork, blockwork or stonework	0	m3	£0.00	£0.00	
	Extra over trench excavations; irrespective of depth and size for					
G	overwating coff protection and a surplus material					
	excavating soft spots; disposal of surplus material and filling with approved fill to formation level of trench - to be priced as rate only per cubic metre	0	m3	£0.00	£0.00	
н	next existing service - to be priced as rate only per metre	0	m3	£0.00	£0.00	

I	around existing service crossing excavation - to be priced as rate only per crossing	0	m3	£0.00	£0.00
	Page Total 23/1				£432.10
	Bill 23 Foul Drainage				
	FOUL DRAINAGE - Below Ground Floor				
	R12 DRAINAGE BELOW GROUND				
	Excavating trenches for drainage pipes; complete with the disposal of surplus materials; backfilling with Type 1				
	For pipes; not exceeding 200mm nominal diameter				
A	average depth 500 to 750mm	114	m	£32.41	£3,694.74
	Type Z Concrete surround				
	Beds and surrounds				
В	to suit 100mm diameter pipe	114	m	£25.93	£2,956.02
	Below ground drainage pipe				
	Approved PVC / Clay pipes to BS4660 and BS 5481, for PVC or BS EN 295 for vitrified clay pipes; complete with all flexible couplings and fittings as required				
С	100mm nominal size	114	m	£11.88	£1,354.32
	Extra over for				
D	bends, 100mm	38	Nr	£30.25	£1,149.50
E	rocker pipes, 100mm; to manholes	19	Nr	£30.25	£574.75
F					
_	rest bends, 100mm; complete with concrete base	19	Nr	£34.57	£656.83
G	connection to soil pipes	19	Nr	£37.81	£718.39
	Sundry items				
	Marker tape, non degradable; red with black lettering				
н	laid in trench 450mm above pipe	114	m	£1.08	£123.12
	Page Total 23/2				£11,227.67
	Bill 23 Foul Drainage				
	FOUL DRAINAGE - Diversion Works				
	C90 ALTERATIONS - SPOT ITEMS				
	To various locations off site				
	Remove existing drainage installations, including all required excavation, breaking out, disposal of pipework and the like; backfilling trenches with well compacted granular material, including selected excavated material as required; make good				
A	cap off and seal existing pipework	1	ITEM	£59.41	£59.41

В	remove manholes; assumed to be masonry construction, assumed to be not exceeding 2.00m deep	1	Nr	£448.30	£448.30
	R12 DRAINAGE BELOW GROUND				
	Excavating trenches for drainage pipes; complete with the disposal of surplus materials; backfilling with Type 1				
	For pipes; 225mm nominal diameter				
С	average depth 750 to 1000mm - outside of site boundary	25	m	£34.57	£864.25
D	average depth 1000 to 1250mm	18	m	£38.89	£700.02
E	average depth 1250 to 1500mm	24	m	£42.13	£1,011.12
F	average depth 1500 to 1750mm	17	m	£47.53	£808.01
G	average depth 1750 to 2000mm	19	m	£51.85	£985.15
	Type S granular surround				
	Beds and surrounds				
н	to suit 225mm diameter pipe	103	m	£11.88	£1,223.64
	Below ground drainage pipe				
	UltraRib Twinwall plastic pipes to BS4660 and BS 5481; complete with all flexible couplings and fittings as required				
I	225mm nominal size	103	m	£17.28	£1,779.84
	Extra over for				
J	bends, 225mm	10	Nr	£30.25	£302.50
к	rocker pipes, 225mm; to manholes	16	Nr	£30.25	£484.00
L	junction 100 x 225 x 225mm	1	Nr	£37.81	£37.81
м	junction 150 x 225 x 225mm	1	Nr	£37.81	£37.81
	Sundry items				
	Marker tape, non degradable; red with black lettering				
N	laid in trench 450mm above pipe	103	m	£1.08	£111.24
	Page Total 23/3				£8,853.10
	Bill 23 Foul Drainage				
	R15 MANHOLES				
	Concrete manholes				
	Concrete manhole; circular; precast concrete shaft - chamber sections to be bedded with mortar,				

chamber sections to be bedded with mortar, proprietary bitumen or resin mastic sealant; 150mm thick GEN3 concrete surround; complete installation including provision of safety equipment, all excavation, temporary works, disposal, concrete beds, surround, benching; brick raising course; pre cast concrete base, concrete topping, step irons, riser and cover units, channel ware, rocker pipes and the like; to accept manhole cover and frame

A	1200mm diameter manhole; depth not exceeding 1250mm; assumed D400 recessed cover	1	Nr	£1,528.54	£1,528.54
В	1200mm diameter manhole; depth not exceeding 1500mm; assumed D400 recessed cover	2	Nr	£1,701.38	£3,402.76
L	1200mm diameter manhole; depth not exceeding 1750mm; assumed D400 recessed cover	2	Nr	£1,824.53	£3,649.06
D	1200mm diameter manhole; depth not exceeding 2000mm; assumed D400 recessed cover	1	Nr	£1,993.05	£1,993.05

R26 WORKS TO EXISTING MANHOLES AND DRAIN RUNS

Works to existing combined drainage scheme

	Works to existing combined drainage manhole (subject to approval); excavate down the side of the existing manhole and create a new connection into existing drainage manhole; complete installation including all excavation, temporary works; disposal, concrete beds, surround, benching, channel ware and the like; making good all trades and testing as required; including all excavations adjacent to the drainage runs that may be required, making good, temporary works and the like, maintain flow at all times, provision of safety equipment to suit					
E	works to existing manhole; remove exit pipes and install new 225mm pipe; manhole construction unknown; assumed to be masonry, depth to invert not exceeding 1000mm	1	Nr	£1,420.52	£1,420.52	
F	works to existing manhole; remove exit pipes and install new 225mm pipe; manhole construction unknown; assumed to be masonry, depth to invert not exceeding 2000mm	1	Nr	£1,636.57	£1,636.57	
	Page Total 23/4 Bill 23 Foul Drainage				£13,630.50	
	Works to existing combined drainage pipework (subject to approval); excavate to locate existing pipe run and create a new connection into existing drainage; complete installation including all excavation, temporary works; disposal; making good all trades and testing as required; including all excavations adjacent to the drainage runs that may be required, making good, temporary works and the like, maintain flow at all times, provision of safety equipment to suit					
A	works to existing pipework, at location of existing manhole, connect existing entry pipework to new pipework for manhole to be abandoned and removed; pipe nominally 2.00m to invert, existing 225mm diameter pipe	1	Nr	£837.19	£837.19	
	Page Total 23/5				£837.19	

Bill 23 Foul Drainage

FOUL DRAINAGE - TO EXTERNAL WORKS

R12 DRAINAGE BELOW GROUND

Excavating trenches for drainage pipes; complete with the disposal of surplus materials; backfilling with Type 1

A					
	average depth 500 to 750mm	4	m	£32.41	£129.64
В	average depth 750 to 1000mm	29	m	£34.57	£1,002.53
С	average depth 1000 to 1250mm	28	m	£38.89	£1,088.92
	<u>Type S granular surround</u>				
	Beds and surrounds				
D	to suit 100mm diameter pipe	28	m	£11.88	£332.64
	Type Z Concrete surround				
	Beds and surrounds				
E	to suit 100mm diameter pipe	34	m	£25.93	£881.62
	Below ground drainage pipe				
	Approved PVC / Clay pipes to BS4660 and BS 5481, for PVC or BS EN 295 for vitrified clay pipes; complete with all flexible couplings and fittings as required				
F	100mm nominal size	62	m	£11.88	£736.56
	Extra over for				
G	bends, 100mm	11	Nr	£30.25	£332.75
н	rocker pipes, 100mm; to manholes	16	Nr	£30.25	£484.00
I	external yard gully, complete with trap, grating and cover, bed and surround in concrete	1	Nr	£237.65	£237.65
	Sundry items				2237.03
	Sundry items				1257.05
	Sundry items Marker tape, non degradable; red with black lettering				2257.05
J		62	m	£1.08	£66.96
J	Marker tape, non degradable; red with black lettering	62	m	£1.08	
J	Marker tape, non degradable; red with black lettering laid in trench 450mm above pipe	62	m	£1.08	
J	Marker tape, non degradable; red with black lettering laid in trench 450mm above pipe <u>R15 MANHOLES</u> Preformed Hepworth polypropylene sectional units -	62	m	£1.08	
ĸ	Marker tape, non degradable; red with black lettering laid in trench 450mm above pipe R15 MANHOLES Preformed Hepworth polypropylene sectional units - Inspection chambers Excavate, support, spoil and concrete surround for; 475mm diameter. polypropylene inspection chamber; complete including setting base in concrete on concrete slab at correct levels; to accept and including approved manhole covers Class D400; 450mm diameter; to suit	62	m	£1.08 £394.29	
	Marker tape, non degradable; red with black lettering laid in trench 450mm above pipe R15 MANHOLES Preformed Hepworth polypropylene sectional units - Inspection chambers Excavate, support, spoil and concrete surround for; 475mm diameter. polypropylene inspection chamber; complete including setting base in concrete on concrete slab at correct levels; to accept and including approved manhole covers Class D400; 450mm diameter; to suit manhole				£66.96

Bill 23 Foul Drainage

FOUL DRAINAGE - TESTING

R99 DRAINAGE TESTS

Inspections and testing as required

CCTV inspection to all pipelines

A	generally	1	ITEM	£810.18	£810.18
	Testing of manholes and pipelines				
В	generally	1	ITEM	£378.08	£378.08
	Cleaning of pipelines				
С	as required	1	ITEM	£324.07	£324.07
	Operating and maintenance manuals				
D	as required	1	ITEM	£270.06	£270.06
	Record drawings				
E	as required	1	ITEM	£194.44	£194.44
	Page Total 23/7				£1,976.83
	Bill 24 Storm Drainage				
	Preambles and EXCAVATION RISK ITEMS				
	A13 DESCRIPTION OF THE WORK				
	Drainage activities				
	The Contractor and Sub Contractors should allow for all works identified within the appended Drainage Standard Bill; which includes for all attendances, site surveys and investigations				
A	generally	1	ITEM	£216.05	£216.05
	The Contractor and Sub Contractor should familiarise themselves as to the condition of the existing drainage lines. The contractor to make allowance for possible repairs to the existing drainage lines including revamping existing manholes to suit				
В	generally	1	ITEM	£216.05	£216.05
	The contract is advised that there are no drainage depths indicated on the drawings or pipe sizes, and therefore all depths, pipe sizes and the like in this Bill should be taken to be provisional and subject to verification.				
С	generally	1	ITEM	£0.00	£0.00
	R12 Storm DRAINAGE BELOW GROUND				
	Trench excavation risk				
	Extra over excavation irrespective of depth for breaking out - to be priced as rate only per cubic metre				
D	rock	0	m3	£0.00	£0.00
E	concrete	0	m3	£0.00	£0.00

F	reinforced concrete	0	m3	£0.00	£0.00
G	brickwork, blockwork or stonework	0	m3	£0.00	£0.00
	Extra over trench excavations; irrespective of depth and size for				
н	excavating soft spots; disposal of surplus material and filling with approved fill to formation level of trench - to be priced as rate only per cubic metre	0	m3	£0.00	£0.00
I	next existing service - to be priced as rate only per metre	0	m3	£0.00	£0.00
1	around existing service crossing excavation - to be priced as rate only per crossing	0	m3	£0.00	£0.00
	Page Total 24/1				£432.10
	Bill 24 Storm Drainage				
	Storm DRAINAGE - TO EXTERNAL WORKS				
	<u>Q10 KERBS /EDGINGS /CHANNELS /PAVING</u> <u>ACCESSORIES</u>				
	Aco Drains; thresholds				
	ACO channels or equal other approved with ductile iron grating to load class D400; complete including excavation, disposal and concrete bed and surround as indicated on detail drawing				
A	generally; laid straight	35	m	£156.64	£5,482.40
	Extra over slotted drain system for:				
В	ends	26	Nr	£27.01	£702.26
С	outlet connection 100mm diameter	13	Nr	£41.05	£533.65
	Dished channels; as drawing 50037-0011 revision B				
	In situ concrete ST4 foundation to receive pennant / granite setts 200 x 100 x 100mm bedded and pointed in approved mortar; complete including excavation, disposal and concrete bed and surround as indicated on detail drawing				
D	generally; laid straight	49	m	£73.46	£3,599.54
	R12 DRAINAGE BELOW GROUND				
	Excavating trenches for drainage pipes; complete with the disposal of surplus materials; backfilling with Type 1				
	For pipes; not exceeding 200mm nominal diameter				
E	average depth 750 to 1000mm	229	m	£34.57	£7,916.53
F	average depth 1000 to 1250mm	23	m	£38.89	£894.47
G	average depth 1250 to 1500mm	68	m	£42.13	£2,864.84
	For pipes; 225mm nominal diameter				
н	average depth 1250 to 1500mm	21	m	£51.85	£1,088.85

I	average depth 1500 to 1750mm	68	m	£56.17	£3,819.56		
<u>F</u> e	or pipes; 300mm nominal diameter						
J	average depth 1250 to 1500mm	4	m	£57.25	£229.00	£57.25	
к	average depth 1500 to 1750mm	12	m	£62.65	£751.80		£62.65
<u>T</u>	ype S granular surround						
<u>B</u>	eds and surrounds						
L	to suit 100mm diameter pipe	7	m	£11.88	£83.16		
М	to suit 150mm diameter pipe	83	m	£14.04	£1,165.32		
N	to suit 225mm diameter pipe	89	m	£16.20	£1,441.80		
0	to suit 300mm diameter pipe	16	m	£20.52	£328.32	£20.52	£20.52
Р	age Total 24/2				£30,901.50		
<u>B</u>	ill 24 Storm Drainage						
T	ype Z Concrete surround						
<u>B</u>	eds and surrounds						
A	to suit 100mm diameter pipe	194	m	£25.93	£5,030.42		
В	to suit 150mm diameter pipe	34	m	£28.09	£955.06		
<u>B</u>	elow ground drainage pipe						
P	pproved PVC / Clay pipes to BS4660 and BS 5481, for VC or BS EN 295 for vitrified clay pipes; complete with Il flexible couplings and fittings as required						
С	100mm nominal size	202	m	£11.88	£2,399.76		
D	150mm nominal size	117	m	£14.04	£1,642.68		
Е	225mm nominal size	89	m	£17.28	£1,537.92		
F	300mm nominal size	16	m	£25.93	£414.88	£25.93	£25.93
<u>E</u> :	xtra over for						
G	bends, 100mm	130	Nr	£27.01	£3,511.30		
н	bends, 150mm	65	Nr	£30.25	£1,966.25		
I	bends, 225mm	24	Nr	£32.41	£777.84		
J	bends, 300mm	3	Nr	£41.05	£123.15		
к	rocker pipes, 100mm; to manholes	27	Nr	£27.01	£729.27		
L	rocker pipes, 150mm; to manholes	18	Nr	£30.25	£544.50		
М	rocker pipes, 225mm; to manholes	14	Nr	£32.41	£453.74		
Ν	rocker pipes, 300mm; to manholes	6	Nr	£38.89	£233.34		
0	junctions, 100 x 100 x 100mm	14	Nr	£37.81	£529.34		
Ρ	junctions, 100 x 150 x 150mm	2	Nr	£37.81	£75.62		
Q	junctions, 100 x 225 x 225mm	12	Nr	£41.05	£492.60		
R	junctions, 100 x 300 x 300mm	1	Nr	£49.69	£49.69		

S	junctions, 150 x 150 x 150mm	7	Nr	£37.81	£264.67	
т	junctions, 150 x 225 x 225mm	5	Nr	£41.05	£205.25	
U	external yard gully, complete with trap, grating and cover, bed and surround in concrete; 150mm outlet	5	Nr	£237.65	£1,188.25	
v	rodding eye, complete with frame and cover, bed and surround in concrete; 100mm outlet	2	Nr	£118.83	£237.66	
w	connection to rainwater pipes	37	Nr	£48.61	£1,798.57	
х	rest bend, complete with concrete bed and surround; 100mm	37	Nr	£31.33	£1,159.21	
	Road gully					
	Pre cast concrete road gully; including all excavation, grating, frame, stopper, concrete bed and surround and the like to complete the installation					
Y	to suit 150mm diameter outlet	10	Nr	£253.86	£2,538.60	
	Page Total 24/3				£28,859.57	
	Bill 24 Storm Drainage					
	Sundry items					
	Marker tape, non degradable; red with black lettering					
A	laid in trench 450mm above pipe	62	m	£1.08	£66.96	
	R15 MANHOLES					
	Concrete manholes					
	Concrete manhole; circular; precast concrete shaft - chamber sections to be bedded with mortar, proprietary bitumen or resin mastic sealant; 150mm thick GEN3 concrete surround; complete installation including provision of safety equipment, all excavation, temporary works, disposal, concrete beds, surround, benching; brick raising course; pre cast concrete base, concrete topping, step irons, riser and cover units, channel ware, rocker pipes and the like; to accept manhole cover and frame					
В	1200mm diameter manhole; depth not exceeding 1250mm; assumed D400 recessed cover	1	Nr	£1,528.54	£1,528.54	
С	1200mm diameter manhole; depth not exceeding 1500mm; assumed D400 recessed cover	2	Nr	£1,701.38	£3,402.76	
D	1200mm diameter manhole; depth not exceeding 1750mm; assumed D400 recessed cover	2	Nr	£1,824.53	£3,649.06	
E	1200mm diameter manhole; depth not exceeding 2000mm; assumed D400 cover	2	Nr	£1,993.05	£3,986.10	
	<u>Headwalls</u>					

	Athlon precast concrete headwall; complete installation including all excavation, temporary works; disposal, concrete beds, surround; including all guarding, galvanised gratings and the like				
F	150mm diameter pipe outlet; depth to invert not exceeding 1.50m	1	Nr	£324.07	£324.07
G	300mm diameter pipe outlet; depth to invert not exceeding 1.75m	1	Nr	£378.08	£378.08
	Preformed Hepworth polypropylene sectional units - Inspection chambers				
	Excavate, support, spoil and concrete surround for; 475mm diameter. polypropylene inspection chamber; complete including setting base in concrete on concrete slab at correct levels; to accept and including approved manhole covers Class D400; 450mm diameter; to suit manhole				
Н	manhole not exceeding 1000mm deep	10	Nr	£480.71	£4,807.10
I	manhole not exceeding 1250mm deep	3	Nr	£556.32	£1,668.96
J	manhole not exceeding 1500mm deep	1	Nr	£658.95	£658.95
	Page Total 24/4				£20,470.58
	Bill 24 Storm Drainage				
A	manhole not exceeding 1750mm deep 3.00 Nr	0		£0.00	£0.00
	Page Total 24/5				£0.00
	Bill 24 Storm Drainage				
	Storm DRAINAGE - TESTING				
	R99 DRAINAGE TESTS				
	Inspections and testing as required				
	CCTV inspection to all pipelines				
Α	generally	1	ITEM	£810.18	£810.18
	Testing of manholes and pipelines				
В	generally	1	ITEM	£378.08	£378.08
	<u>Cleaning of pipelines</u>				
С	as required	1	ITEM	£324.07	£324.07
	Operating and maintenance manuals				
D	as required	1	ITEM	£270.06	£270.06
	Record drawings				
Ε	as required	1	ITEM	£199.84	£199.84
	Page Total 24/6				£1,982.23
	Bill 25 External Services				
	EXCAVATING RISK ITEMS				
	D20 EXCAVATING AND FILLING				

Trench excavation risk

Extra over excavation irrespective of depth for breaking out - to be priced as rate only per cubic metre

	out - to be priced as rate only per cubic metre				
A	rock	0	m3	£0.00	£0.00
В	concrete	0	m3	£0.00	£0.00
С	reinforced concrete	0	m3	£0.00	£0.00
D	brickwork, blockwork or stonework	0	m3	£0.00	£0.00
	Extra over trench excavations; irrespective of depth and size for				
E	excavating soft spots; disposal of surplus material and filling with approved fill to formation level of trench - to be priced as rate only per cubic metre	0	m3	£0.00	£0.00
		Ū		20100	20100
F	next existing service - to be priced as rate only per metre	0	m	£0.00	£0.00
G	around existing service crossing excavation - to be priced as rate only per crossing	0	Nr	£0.00	£0.00
	Page Total 25/1				£0.00
	Bill 25 External Services				
	external services				
	A40 MANAGEMENT AND STAFF				
	<u>Survey site</u>				
	As may be required; identify the location, size, type and all other relevant information on the location of existing services likely to be affected by the works, both				
	buried and overhead; mark in a visible manner on site and maintain markings				
^	and maintain markings	1	ITENA	£0.00	£0.00
A	and maintain markings to the site area and surrounding	1	ITEM	£0.00	£0.00
A	and maintain markings	1	ITEM	£0.00	£0.00
A	and maintain markings to the site area and surrounding The Contractor should note that there is no allowance for the excavation of combined trenches within the	1	ITEM	£0.00 £0.00	£0.00 £0.00
	and maintain markings to the site area and surrounding The Contractor should note that there is no allowance for the excavation of combined trenches within the project				
	and maintain markings to the site area and surrounding The Contractor should note that there is no allowance for the excavation of combined trenches within the project generally P30 TRENCHES/PIPEWAYS/PITS FOR BURIED				
	and maintain markings to the site area and surrounding The Contractor should note that there is no allowance for the excavation of combined trenches within the project generally P30 TRENCHES/PIPEWAYS/PITS FOR BURIED MECHANICAL SERVICES				
	and maintain markings to the site area and surrounding The Contractor should note that there is no allowance for the excavation of combined trenches within the project generally P30 TRENCHES/PIPEWAYS/PITS FOR BURIED MECHANICAL SERVICES Excavating trenches for Water Excavating trenches including all temporary works, disposal of surplus, backfilling with suited material; for				
В	and maintain markings to the site area and surrounding The Contractor should note that there is no allowance for the excavation of combined trenches within the project generally P30 TRENCHES/PIPEWAYS/PITS FOR BURIED MECHANICAL SERVICES Excavating trenches for Water Excavating trenches including all temporary works, disposal of surplus, backfilling with suited material; for piped services services not exceeding 200mm; depth not	1	ITEM	£0.00	£0.00

p	isposal of surplus, backfilling with suited material; for				
	iped services				
	services not exceeding 200mm; depth not exceeding 1250mm - Provisional Quantity	136	m	£38.89	£5,289.0
	extra over for excavation in highways, including all				
	works to breakout existing surfaces, make good and				
	reinstate on completion of works, temporary fencing, diversions and the like	7	m	£156.64	£1,096.4
_	-				,
<u>U</u>	isposal				
re	urface water; including the treatment of the water to emove all sediment; pollutants and the like before aving the site perimeters				
	generally	1	ITEM	£199.84	£199.8
B	ed and surround for pipes				
B	ed and surround; to water pipes				
	to suit one pipes nominal size not exceeding 100mm				
	diameter - Provisional Quantity	116	m	£12.96	£1,503.3
Pa	age Total 25/2				£14,479.6
Bi	ill 25 External Services				
B	ed and surround; to gas pipes				
	to suit one pipe nominal size not exceeding 100mm				
	diameter - Provisional Quantity	136	m	£12.96	£1,762.5
D	ucts				
tr	IDPE or Puriton ducts for Water supplies, laid in renches complete with draw cords and the like - rovisional Quantity				
	32mm diameter; or similar	116	m	£8.64	£1,002.2
co	IDPE or Puriton ducts for Gas supplies, laid in trenches omplete with draw cords and the like - Provisional uantity				
	63mm diameter; or similar	136	m	£8.64	£1,175.0
Pi	its				
_	xcavate pit for connection of water pipes; at onnection to local meter / building locations / existing				
m	nains				
	generally - Provisional Quantity	7	Nr	£51.85	£362.9
	xcavate pit for connection of gas pipes; at connection o local meter / building locations / existing mains - rovisional Quantity				
to				654.05	£362.9
to	generally	7	Nr	£51.85	
<u>to</u> Pi	generally leters	7	Nr	£51.85	
		7	Nr	£51.85	

G	water - Provisional Quantity	10	Nr	£0.00	£0.00
	Site isolation valve and utility governor				
	Site isolation valve and utility governor to approved regulations; installed in accordance with manufacturers recommendations				
н	gas - Provisional Quantity	1	Nr	£0.00	£0.00
	Sundries				
	Identification tapes - ' WATER PIPE BELOW'				
I	generally - Provisional Quantity	116	m	£1.08	£125.28
	Identification tapes - ' GAS PIPE BELOW'				
J	generally - Provisional Quantity	136	m	£1.08	£146.88
	Page Total 25/3				£4,937.90
	Bill 25 External Services				
	P30 TRENCHES/PIPEWAYS/PITS FOR BURIED ELECTRICAL SERVICES				
	Excavating trenches for BT				
	Excavating trenches including all temporary works, disposal of surplus, backfilling with suited material; for cabled services				
A	services not exceeding 200mm; depth not exceeding 1250mm - Provisional Quantity; assumed to be two ducts	149	m	£38.89	£5,794.61
В	attendance on the relocation of telegraph pole	1	Nr	£297.07	£297.07
	Excavating trenches for data				
	Excavating trenches including all temporary works, disposal of surplus, backfilling with suited material; for cabled services				
C	services not exceeding 200mm; depth not exceeding 1250mm - Provisional Quantity	149	m	£38.89	£5,794.61
	Excavating trenches for power supplies				
	Excavating trenches including all temporary works, disposal of surplus, backfilling with suited material; for cabled services				
D	services not exceeding 200mm; depth not exceeding 1250mm - Provisional Quantity	256	m	£38.89	£9,955.84
E	services not exceeding 200mm; depth not exceeding 1250mm - Provisional Quantity - connections to buildings	48	m	£38.89	£1,866.72
	Excavating trenches including all temporary works, disposal of surplus, backfilling with suited material; for the removal of existing services				
F	services not exceeding 200mm; depth not exceeding 1250mm - Provisional Quantity	208	m	£38.89	£8,089.12
	Excavating trenches for street lighting				

	Excavating trenches including all temporary works, disposal of surplus, backfilling with suited material; for					
	cabled services					
G	services not exceeding 200mm; depth not exceeding 1250mm - no details	89	m	£38.89	£3,461.21	
	Disposal					
	Surface water; including the treatment of the water to remove all sediment; pollutants and the like before leaving the site perimeters					
н	generally	1	ITEM	£199.84	£199.84	
	Page Total 25/4				£35,459.02	
	Bill 25 External Services					
	Bed and surround for cables					
	Bed and surround; to electrical cables					
A	to suit single duct nominal size not exceeding 200mm diameter	304	m	£11.88	£3,611.52	
	Bed and surround; to BT ducts					
В	to suit single duct nominal size not exceeding 200mm diameter	298	m	£11.88	£3,540.24	
	Bed and surround; to communications ducts					
С	to suit single duct nominal size not exceeding 200mm diameter	298	m	£11.88	£3,540.24	
	Bed and surround; to street lighting cables					
D	to suit single duct nominal size not exceeding 200mm diameter - no details	89	m	£11.88	£1,057.32	
	Ducts					
	Ducts for Power supplies, laid in trenches; complete with draw cords and the like					
E	100mm diameter, or similar	304	m	£8.64	£2,626.56	
	Ducts for BT supplies, laid in trenches; complete with draw cords and the like					
F	100mm diameter, or similar	298	m	£8.64	£2,574.72	
	Ducts for communication supplies, laid in trenches; complete with draw cords and the like					
G	100mm diameter, or similar	298	m	£8.64	£2,574.72	
	Ducts for street lighting supplies, laid in trenches; complete with draw cords and the like					
Н	50mm diameter, or similar	89	m	£8.64	£768.96	
	<u>Pits</u>					
	Excavate pit for connection of services; at connection to local meter / building locations / lighting					
I	electrical - Provisional Quantity	22	Nr	£51.85	£1,140.70	
J	BT - Provisional Quantity	3	Nr	£51.85	£155.55	

К	communications - Provisional Quantity	3	Nr	£51.85	£155.55	
L	street lighting - no details	6	Nr	£51.85	£311.10	
	Meters					
	Meters to approved regulations; installed in accordance with manufacturers recommendations					
М	power - Provisional Quantity	11	Nr	£0.00	£0.00	
	Page Total 25/5				£22,057.18	
	Bill 25 External Services					
	Attendance					
	Excavate pit for base to lighting standard; complete with all temporary works; concrete bed and surround; setting standard in place					
А	lighting standards - no details	6	Nr	£59.41	£356.46	
	Sundries					
	Identification tapes - 'POWER CABLE BELOW'					
В	generally	394	m	£1.08	£425.52	
	Identification tapes - 'COMMUNICATION DUCTS BELOW'					
С	generally	592	m	£1.08	£639.36	
	Y10 INCOMING SERVICES					
	Utility Company Supplies					
	Allow for all Utility Company costs for the provision of new gas supply, including attendance					
D	connecting from existing gas supplies to meter locations adjacent buildings as required	1	ITEM	£0.00	£0.00	
	Allow for all Utility Company costs for the provision of new water supply, including attendances					
E	connecting existing mains water supply to meter locations for buildings supplies as required	1	ITEM	£0.00	£0.00	
	Allow for all Utility Company costs for the provision of					
	new electrical supply, including attendance as may be required					
F		1	ITEM	£0.00	£0.00	
F G	required connecting from existing electrical supply to meter	1	ITEM	£0.00 £0.00	£0.00 £0.00	
	required connecting from existing electrical supply to meter locations for buildings supplies as required; works to existing substation, including all diversion					

I	allow for all works to relocate telegraph poles and associated diversion works	1	ITEM	£0.00	£0.00
	Allow for all Utility Company(ies) costs for the provision of new communication/data supplies, including attendance				
J	connecting from existing communication/data supplies to connection points within the buildings as required	1	ITEM	£0.00	£0.00
	Page Total 25/6				£1,421.34

a LČI -//doi.org/10.1016/j.scitoterv.2017.12	_						
l kett Mass (kg) kWh MJ less st 0.645 c 0.024 er 0.019 inium	ICE Low central high 11 56.7 82 16.8 80.7 239 seneral br 2.4 69.02 152.71 General va	Results <u>Low Central High</u> 7.095 36.5715 52.89 0.4032 1.9368 5.736 0.0456 1.31138 2.90149	EC central 6.15 6.1 2.64 2.6 0.84 2.7	high 5 6.15 54 2.64 11 3.81			
0.419 0.577 0.036	80.57 115.1 148.63 Injection n 66.57 95.1 123.63 Injection n 84.35 120.5 156.65 Nylon (6) v	33.75883 48.2269 62.69497 38.41089 54.8727 71.33451 3.0366 4.338 5.6394	3.43 3.4 3.1 3. 9.14 9.1	3 3.43 1 3.1 4 9.14			
arbonate density polyurethane n 0.001 r 14	0.2 0.2 0.2	28 28 28					
uction ion moulding (heat) 2.3 ion moulding (eld 0.8 2.88 i stamping (heat) 0.03 i stamping electr 0.3 1.08 0.04		2.3 2.3 2.3 2.88 2.88 2.88 0.03 0.03 0.03 1.08 1.08 1.08 0.04 0.04 0.04					
nicity 0.1 0.36	total	0.36 0.36 0.36 92.24012 156.74728 210.6864	7.60098 7.6365	i1 7.65741			
ICE value Mass Low Central	High Low central	EC high low central	high				
J 14.7 0.33 5.88 24.2 14.07 20.1 0.005 15.1 70.61 3.04 14.07 20.1 lesi 0.825 53.7 103.88 weihi 6.76 53.7 103.88 weiha 23.5 65.2 80.1	26.13 General va 340.494 486.42 120 General va 12.4575 58.25325 26.13 General va 42.7728 61.104 200 Contex well 116.95 2440.005	99 3.1 3.1 79.4352 0.72 0.72 8930 310.08 3.48 3.43	0.72 2.89 3.1 0.72 3.43 polystyrene 4.84				
retha 23.5 65.2 80.1 0.816 31.25 31.25 aging ard 73.846	110 General va 1532.2 1882.35 95.7 General va 25.5 25.5 Total 3259.195 5038.384	78.0912 0.72 0.72	0.72				
åe bed ids.doi.org/10.1016.j.scitotenv.2017.03.	107 0048-9697/© 2017 Elsevier B.V. All right		10100				
med mattress included <u>m3 kg Notes</u> 0.083618 64.80395 775km/m3 12.01 les 1.01	ICE values MJ/kg 9.96 11.02 11.9 General va 14.07 20.1 26.13 General va 22.1 146.38 350 Cotton val	Low central high 645.4473 714.139529 771.167 168.9807 241.401 313.8113 27.371 147.8438 353.5	CE low central 0.74 0.7 0.72 0.7	high 4 0.74 2 0.72			
r 0.27 0.2 aging not considered	65.2 80.1 110 General va 12 28.2 42 66.71 95.3 1238.9	273.188 335.619 460.9 3.24 7.614 11.34 13.342 19.06 247.78	4.84 4.8 1.49 1.4 3.76 3.7	0 1.49 6 3.76			
82.48395	iotai	1131.569 1465.677329 2158.508					
e/Freezer iance Remansfacturing and Energy Savin //web-mit.edu/ebm/www/Publication //web-mit.edu/ebm/www/Publication //CE value	Results	wski, Steven Graves high CE					
Mass (kg) low central initurr 0.39 124 155 er 0.92 2.4 69.02 0.02 8.46 59.8 less st 7.42 11 56.7	high 48.36 60.45 186 48.36 60.45 152.71 2.208 63.4984 105.76 0.1692 1.196 82 81.62 420.714	low central 72.54 1.81 9.16 140.4932 0.84 2.71 2.1152 3.09 3.09 608.44 6.15 6.15	high 12.79 3.81 3.09 6.15				
15.4 14.07 20.10 0.87 66.71 95.3 6.666 54.04 77.2 8.81 80.57 115.1 0.02 58.17 83.1 1 62.02 88.6	26.13 216.578 309.54 123.89 58.0377 82.911 100.36 360.2306 51.46152 149.63 709.8217 1014.031 108.03 1.1634 1.662 115.18 62.02 88.6	402.402 0.72 0.72 107.7843 3.76 3.76 668.9998 3.1 3.1 1318.24 3.43 3.43 2.1606 2.54 2.54 115.18 3.43 3.43	0.72 3.76 3.1 3.43 2.54 3.43				
12.5 0.2 8.75 9.5 35.7 51 0.57 66.71 95.3 0.29 90.7 115 1	Nylon (Polyami 16.25 dol 339.15 2.5 66.3 339.15 484.5 123.89 38.0247 54.321 149.62 31.4732 44.5	3.25 9.14 9.14 629.85 0.43 0.49 70.6173 3.76 3.76	9.14 0.55 3.76 3.43				
1.018 62.02 88.6 al 0.169 71.47 102.1 151	115.18 63.13636 90.1948 132.73 12.07843 17.2549 DOI: 10.1109/1 SSST.201	117.2532 4.39 4.39 22.43137 2.54 2.54	4.39 2.54				
estic oven https://www.sup.net	0.550767 151 7 61.91 61.91 Total 2007.78 3312.787 twork.de/fileadmin/user_upload/tot22 Task4		138.34318				
rial KG Low central less st 22.492 11 56.7		CE	high 6.15				
In 2.4% 11 36.7 ifibre 0.45 16.5 2.8 anisei 0.23 15.82 22.6 0.1935 54.04 77.2 er er 1.407 2.4 69.02 initurt 0.0276 124 155	42 7.425 12.6 19.5 43.26 61.8 29.38 3.6386 5.198 100.36 10.45674 14.9382	18.9 1.54 1.54 80.34 0.91 0.91 6.7574 1.54 1.54 19.41966 3.1 3.1	0.154 0.91 1.54 3.1 3.81 12.79				
0.1932 11.7 25 ronic 0.125 151 151	186 3.4224 4.278 36.3 2.26044 4.83 Printed control 151 board	7.01316 2.03 2.03 18.875 http://ecodesignbacs.eu/site	2.03 s/ecodesignbacs.eu/files/	/attachments/EcodesignStakeholderM	w148ACSyS1.odf		
29.2383	Total <u>340.13 1494.9</u>	145.346082 148.18 2215.6 Final.pdf	149.82792				
ICE database values (MJ/kp) Results high Low Central 123.89 28.21833 40.3119	CE High low central 52.40547 3.76 3.76	high 3.76				
0.423 66.71 95.3 initur 0.0548 124 155 initur 0.0742 2.5 10 oller 0.01 er 2.2848 2.4 69.02 swite 0.023 a 1.164 2.56 18.5	186 6.7952 8.494 29.1 0.1855 0.742 0 0 152.71 5.48352 157.6969 0 0	10.1928 1.81 9.16 2.15922 0.7 0.7 0	12.79 0.7 3.81 0.91				
aracii 0.159 iode 0.008 2.4748 11.7 25 0.007 E 0.019	0 0 0 0 36.3 28.95516 61.87 0 0	72.2844 0.91 0.91 0 89.83524 2.03 2.03 0 0	2.03				
s filte 0.033 0.026 97.02 138.6 0.015 79.03 112.9 A 0.3 ker psi 0.216	0 0 180.18 PA66 2.52252 3.6036 146.77 Polycarbor 1.18545 1.6935 Polycarbor 0 0	0	9.14 7.62 3.43				
0.172 80.57 115.1 0.025 60.48 86.4 0.1824 54.04 77.2 galva 4.451 15.82 22.6 0.052 11 56.7	112.32 1.512 2.16 100.36 9.856896 14.08128 29.38 70.41482 100.5926 82 0.572 2.9484	2.808 3.43 3.43 18.30566 3.1 3.1 130.7704 1.54 1.54 4.264 0.72 0.72	3.43 3.43 3.1 1.54 0.72				
Electronic component	(see below) 1418.19 1418.19 Total <u>1853.715</u>		e/fileadmin/user_upload 22.90435 25.61655	/Produkteruopen/Methodology_oreo_	study/MEErP_study_by_vhk/2	0110819_Ecoreport_2011_MEE	<u>P.vic</u>
ICE datab Mass (kt) Low	id=8dPnX_5MPQC&pg=PA219&lpg=PA219&d ase values (MJ/kg) Results central high Notes Low	CE Costed High loss	central hish		&wid=2ahUKEwiC7b-C0prcAhV	FaxQKHedfCxEQ8AEwCXoECA	QQAQ#v=onepage&q=toaster%20bi
0.24 71.05 0.24 71.05 tome 0.003 114 carbon steel 0.93 11 urethane 0.045 71.05	101.5 131.95 17.052 Nickel value 0.342	Contra High Am 24.36 31.668 3.34 0.492 0.582 52.731 76.26 6.15 4.5675 5.93775 4.84	6.15 6.1 4.84 4.8				
ver 0.011 2.4	69.02 152.71 0.0264	4.5675 5.93775 4.84 0.75922 1.67981 0.84	4.84 4.8 2.71 3.8	1			

	Mass (kg)	Low	central	high	Notes	Low		High	low	central	high
PP	0.24	71.05	101.5	131.95		17.052	24.36	31.668	3.3	3.3	ŧ З.
					Nickel						
					value	0.342					
Nichrome	0.003	114	164	194			0.492	0.582			
Low carbon steel	0.93		56.7 101.5		stainless	10.23	52.731	76.26	6.1		
Polyurethane	0.045	71.05		131.95		3.19725	4.5675	5.93775	4.8		
Copper	0.011	2.4	69.02 101.5	152.71		0.0264	0.75922	1.67981	0.8		
Phenolic	0.037	71.05	80.7	131.95	PP rigid f	2.62885 0.5043	3.7555	4.88215	4.2		
Brass	0.03	16.81	80.7	259		0.5043	2,421	7.17	2.6	2.6	2.
					Total	33,9808	00.0050	128.17971	6.9849	5 7.0055	3 7.017
					1 Crass	33,2000	03.0002	149-1/2/1		/ ///////	/ ////
Iron											
		ICE value	e .		Results			CE			
Mass (kr	Low			Notes	Low	Central		low	central	high	
PP 0.15	71.05	101.5									
			131.95		10.6575	15.225	19,7925	3.34	3.3		
		101.5	131.95	Nickel	10.6575	15.225	19.7925	3.34			
		101.5	131.95	Nickel value	3.42	15.225	19.7925	3.34			•
Nichrome 0.03	114	164	131.95			4.92	19.7925	3.34			
		164 56.7		value				3.34		ı 3.3	
Stainless: 0.8	8 11	164	194	value	3.42	4.92	5.82		3.3	i 3.3 5 6.1	5
Stainless: 0.8 Polvureth: 0.18	8 11 8 71.05	164 56.7 101.5 69.02	194 82	value	3.42 8.8	4.92 45.36	5.82 65.6	6.15	3.3	i 3.3 i 6.1 i 4.8	5
Stainless: 0.8 Polvureth: 0.18	8 11 8 71.05 5 2.4	164 56.7 101.5	194 82 131.95 152.71	value	3.42 8.8 12.789 0.12	4.92 45.36 18.27	5.82 65.6 23.751 7.6355	6.15 4.84	3.3 6.1 4.8	i 3.3 i 6.1 i 4.8 i 3.8	5 8 1
Stainless: 0.8 Polvureth: 0.18 Copper 0.05 Phenolic 0.037	8 11 8 71.05 5 2.4 7 71.05	164 56.7 101.5 69.02	194 82 131.95 152.71	value used	3.42 8.8 12.789 0.12	4.92 45.36 18.27 3.451	5.82 65.6 23.751 7.6355	6.15 4.84 0.84	3.3 6.1 4.8 2.7	5 6.1 5 4.8 1 3.8 5 4.2	5 6 1 5
Stainless: 0.8 Polvureth: 0.18 Copper 0.05 Phenolic 0.037	8 11 8 71.05 5 2.4 7 71.05	164 56.7 101.5 69.02 101.5	194 82 131.95 152.71 131.95 239	value used PP rigid fo	3.42 8.8 12.789 0.12 2.62885 0.5043	4.92 45.36 18.27 3.451 3.7555 2.421	5.82 65.6 23.751 7.6355 4.88215 7.17	6.15 4.84 0.84 4.26 2.64	3.3 6.1 4.8 2.7 4.2 2.6	4 3.3 6 6.1 4 4.8 1 3.8 5 4.2 4 2.6	5 8 1 5
Stainless: 0.8 Polvureth: 0.18 Copper 0.05 Phenolic 0.037	8 11 8 71.05 5 2.4 7 71.05	164 56.7 101.5 69.02 101.5	194 82 131.95 152.71 131.95 239	value used	3.42 8.8 12.789 0.12 2.62885	4.92 45.36 18.27 3.451 3.7555 2.421	5.82 65.6 23.751 7.6355 4.88215 7.17	6.15 4.84 0.84 4.26	3.3 6.1 4.8 2.7 4.2 2.6	4 3.3 6 6.1 4 4.8 1 3.8 5 4.2 4 2.6	5 8 1 5

	Description	Otv	Unit	Rate	£p	Lifespan			Volume/are i	Density Note	Material used if not s I	EE (MJ/Kg		E	(MJ)				
А	Subcontractor personnel transport and materials transport							1											
	materials transport Description	1 Qty	Unit	70,500.00 Rate			reference from BCIS (20	06)	Volume/are	Density Note referen reference from ICE if not specifi	Material used if not				(MJ)	central	high		
D	Excavating To reduce levels no details -							gh						0			0		
E	Provisional Quantity Disposal Excavated material off site; it has been assumed all excavated material to be taken off site: inert non hazardous - Provisional	279	m3	£3.24	£903.96	500	750	1000		2050	soil	0.15	0.45	0.73	85792.5	257377.5	417523.5	284.722	
_	Quantity	140	m3	£35.65	£4,991.00	1	1	1		2050	soil	0.15	0.45	0.73	43050	129150	209510	25.8766	
F	Disposal Excavated material on site; in stock piles suitable for reuse	140	m3	£6.48	£907.20	1	1	1		2050	soil	0.15	0.45	0.73	43050	129150	209510	142.361	
G	Selected excavated materia Filling to make up levels; compacting in layers over 250mm																		
н	average thick Surface Treatments Compacting ground generally	140 2678	m3 m2	£8.64 £0.76	£1,209.60 £2,035.28	1	1	1		2050	soil	0.15	0.45	0.73	43050 164697	129150 494091	209510 801525.4	106.771	
1	Surface water; including the treatment of the water to remove all sediment; pollutants and the like before leaving the site perimeters, off			£0.76	£2,035.28	1	1	1	535.6	2050 Soil compaction depth is 20cm	SOII	0.15	0.45	0.73	164697	494091	801525.4		
A	site Excavating Ground beams; from formation	1	ITEM	£199.84	£199.84	1	1	1											
в	level, not exceeding 1.00m deep Pits, pad foundations 1 nr; from formation	348	m3	£6.48	£2,255.04	100	150	200		2300	Reinforced concrete I	0.77	0.85	0.91	616308	680340	728364		
с	level 1.00m maximum depth Working space allowance; complete with backfilling with approved well compacted	2	m3	£12.96	£25.92	100	150	200		2300	Reinforced concrete I	0.77	0.85	0.91	3542	3910	4186		
D	material; including all design, maintenance and removal as required pits Working space allowance; complete with backfilling with approved well compacted	4	m2	£6.48	£25.92	1	1	1		2050	soil	0.15	0.45	0.73	1230	3690	5986	142.361	
	material; including all design, maintenance and removal as required trenches	980	m2	£4.32	£4,233.60	1	1	1		2050	soil	0.15	0.45	0.73	301350	904050	1466570	213.542	
E	including all additional backfilling with well compacted granular material, making good as	980	m2	£3.24	£3,175.20	100	300	500	980	2240	sand and gravel, crus	0.05	0.081	0.15	109760	177811.2	329280		
F	Earthwork support To faces of excavation; including all additional backfilling with well compacted granular material, making good as required, designed, supplied and installed, maintained and removed by specialist Sub Contractor 1.00m maximum depth; distance																		
G	between opposing faces 2.00 to 4.00m Disposal Excavated material off site; it has been assumed all excavated material to be taken off site; to be treated as inert hazardous	4	m2	£5.40	£21.60	100	300	500	4	2240		0.05	0.081	0.15	448	725.76	1344		
н	material	350	m3	£35.65	£12,477.50	1	1	1		2050	soil	0.15	0.45	0.73	107625	322875	523775	25.8766	
	Surface Treatments Compacting ground generally	668	m2	£0.76	£507.68	1	1	1	133.6	2050 20cm depth	soil	0.15	0.45	0.73	41082	123246			242.763
J	Compacting bottoms of exeavations generally, borde cast-in-place piles to site generally, in various locations; deemed to include the transport to site and from site of all plant, materials and equipment required for the piling operations; all plant movements on site; all setting out; concrete, reinforcement and formwork; all ancillary piling operations required to astify the piling design, designed and installed by specialis sub Contractor generally a300m diameter	433	m2 Nr	£0.76 £834.44	£329.08 £97,629.48	1	1 750	1	86.6 396.7704	2050 2300 Height using 12m	soll	0.15	0.45	0.73	26629.5	79888.5		242.763	
с	Cutting off tops of piles; Heights to be developed by contractor as to construction methods on site 300mm diameter piles; cutting length to be developed by contractor;																		
D	below top of pilemat Disposal Surplus excavated material; based on piles to be 12.00m deep; material taken to be	117	Nr	£19.44	£2,274.48	1	1	1	2.479815	2300 Height using 75mm		0.77	0.85	0.91 4	391.752365	4848.03833	5190.2528		
G	Inert non hazardous diposal off site Pilling mat, deigned to suit he pilling reg(s) for the project; provide, jav and level (note area measure all allows for the full site area); Contractor to to note: the pilemat is the same site as the building footprint; Contractor to note: Make allowance for exavation for the pilemat, the building footprint; Contractor to note: Make allowance for exavation for the pilemat, removal of soli and import of sublicit pilemat formation level for exervision based on marked up drawing, taken to be noninally 600mm thick, assumed to be constructed uting monorfal approved well compacted granular material; compaction to engineers requirements; top of pile mat taken to be 600mm above top of pile caps	99	m3	£35.65 £34.57	£3,529.35 £38,614.69	1	1	1	670.2	2250	soil natural gravels, clean	0.15	0.85	0.91	30442.5 75062.4	172507.5	184684.5	48.878	
~	pling operations; it is assumed that the pling operations; it is assumed that the plemat is to be removed completely; and making allowance for compacting and preparing for new works generally	1117	m2	£22.69	£25.344.73	1	1	1											
		'				-	-												

в	General attendances on the piling Sub Contractor as required	1	ITEM	£297.07	£297.07	1	1	1										
с	Special attendances on the piling Sub Contractor as required		ITEM	£297.07	£297.07	1	1	1										
D	Plain concrete grade Gen 1 Blinding concrete not exceeding 150mm thick		m3	£149.07	£1,639.77	100	150	200		1760	Gen 1 concrete	0.59	0.65	0.7	11422.4	12584	13552	7.67425
E	Filling to hollow walls not exceeding 150mm thick	27	m3	£149.07	£4,024.89	100	150	200		1040	hollow medweight	0.59	0.65	0.7	16567.2	18252	19656	4.53478
F	Plain concrete grade Gen 3 Mass fill concrete generally	2	m3	£156.64	£313.28	100	150	200		1900	Gen 3 concrete	0.68	0.75	0.81	2584	2850	3078	9.09729
G	Reinforced concrete grade FND2z Foundations generally Isolated foundations generally	228	m3		£41,623.68	100	150	200		2300	RC 25/30 concrete	0.77	0.85	0.91	403788	445740		10.7088
1 H	E20 FORMWORK FOR IN SITU CONCRETE	1	m3	£182.56	£182.56	100	150	200		1900	Gen 1	0.59	0.65	0.7	1121	1235	1330	6.7649
r	Formwork, basic finish Sides of ground beams and edges of beds not exceeding 250mm high E20 FORMWORK FOR IN SITU CONCRETE	8	m	£23.77	£190.16	47	70	110	0.1	480 Formwork can be timber, ste	el, į timber, 50mm depth	0.72	7.11	21.3	34.56	341.28	1022.4	
ĸ	Formwork, Sides of ground beams and edges of beds basic finish 500 to 1000mm high	1202	m	£30.25	£36,360.50	47	70	110	90.15	480	timber, 100mm depti	0.72	7.11	21.3	31155 84	307663.92	921693.6	8 46149
А	Claymaster board; 50mm thick to sides of foundations, 500 to 1000mm high	134	m	£20.52	£2,749.68	64	108	178		21.5 density range of 11 to 32 kg/				115.18		9572.1225		0.40145
в	Cordek Cellcore HXB 18/24 heave protection to underside of foundations	79	m2	£16.20	£1,279.80	500	750	1000		21.5 density range of 11 to 32 kg/				115.18	69525.0402			
с	E30 REINFORCEMENT FOR IN SITU CONCRETE High tensile steel deformed square bar																	
D	reinforcement to B.S.4449 grade 460; bars H10 E30 REINFORCEMENT FOR IN SITU CONCRETE	3.83	т	£1,593.36	£6,102.57	47	60	100				12.18	17.4	22.62	46649.4	66642	86634.6	10.9203
	High tensile steel deformed square bar reinforcement to B.S.4449 grade 460; bars H12	0.55	т	£1,636.57	£900.11	47	60	100				12.18	17.4	22.62	6699	9570	12441	10.632
E	E30 REINFORCEMENT FOR IN SITU CONCRETE High tensile steel deformed square bar reinforcement to B.S.4449 grade 460; bars H16	2.20	-	£1,712.18	£5,615.95	47	60	100				12.18	17.4	22.62	39950.4	57072	74193.6	10.1525
F	E30 REINFORCEMENT FOR IN SITU CONCRETE High tensile steel deformed square bar	3.20		11,/12.10	13,013.93	47	00	100				12.10	17.4	22.02	33530.4	57072	74193.0	10.1025
G	reinforcement to B.S.4449 grade 460; bars H20 E30 REINFORCEMENT FOR IN SITU CONCRETE	4.95	т	£1,795.36	£8,887.03	47	60	100				12.18	17.4	22.62	60291	86130	111969	9.69165
-	High tensile steel deformed square bar reinforcement to B.S.4449 grade 460; bars H25	4.66	т	£1,847.21	£8,608.00	47	60	100				12.18	17.4	22.62	56758.8	81084	105409.2	9.41961
н	E41 WORKED FINISHES/CUTTING TO IN SITU CONCRETE, Power floating, generally	3	m2	£10.80	£32.40	1	1	1	0.6	2100 Finishing screed, made of sha	rp : Cement screed	3.157	4.51	5.863	3977.82	5682.6	7387.38	
1	RMC pre cast concrete beam and dense aggregate block floor; including all grouting																	
	joints, straps, infills and the like, designed, manufactured and installed by specialist Sub																	
	Contractor; laid on blockwork sleeper walls, nominally 150mm thick	671	m2	£69.00	£46,299.00	47	72	100	100.65	2200	concrete precast	1.2	2.18	3.8	265716	482717.4	841434	
к	RMC pre cast concrete beam and dense aggregate block floor; including all grouting joints, straps, infills and the like, designed,																	
	manufactured and installed by specialist Sub Contractor; laid on blockwork sleeper walls,																	
L	holes for services and drainage RMC pre cast concrete beam and dense	52	Nr	£5.00	£260.00	500	750	1000		2200		1.2	2.18	3.8				
-	aggregate block floor; including all grouting joints, straps, infills and the like, designed,																	
	manufactured and installed by specialist Sub Contractor; laid on blockwork sleeper walls,																	
м	provision of additional supports for stair cases RMC pre cast concrete beam and dense	6	Nr	£100.00	£600.00	500	750	1000										
	aggregate block floor; including all grouting joints, straps, infills and the like, designed,																	
	manufactured and installed by specialist Sub Contractor; laid on blockwork sleeper walls,																	
А	provision of additional supports for lift shaft Dense aggregate blockwork; 7.3N/mm2	1	Nr	£100.00	£100.00	500	750	1000										
в	nominally 100mm thick; in cement mortar; stretcher担架 bond; laid flat, 100mm thick Dense aggregate blockwork; 7.3N/mm2	415	m2	£22.80	£9,462.00	52	72	101	41.5	2200		0.525	0.75	0.975	47932.5	68475	89017.5	
ь	nominally 100mm thick; in cement mortar; stretcher担架 bond; laid flat, 215mm thick;																	
с	assumed to be 100mm blocks laid flat Dense aggregate blockwork; 7.3N/mm2	76	m2	£45.58	£3,464.08	52	72	101	16.34	2200		0.525	0.75	0.975	18872.7	26961	35049.3	
	nominally 100mm thick; in cement mortar; stretcher担架 bond; laid flat, 215mm thick;																	
D	assumed to be 100mm blocks laid flat; in piers Dense aggregate blockwork; 7.3N/mm2	2	m2	£45.58	£91.16	52	72	101	0.43	2200		0.525	0.75	0.975	496.65	709.5	922.35	
	nominally 100mm thick; in cement mortar; stretcher担架 bond; laid flat, Extra over																	
	blockwork for cutting blockwork to course 100mm thick	619	m	£5.00	£3,095.00	52	72	101										
E	Dense aggregate blockwork; 7.3N/mm2 nominally 100mm thick; in cement mortar;																	
	stretcher担架 bond; laid flat, Extra over blockwork for cutting blockwork to course 215mm thick		-	£10.00	£1 130 00	52	72	101										
F	Engineering bricks; manufacturer and product reference to be agreed; 7.5N/mm2	113	m	£10.00	£1,150.00	52	72	101										
	compressive strength; half lap stretcher bond; flush joints; walls, half brick thick	62	m2	£72.20	£4,476.40	70	93	131	6.355	1920 half brick thick is 102.5mm		0.63	3	6	7687.008	36604.8	73209.6	
G	Forming cavities in hollow walls; complete with				,													
	Ancon stainless steel HRT4 safety ties at the rate of five per square metre, 125mm wide	220	m2	£3.60	£792.00	50	75	100	27.5	7850		11	56.7	82	2374625	12240112.5	17701750	15454.7
н	Forming cavities in hollow walls; complete with Ancon stainless steel HRT4 safety ties at the																	
	rate of five per square metre; and rigid insulation board; Celotex CG5000 50mm thick,																	
I.	100mm wide Forming cavities in hollow walls; complete with Ancon stainless steel HRT4 safety ties at the	19	m2	£11.54	£219.26	50	75	100	1.9	7850		11	56.7	82	164065	845680.5	1223030	3856.98
	rate of five per square metre; and rigid insulation board; Celotex CG5000 75mm thick,																	
	125mm wide Visqueen Zedex Housing grade damp proof	55	m2	£16.04	£882.20	50	75	100	6.875	7850		11	56.7	82	593656.25	3060028.13	4425437.5	3468.63
	course; bedding in cement mortar, not exceeding 225mm wide	87	m2	£16.45	£1,431.15	50	75	100	19.575	1650		0.1	1.54	3.49	3229.875	49740.075	112722.64	34.7553
А	Telescopic vents 通风口, Glidevale Limited ZLAB airbrick 空心砖 with ZLPS			-			-		-					-				-
	periscope潜望镜; colour Anthracite; building in as work proceeds, generally	223	Nr	£16.50	£3,679.50				0.335615	400	aerated brick	1.37	1.37	1.37	183.91702	183.91702	183.91702	0.04998
В	Frame, Pre cast concrete padstones, building in as work proceeds, 440 x 215 x 100mm	18	Nr	£60.00	£1,080.00	50	75	100	0.17028	1900		1.2	2.18	3.8	388.2384	705.29976	1229.4216	0.65306
с	Frame, Pre cast concrete padstones, building in as work proceeds, 600 x 215 x 100mm	5	Nr	£77.50	£387.50	50	75	100	0.0645	1900		1.2	2.18	3.8	147.06	267.159	465.69	
D E	Frame, Pre cast concrete padstones, building in as work proceeds, 900 x 215 x 100mm Frame, Pre cast concrete padstones, building in	3	Nr	£130.00	£390.00	50	75	100	0.05805	1900		1.2	2.18	3.8	132.354	240.4431	419.121	
E	as work proceeds, 440 / 440 x 215 x 100mm L shaped	3	Nr	£135.00	£405.00	50	75	100	0.05676	1900		1.2	2.18	3.8	129 4128	235.09992	409 8072	
F	G10 STRUCTURAL STEEL FRAMING, All steelwork is to be designed, manufactured,	5		2133.00	2403.00	50		100	0.03070	1500			1.10	5.0	115.4110	233.03332	405.0072	
	supplied and erected by specialist Sub Contractor; including, but not limited to, all																	
	surface treatments; factory applied finishes; localised repairs and the like as required																	
	following installation; making good following installation; in accordance with specifications																	
	prepared by Craddys and the National Steelwork Specifications. Supply and erect all																	
	steelwork required for the Coombe Shute, Stoke Gabriel Housing project; including all		-															
G H	galvanising as may be required Columns, weight not exceeding 40kg/m G10 STRUCTURAL STEEL FRAMING, Columns	1 0.77		£35,137.64 Included	£35,137.64 Included	50 47	75 70	100 110				14.07	20.1	26.13	10833.9	15477	20120.1	
п	G10 STRUCTURAL STEEL FRAMING, Columns, weight not exceeding 40kg/m; square hollow section	0.19	-	Included	Included	47	70	110				14.07	20.1	26.13	2673.3	3819	4964.7	
I.	section G10 STRUCTURAL STEEL FRAMING, Columns, weight not exceeding 40kg/m; galvanised	0.19	т	Included	Included	47	70	110				14.07	20.1		2673.3	3819 8241	4964.7	
L	G10 STRUCTURAL STEEL FRAMING, Columns, weight not exceeding 40kg/m; galvanised;						,,								5766.7	0141		
А	square hollow section G10 STRUCTURAL STEEL FRAMING, Beams,	0.75	т	Included	Included	47	70	110				14.07	20.1	26.13	10552.5	15075	19597.5	
в	weight not exceeding 40kg/m G10 STRUCTURAL STEEL FRAMING, Beams,	6.21	т	Included	Included	47	70	110				14.07	20.1	26.13	87374.7	124821	162267.3	
	weight not exceeding 40kg/m; square hollow section	0.06	т	Included	Included	47	70	110				14.07	20.1	26.13	844.2	1206	1567.8	
с	G10 STRUCTURAL STEEL FRAMING, Beams, weight not exceeding 40kg/m; galvanised	1.51	т	Included	Included	47	70	110				14.07	20.1	26.13	21245.7	30351	39456.3	

D	G10 STRUCTURAL STEEL FRAMING, Beams,															
	weight not exceeding 40kg/m; galvanised; rectangular hollow section	0.44	т	Included	Included	47	70	110			14.07	20.1	26.13	6190.8	8844	11497.2
E	G10 STRUCTURAL STEEL FRAMING, Beams, weight 40 to 100kg/m	0.7	т	Included	Included	47	70	110			14.07	20.1	26.13	9849	14070	18291
G	Fittings, generally; assessed at 17.5% of all steelwork	1.92	т	Included	Included	47	70	110			14.07	20.1	26.13	27014.4	38592	50169.6
н	Framing and erection, all works required to	12.96	т	Included	Included	49	73	113			14.07	20.1		182347.2		338644.8
1	Allow for all works necessary to eliminate cold	12.50		mendaed	mendaed	45	75	115			14.07	20.2	20.15	101347.1	200450	550044.0
	bridging within the design of the steel frame; by use of proprietary fittings and equipment,															
L	generally - no details Isolated structural and secondary steelwork	1	ITEM	Included	Included	83	83	83								
	additional framing and supports to external and internal walls	1	ITEM	Included	Included											
к	Isolated structural and secondary steelwork	-		mendaed	mendaed											
	additional framing and supports to roof															
L	structure, including all cleader rails and the like Isolated structural and secondary steelwork	1	ITEM	Included	Included											
	additional framing and supports to curtain walling, removable panels and the like	1	ITEM	Included	Included											
м	additional framing and supports to mechanical and electrical installations additional framing															
	and supports to mechanical and electrical installations															
N	additional framing and supports to mechanical	1	ITEM	Included	Included											
	and electrical installations windposts, WP3, nominally 2.40m long	2	Nr	£415.00	£830.00	50	75	100 Steel beam			14.07	20.1	26.13			
0	Prepare, touch up primer and apply two coats of approved bitumen based paint (RIW or															
	similar) to steelwork, general surfaces, generally over 300mm - provisional quantity	5	m2	£16.20	£81.00	12	18	26 0.0005	2400	double coat paint	35.7	51	66.3	42.84	61.2	79.56
А	Prepare, touch up primer and apply two coats of approved exterior grade gloss paint to															
	steelwork, general surfaces, generally over															
в	300mm - provisional quantity Nulifire or similar approved	35	m2	£10.00	£350.00	49	73	113		double coat paint						
	intumescent膨胀的 paint finish to exposed surfaces; to achieve one hour fire rating;															
	general surfaces of structural metalwork, over 300mm girth 周长 - Provisional Quantity -															
А	measured to all surfaces of all steelwork RMC or similar approved hollow core pre cast	239	m2	£8.00	£1,912.00					single coat paint						
	concrete floor planks 厚木板; including all grouting 灌浆 of ends of hollows, all grouting															
	joints, straps, infills and the like, designed,															
	manufactured and installed by specialist Sub Contractor; laid on blockwork walls, nominally															
в	150mm thick RMC or similar approved hollow core acoustic	48	m2	£69.00	£3,312.00	47	72	108 7.2	1040		1.2	2.18	3.8	8985.6	16323.84	28454.4
	rated pre cast concrete floor planks; including all grouting of ends of hollows, all grouting															
	joints, straps, infills and the like, designed, manufactured and installed by specialist Sub															
	Contractor; laid on blockwork walls, nominally															
с	150mm thick TJI floor joists. Designed floor joists, to suit	407	m2	£69.00	£28,083.00	42	72	108 61.05	1040		1.2	2.18	3.8	76190.4	138412.56	241269.6
	span, locations and loadings for the domestic properties, including the design, manufacture,															
	supply and installation, complete with all joist hangers, fixings, supports, bracings 支撑,															
	blockings and the like as required to complete installation, to suit upper floor area of															
D	50.49m2; unit 1 TJI floor joists. Designed floor joists, to suit	1	ITEM	£2,253.00	£2,253.00	35	60	95 1.3080949	650	Laminated Veener lui	0.72	7.11	21.3	612.1884226	6045.36067	18110.574
D	span, locations and loadings for the domestic															
	properties, including the design, manufacture, supply and installation, complete with all joist															
	hangers, fixings, supports, bracings 支撑, blockings and the like as required to complete															
	installation, to suit upper floor area of 56.18m2; unit 2	1	ITEM	£2,343.00	£2.343.00	35	60	95 1.2013021	650		0.72	7.11	21.3	562.2094034	5551.81786	16632.028
E	TJI floor joists. Designed floor joists, to suit span, locations and loadings for the domestic															
	properties, including the design, manufacture, supply and installation, complete with all joist															
	hangers, fixings, supports, bracings 支撑,															
	blockings and the like as required to complete installation, to suit upper floor area of															
F	54.39m2; unit 3 TJI floor joists. Designed floor joists, to suit	1	ITEM	£2,178.00	£2,178.00	35	60	95 1.1653937	650		0.72	7.11	21.3	545.404231	5385.86678	16134.875
	span, locations and loadings for the domestic properties, including the design, manufacture,															
	supply and installation, complete with all joist hangers. fixings, supports, bracings 支撑.															
	blockings and the like as required to complete installation, to suit upper floor area of															
	54.39m2; unit 4	1	ITEM	£2,178.00	£2,178.00	35	60	95 1.1653937	650		0.72	7.11	21.3	545.404231	5385.86678	16134.875
G	TJI floor joists. Designed floor joists, to suit span, locations and loadings for the domestic															
	properties, including the design, manufacture, supply and installation, complete with all joist															
	hangers, fixings, supports, bracings 支撑, blockings and the like as required to complete															
	installation, to suit upper floor area of 54.41m2; unit 10	1	ITEM	£3,052.00	£3,052.00	35	60	95 1.1653937	650		0.72	7.11	21.3	545.404231	5385.86678	16134.875
н	TJI floor joists. Designed floor joists, to suit	1		,	,		~	1.103333/			4		3			
	span, locations and loadings for the domestic properties, including the design, manufacture,															
	supply and installation, complete with all joist hangers, fixings, supports, bracings 支撑,															
	blockings and the like as required to complete installation, trimmers or additional joists to suit															
I.	unit 1, 2.44m long TJI floor joists. Designed floor joists, to suit	2	Nr	£12.00	£24.00	35	60	95 0.1933773	650		0.72	7.11	21.3	90.50058202	893.693247	2677.3089
	span, locations and loadings for the domestic properties, including the design, manufacture,															
	supply and installation, complete with all joist hangers, fixings, supports, bracings 支撑,															
	blockings and the like as required to complete															
	installation, trimmers or additional joists to suit unit 3, 3.12m long	2	Nr	£15.00	£30.00	35	60	95 0.5148438	650		0.72	7.11	21.3	240.9468872	2379.35051	7128.0121
1	TJI floor joists. Designed floor joists, to suit span, locations and loadings for the domestic															
	properties, including the design, manufacture, supply and installation, complete with all joist															
	hangers, fixings, supports, bracings 支撑, blockings and the like as required to complete															
	installation, trimmers or additional joists to suit unit 4, 3.12m long	2	Nr	£15.00	£30.00	35	60	95 0.6702918	650		0.72	7.11	21 2	313.6965512	3097 75244	9280 189F
к	Sawn 锯开的 softwood, for exterior use;	2	-41	213.00	230.00		30	55 0.0702918			0.72	1	-1.3			-100.1030
	joists	98	m	£4.90	£480.20	42	71	109 0.735	630		0.3	5.55	13	138.915	2569.9275	6019.65
L	Sawn 锯开的 softwood, for exterior use; preservative treated; grade C24, 50 x 150mm															
	joists; fixed to steel frame with and including bolts	41	m	£5.35	£219.35	42	71	109 0.3075	630		0.3	5.55	13	58.1175	1075.17375	2518.425
А	Fixings; galvanised mild steel, Straps; to suit upper floors; plugged and screwed to masonry															
	walls; nailed to joists nominally 1750mm long, 50 x 3mm; bent once	129	Nr	£9.00	£1,161.00	35	60	95 0.0338625	7800		15.82	22.6	29.38	4178.49705	5969 2815	7760.066
в	Fixings; galvanised mild steel, Joist hangers, external quality, nailed, to suit 150 x 50mm	123		25.00	,-01.00		~	0.0330025					0			
-	joists	160	Nr	£2.40	£384.00	35	60	95 0.9152	7800		15.82	22.6	29.38	112932.0192	161331.456	209730.89
c	Floor boarding, Chipboard to B.S5669 part 2; tongued and grooved flooring panels, all joints															
	secret screwed to joists and glued, all joints offset; floors, over 300mm wide	270	m2	£8.03	£2,168.10	32	51	69 81	650	particle board	10	24.8	39	526500	1305720	2053350
D	Balcony flooring Assumed to be hardwood ribbed decking boards; screw fixed to timber				-											
	joists; 125 x 19mm section; with nominal 5mm gap between boards; complete with anti slip															
E	finish; preservative treated, over 300mm wide Rockwool or similar approved cavity fire	23	m2	£94.30	£2,168.90	42	71	109 6.9	700		0.72	10.4	16	3477.6	50232	77280
E	breaks; at perimeter of upper floors; nominally	ar -		caa	ee 700 0-	50		100	100							330 FF
	200 x 300mm section, horizontal	327	m	£20.75	£6,785.25	50	75	100 19.62	100		16.8	16.8	16.8	32961.6	32961.6	32961.6

A	Sawn softwood, preservative 防腐剂 treated; grade C24; pitched roof members, 150 x 50mm, C24 timber joists at 400mm centres; to																	
в	somm, C24 timber Joists at 400mm centres; to porches Sawn softwood, preservative 防腐剂 treated; grade C24; pitched roof members, 150 x	41	m	£4.90	£200.90	49	82	114	0.3075	630		0.72	7.4	13	139.482	1433.565	2518.425	
с	50mm, C24 timber joists at 400mm centres; to dormers Sawn softwood, preservative 防腐剂 treated;	65	m	£5.10	£331.50	49	82	114	0.4875	630		0.72	7.4	13	221.13	2272.725	3992.625	
D	grade C24; pitched roof members, 175 x 50mm, C24 timber joists at 400mm centres; to unit 5 to 9 Sawn softwood, preservative 防腐剂 treated;	913	m	£5.88	£5,368.44	49	82	114	7.98875	630		0.72	7.4	13	3623.697	37243.5525	65427.863	
	grade C24; pitched roof members, 250 x 25mm, C24 timber ridges 带钢单向皱纹; to unit 5 to 9	15	m	£6.38	£95.70	49	82	114	0.09375	630		0.72	7.4	13	42.525	437.0625	767.8125	
E	Sawn softwood, preservative treated; grade C24; dormer 屋顶采光窗 wall construction, 100 x 50mm, C24 timber joists at 400mm centres	267	m	£4.37	£1,166.79	49	82	114	1.335	630		0.72	7.4	13	605.556	6223 77	10933.65	
F	Sawn softwood, preservative treated; bolted 用螺栓固定 to timber beams; plates, 100 x 50mm	30	m	£5.37	£161.10	23	37	53	0.15	630		0.72	7.4	13	68.04	699.3	1228.5	
G	Sawn softwood, preservative treated; bolted to steel beams; plates, 100 x 50mm	183	m	£5.37	£982.71	23	37	53	0.915	630		0.72	7.4	13	415.044	4265.73	7493.85	
н	Sawn softwood, preservative treated; bolted to masonry with resin anchors at 300mm centres;																	
I.	plates, 100 x 50mm Sawn softwood, preservative treated; bedded	10	m	£5.37	£53.70	23	37	53	0.05	630		0.72	7.4	13	22.68	233.1	409.5	
I	in mortar; plates, 100 x 50mm Sawn softwood, preservative treated; bedded	287	m	£4.82	£1,383.34	23	37	53	1.435	630		0.72	7.4	13	650.916	6689.97	11752.65	
к	in mortar; plates, 100 x 50mm; to verges Sawn softwood, preservative treated; framing	60	m	£4.37	£262.20	23	37	53	0.3	630		0.72	7.4	13	136.08	1398.6	2457	
L	to eaves 屋櫓 and verges , nominally 50 x 50mm Sawn softwood, preservative treated; framing	1235	m	£3.04	£3,754.40	23	37	53	3.0875	630		0.72	7.4	13	1400.49	14393.925	25286.625	
	to eaves 屋櫓 and verges , nominally 50 x 50mm; plugged and screwed to masonry walls	378	m	£3.04	£1,149.12	23	37	53	0.945	630		0.72	7.4	13	428.652	4405.59	7739.55	
м	Roof trusses, designed, manufactured, supplied and installed by specialist Sub Contractor, complete with all bracings 紧固該置, fkings, central walkway boards; openings for access hatches 舱口 and the like																	
N	as required to complete installation. total roof area - on plan; garage units for 7 to 9 Roof trusses, designed, manufactured, supplied and installed by specialist Sub Contractor, complete with all bracings	90	m2	£35.00	£3,150.00	23	37	53										
	紧固装置, fixings, central walkway boards; openings for access hatches 舱口 and the like as required to complete installation. total roof																	
A	area - on plan; timber store Roof trusses, designed, manufactured, supplied and installed by specialist Sub Contractor, complete with all bracings 紧固装置, fixings, central walkway boards;	8	m2	£35.00	£280.00	23	37	53										
	openings for access hatches 舱口 and the like as required to complete installation. total roof area - on plan; car port 简易车库	56	m2	£35.00	£1,960.00	30	60	80										
В	Roof trusses, designed, manufactured, supplied and installed by specialist Sub Contractor, complete with all bracings 紧固狹置, fixings, central walkway boards; openings for access hatches 舱口 and the like as required to complete installation. total roof																	
с	area - on plan; units 1 and 2, including 4 dormers	168	m2	£34.76	£5,839.68	30	60	80										
L	Roof trusses, designed, manufactured, supplied and installed by specialist Sub Contractor, complete with all bracings 系固枝置, finings, central walkway boards; openings for access hatches 없는 and the like as required to complete installation. total roof area- on plan; units 3 and 4, including central																	
D	shallow pitched valley Roof trusteet, decigned, manufactured	157	m2	£26.25	£4,121.25	30	60	80										
D	shallow pitched valley Roof trusses, designed, manufactured, supplied and installed by specialist Sub Contractor, complete with all bracings 系回该量, fbings, central walkway boards; openings for access hatches 能口 and the like as required to complete installation. total roof	157	m2				60											
D	Roof trusses, designed, manufactured, supplied and installed by specialist Sub Contractor, complete with all bracings 紧固装置, fixings, central walkway boards; openings for access hatches 舱口 and the like	157	m2 m2		£4,121.25 £2,894.32	30 30	60	80										
	Roof trusses, designed, manufactured, supplied and installed by specialist Sub Contractor, complete with all bracings 资語感意, finenge, central walkaway boards; openings for access hatches 他口 and the like as required to complete installation. total roof area - on plan, unit J Assumed to be 12mm plywood; nailed to trusses nominaly 300mm wide Strapp; assumed to be galansied mid steel; Strapp; assumed to be galansied to be	104 158	m2 m	£27.83 £10.00	£2,894.32 £1,580.00	30 23	60 36	80 49	0.5688	700		10	15	20	3981.6	5972.4	7963.2	
	Roof trusses, designed, manufactured, supplied and installed by specialist Sub Contractor, complete with all bracings 资語管意, finger, central walkaway boards; openings for access hatches 他口 and the like as required to complete installation. total roof area - on plan, unit J Assumed to be 12mm plywood; nailed to trusses nominally 300mm wide Strapp; assumed to be galanised mid steel; 1700 x50 x3mm, bent once; to verges Strapp; assumed to be galanised mid steel;	104 158 50	m2 m Nr	£27.83 £10.00 £9.20	£2,894.32 £1,580.00 £460.00	30 23 24	60 36 34	80 49 42	0.01275	7800		15.82	22.6	29.38	1573.299	2247.57	2921.841	
F	Roof trusses, designed, manufactured, supplied and installed by specialist Sub Contractor, complete with all bracings 房間接置, finging, central walkway boards; openings for access hatches 般已 and the like as required to complete installation. total roof area- on plan; unit 10 Assumed to be 12mm plywood; nailed to trusses nominally 300mm wide Straps; assumed to be glavnised mid steel; fixed to timber and macrony, Straps; assumed to be glavnised mid steel; fixed to timber and macrony Joit hangers 7+ get St, shockets and	104 158 50 228	m2 m Nr Nr	£27.83 £10.00 £9.20 £8.38	£2,894.32 £1,580.00 £460.00 £1,910.64	30 23 24 24	60 36 34 34	80 49 42 42		7800			22.6	29.38		2247.57	2921.841	
E F G	Roof trusses, designed, manufactured, supplied and installed by specialist Sub Contractor, complete with all bracings 深語受賞, finging, central walkway boards; openings for access hatches 船口 and the like as required to complete installation. Intal roof area - on plan; unit 10 Assumed to be Lardm plankow, nailed to trusses nominally 300mm wide Straps; assumed to be galavnised mild steel; fixed to timber and masonry, assumed to be 2100 x 50 x 3mm, bent once; to verges Straps; assumed to be galavnised mild steel; fixed to timber and masonry Joit hangers 小葉捏钙, hones, brackets and he like, as required to complete installation Natural siter roofing (no details); complete with approved bites (38 x 25mm) fixed to and including approved fielt 毛팅 / breather nembrane and the like to complete	104 158 50 228 1	m2 m Nr ITEM	£27.83 £10.00 £9.20 £8.38 £500.00	£2,894.32 £1,580.00 £460.00 £1,910.64 £500.00	30 23 24 24 24	60 36 34 34 34	80 49 42 42 42	0.01275	7800		15.82	22.6	29.38 29.38	1573.299 5064.17184	2247.57 7234.5312	2921.841 9404.8906	
E F G H	Roof Trusses, designed, manufactured, supplied and installed by specialist Sub Contractor, complete with all bracings 篇書之前, finguing, finguing, central walkway boards; openings for access hatches 船口 and the like as required to complete installation. Intal roof area - on plan; unit 10 Assumed to be jailwainsed mild steel; fixed to timber and maximy, assumed to be Trupps, assumed to be galavnised mild steel; fixed to timber and maximy, assumed to be trupps, assumed to be galavnised mild steel; fixed to timber and maximy, assumed to be trupps, assumed to be galavnised mild steel; fixed to timber and maximy, assumed to be plantavised and maximy and steel; fixed to timber and maximy. Assumed to be trupps, assumed to complete installation thatural state roofing (no destalls; complete with approved batters (38 x 25mm) fixed to and including approved fixet, 684, breather membrane and the like to complete	104 158 50 228 1	m2 m Nr ITEM m2	£27.83 £10.00 £9.20 £8.38 £500.00 £45.00	£2,894.32 £1,580.00 £460.00 £1,910.64 £500.00 £3,060.00	30 23 24 24 24 24	60 36 34 34 34 26	80 49 42 42 42 36	0.01275 0.04104 0.34	7800 7800 1600		15.82 15.82 0.1	22.6 22.6 0.5	29.38 29.38 1	1573.299 5064.17184 54.4	2247.57 7234.5312 272	2921.841 9404.8906 544	
E F H I	Roof trusses, designed, manufactured, supplied and instaled by specialist Sub Contractor, complete with all bracings 深國經濟, finkings, central walkway boards; openings for access hatches 船口 and the like as required to complete installation. Ital aroof area - on plan; unit 10 Assumed to be Landmark million and the lei- fixed to timber and masonry, assumed to be 1700 x 503 x3mm, betn once; to verges Straps, assumed to be galvanised mild steel; fixed to timber and masonry Joits hangers 小葉程钰, hones, brackets and he like, as required to complete installation Natural site roofing (no details); complete installation, pitch H g 25 degrees Natural site roofing (no details); complete with approved buttens (18 x 25mm) fixed to and including approved fite H G by treather membrane and the like to complete installation, pitch H g Z 5 degrees Natural site roofing (no details); complete with approved buttens (18 x 25mm) fixed to and including approved fite H G by treather membrane and the like to tomplete installation, pitch H S G 5 degrees Natural site roofing (no details); complete with approved buttens (18 x 25mm) fixed to and including approved fite H G U breather membrane and the like to tomplete installation, pitch H S G 5 degrees Natural site roofing (no details); complete with approved buttens (18 x 25mm) fixed to and including approved fite H G U breather membrane and the like to complete installation, pitch H G G G H G G U breather membrane the like to complete	104 158 50 228 1	m2 m Nr ITEM	£27.83 £10.00 £9.20 £8.38 £500.00 £45.00	£2,894.32 £1,580.00 £460.00 £1,910.64 £500.00	30 23 24 24 24	60 36 34 34 34	80 49 42 42 42	0.01275	7800 7800 1600		15.82	22.6	29.38 29.38	1573.299 5064.17184	2247.57 7234.5312	2921.841 9404.8906	
E F H I	Roof trusses, designed, manufactured, supplied and installed by specialist Sub Contractor, complete with all bracings 高問筆實, finge, central walkway boards; openings for access hatches MiCl and the like ser required to complete installation. Installar area - on plan; unit 10 Assumed to be 12mm phywood; nalled to trusses nominally 300mm wide Straps; assumed to be galavained mid steel; fixed to timber and maconry 100 a 500 a 3mm, bent note; to verges Straps; assumed to be galavained mid steel; fixed to timber and maconry 100 bit 300 a 3mm, bent note; to verges Straps; assumed to be galavained mid steel; fixed to timber and maconry 100 bit 300 a 3mm, bent note; to verges Straps; assumed to be galavained mid steel; fixed to timber and maconry 100 bit 300 a 300 a 3mm, bent note; to verges 100 a 500 a 50	104 158 50 228 1	m2 m Nr ITEM m2	£27.83 £10.00 £9.20 £8.38 £500.00 £45.00	£2,894.32 £1,580.00 £460.00 £1,910.64 £500.00 £3,060.00	30 23 24 24 24 24	60 36 34 34 34 26	80 49 42 42 42 36	0.01275 0.04104 0.34	7800 7800 1600		15.82 15.82 0.1	22.6 22.6 0.5	29.38 29.38 1	1573.299 5064.17184 54.4	2247.57 7234.5312 272	2921.841 9404.8906 544	
E F H I J	Roof Trusses, designed, manufactured, supplied and installed by specialist Sub Contractor, complete with all bracings 第國證意, fincing, central walkway boards; openings for access hatches MiCl and the like as required to complete installation. Intal roof area - on plan; unit 10 Assumed to be 12mm phywood; nalled to trusses nominally 300mm wide Straps; assumed to be galvanised mid steel; fixed to timber and maconry, assumed to be 1700 x 500 x 3mm, bent once; to verges Straps; assumed to be galvanised mid steel; fixed to timber and maconry Jost hangers /h 建程5, those, brackets and he like, as required to complete installation Natural size roofing (no details); complete installation, pitch Hig 25 degrees installation, pitch Hig 26 degrees installation, pitch Hig 26 degrees installation, pitch Hig 26 degrees installation, pitch Hig 26 degrees Natural size roofing (no details); complete with approved batters (18 x 25mm) fixed to and including approved fite # 54/ breather membrane and the like to complete installation, pitch Hig 26 degrees Natural size roofing (no details); complete with approved batters (18 x 25mm) fixed to and including approved fite # 54/ breather membrane and the like to complete installation, Abutters (18 x 25mm) fixed to and including approved fite # 54/ breather membrane and the like to complete installation, Abutters (18 x 25mm) fixed to and including approved fite # 54/ breather membrane and the like to complete installation, Abuttens (18 x 25mm) fixed to and including approved fite # 54/ breather membrane, and the like to complete installation, Abuttens (18 x 25mm) fixed to and including approved fite # 54/ breather membrane, bitch as 25 degrees Natural size roofing (no details); complete installation, Abuttens (18 x 25mm) fixed to and including approved fite # 54/ breather membrane, bit	104 158 50 228 1 68 914	m2 M Nr ITEM m2 m2	£27.83 £10.00 £9.20 £8.38 £500.00 £45.00	£2,894.32 £1,580.00 £1,910.64 £500.00 £3,060.00 £3,090.00	30 23 24 24 24 17 17	60 36 34 34 34 26 26	80 49 42 42 42 36	0.01275 0.04104 0.34 22.85	7800 7800 1600 1600		15.82 15.82 0.1	22.6 22.6 0.5 0.5	29.38 29.38 1	1573.299 5064.17184 54.4 3656	2247.57 7234.5312 272 18280	2921.841 9404.8906 544 36560	
E F H I J	Roof trusses, designed, manufactured, supplied and installed by specialist Sub Contractor, complete with all bracings 篇書之前, complete with all bracings 篇書之前, complete installation. Ital aroof area-on plan; unit 10 Assumed to be 10 be galavnised in total aroof area-on plan; unit 10 Assumed to be the galavnised in total aroof area-on plan; unit 10 Assumed to be the galavnised in total aroof area-on plan; unit 10 Assumed to be the galavnised in total aroof area-on plan; unit 10 Assumed to be the galavnised in total aroof fixed to timber and maxony Joist hangers 7-1428±05, shoe, krackets and the like, as required to complete installation thatural size config (no details), complete with approved batters (38 x 25mm) fixed to and including approved fite 毛毛d/by Creather membrane and the like to complete installation, pitch 33 degrees Natural size roofing (no details), complete with approved batters (38 x 25mm) fixed to and including approved fite 毛毛d/by Creather membrane and the like to complete installation, pitch 33 degrees Natural size roofing (no details), complete with approved batters (38 x 25mm) fixed to and including approved fite 毛did, complete with approved batters (38 x 25mm) fixed to and including approved fite 毛did, breather membrane and the like to complete installation, pitch 33 degrees Natural size roofing (no details), complete with approved batters (38 x 25mm) fixed to and including approved fite field by treather membrane and the like to complete installation, butters (38 x 25mm) fixed to and including approved fite field by treather membrane and the like to complete installation, butters (38 x 25mm) fixed to and including approved fite field by treather membrane and the like to complete with approved batters (38 x 25mm) fixed to and including approved fite field by treather membrane and the like to complete installation. Dutters (38 x 25mm) fixed to and including approved fite field by treather membrane and the like to complete installation. Dutters (38 x 25mm) fixed to and including approved fite f	104 158 50 228 1 68 914 71	m2 m Nr iTEM m2 m2	£27.83 £10.00 £9.20 £8.38 £500.00 £45.00 £35.00	£2,894.32 £1,580.00 £460.00 £1,910.64 £3,060.00 £31,990.00 £31,990.00	30 23 24 24 24 17 17 17	60 36 34 34 34 26 26 26	80 49 42 42 42 36 36 36	0.01275 0.04104 0.34 22.85 0.06745	7800 7800 1600 1600		15.82 15.82 0.1 0.1	22.6 22.6 0.5 0.5	29.38 29.38 1 1	1573.299 5064.17184 54.4 3656 10.792	2247.57 7234.5312 272 18280 53.96	2921.841 9404.8906 544 36560 107.92	
E F H I J	Roof Trusses, designed, manufactured, supplied and installed by specialist Sub Contractor, complete with all bracings 篇述是。否, finite and the like as required to complete installation. Installar Assumed to be Izmm physicol, nalled to Urans on plan; unit 10 Assumed to be Izmm physicol, nalled to Urans on plan; unit 10 Assumed to be layanisment to be 1700 X 50 3 Ann, bent once; to verges Straps, assumed to be galanisment of be 1700 X 50 3 Ann, bent once; to verges Straps, assumed to be galanisment of be 1700 X 50 3 Ann, bent once; to verges Straps, assumed to be galanisment of be 1700 X 50 3 Ann, bent once; to verges Straps, assumed to be galanisment of be 1700 X 50 3 Ann, bent once; to verges Straps, assumed to be galanisment of be 1700 X 50 3 Ann, bent once; to verges Natural site room [in do datalik; complete with approved buttens (38 x 25mm) fixed to and including approved fite 毛용 10 Verather membrane and the like to complete installation, pitch 33 digrees Natural site room [in do datalik; complete with approved buttens (38 x 25mm) fixed to and including approved fite 毛용 10 Verather membrane and the like to complete installation, pitch 33 digrees Natural site room [in do datalik; complete installation, buttens (38 x 25mm) fixed to and including approved fite 毛용 10 Verather membrane and the like to complete installation, buttens (38 x 25mm) fixed to and including approved fite 毛용 10 Verather membrane and the like to complete installation, buttens (38 x 25mm) fixed to and including approved fite 毛용 10 Verather membrane and the like to complete installation, buttens (38 x 25mm) fixed to and including approved fite 毛용 10 Verather membrane and the like to complete installation, buttens (38 x 25mm) fixed to and including approved fite 毛용 10 Verather membrane and the like to complete installation, buttens (38 x 25mm) fixed to and including approved fite 毛용 10 Verather membrane and the like to complete installation, buttens (38 x 25mm) fixed to and including approved fite 毛용 10 Verather membrane and the like to comple	104 158 50 228 1 68 914 71 10	m2 m Nr ITEM m2 m	£27.83 £10.00 £9.20 £8.38 £500.00 £45.00 £13.00 £13.00	£2,894.32 £1,580.00 £460.00 £1,910.64 £3,060.00 £31,990.00 £31,990.00 £852.00	30 23 24 24 24 24 17 17 17	60 36 34 34 34 26 26 26 26	80 49 42 42 42 36 36 36	0.01275 0.04104 0.34 222.85 0.06745	7800 7800 1600 1600		15.82 15.82 0.1 0.1 0.1	22.6 22.6 0.5 0.5 0.5	29.38 29.38 1 1 1 1	1573.299 5064.17184 54.4 3856 10.792 1.52	2247.57 7234.5312 272 18280 53.96 7.6	2921.841 9404.8906 544 36560 107.92 15.2	
E F I J K	Roof Trusses, designed, manufactured, supplied and installed by specialist Sub Contractor, complete with all bracings 篇句题, fin, fings, entral walkway boards; openings for access hatches MiCl and the like server and the server and the server and the server server and the server and the server and the server fixed to timber and macorry, assumed to be 1700 x 50 a 3mm, bent once; to verges Straps, assumed to be galavained mid steel; fixed to timber and macorry plot hengers /h 是世分, showed to be galavained the do timber and macorry plot hengers /h 是世分, showed to be server and the server and the server plot hengers /h 是世分, showed to be with approved batters (38 x 25mm) fixed to and including approved fit. High / treather membrane and the like to complete installation, pitch 38 d 25 degrees Natural sister cooling (no details); complete with approved batters (38 x 25mm) fixed to and including approved fit. High / treather membrane and the like to complete installation, pitch 35 degrees Natural sister cooling (no details); complete with approved batters (38 x 25mm) fixed to and including approved fits High / treather membrane and the like to complete installation, pitch 35 degrees Natural sister cooling (no details); complete with approved batters (38 x 25mm) fixed to and including approved fits High / treather membrane and the like to complete installation, butters (38 x 25mm) fixed to and including approved fits High / treather membrane and the like to complete installation, butters (38 x 25mm) fixed to and including approved fits High / treather membrane and the like to complete installation, butters (38 x 25mm) fixed to and including approved fits High / treather membrane and the like to complete installation, butters, lickling over sized or cut sites to suit, hritomation to tops of pitch Natural sister conling (no details); complete with approved batters (38 x 25mm) fixed to cut sites to suit, hritomation tops of pitch Natural sister conling (no details); complete with approved batters (38 x 25mm) fixed to cut site	104 158 50 228 1 68 914 71 10	m2 m Nr ITEM m2 m	£27.83 £10.00 £9.20 £8.38 £500.00 £45.00 £12.00 £12.00 £8.00	£2,894.32 £1,580.00 £460.00 £1,910.64 £3,060.00 £31,990.00 £31,990.00 £852.00	30 23 24 24 24 24 17 17 17	60 36 34 34 34 26 26 26 26	80 49 42 42 42 36 36 36	0.01275 0.04104 0.34 222.85 0.06745	7800 7800 1600 1600 1600		15.82 15.82 0.1 0.1 0.1	22.6 22.6 0.5 0.5 0.5	29.38 29.38 1 1 1 1	1573.299 5064.17184 54.4 3856 10.792 1.52	2247.57 7234.5312 272 18280 53.96 7.6	2921.841 9404.8906 544 36560 107.92 15.2	
E F J K L	Roof Trusses, designed, manufactured, supplied and installed by specialist Sub Contractor, complete with all bracings 篇書で, finise, central walkway boards; openings for access hatches Mill and the like as required to complete installation. Intal roof area - on plan; unit 10 Assumed to be layabing and the like fixed to timber and maxony, assumed to be trusses nominally 300mm wide Straps, assumed to be galvanised mild steel; fixed to timber and maxony, assumed to be solved to the galvanised mild steel; fixed to timber and maxony, assumed to be trusses nominally 300mm wide Straps, assumed to be galvanised mild steel; fixed to timber and maxony, assumed to be solved to timber and maxony, assumed to be trusses and maxony and steel; Stack to timber and maxony fixed to access the straps of the solved to the solved to the like, as required to complete installation thatural state roofing (no details); complete with approved batters (18 x 25mm) fixed to and including approved fixet 684 / breather membrane and the like to complete installation, pitch 33 degrees Natural state roofing (no details); complete with approved batters (18 x 25mm) fixed to and including approved fixet 684 / breather membrane and the like to complete installation, butch 33 degrees Natural state roofing (no details); complete with approved batters (18 x 25mm) fixed to and including approved fixet 684 / breather membrane and the like to complete installation, butchers (18 x 25mm) fixed to and including approved fixet 684 / breather membrane and the like to complete installation, butchers (18 x 25mm) fixed to and including approved fixet 684 / breather membrane and the like to complete installation, Abutments (18 x 25mm) fixed to and including approved fixet 684 / breather membrane and the like to complete installation, Abutments (18 x 25mm) fixed to and including approved fixet 684 / breather membrane and the like to complete installation, Abutments (18 x 25mm) fixed to and including approved fixet 684 / breather membrane and the like to complete ins	104 158 50 228 1 68 914 71 10 23	m2 M Nr ITEM m2 m m	£27.83 £10.00 £9.20 £8.38 £500.00 £35.00 £12.00 £8.00 £8.00 £8.00	£2,894.32 £1,580.00 £1,910.64 £3,060.00 £3,060.00 £31,990.00 £852.00 £8852.00	30 23 24 24 24 17 17 17 17	60 36 34 34 34 26 26 26 26 26	80 49 42 42 36 36 36 36	0.01275 0.04104 0.34 22.85 0.06745 0.0095	7800 7800 1600 1600 1600		15.82 15.82 0.1 0.1 0.1 0.1	22.6 22.6 0.5 0.5 0.5	29.38 29.38 1 1 1 1 1	1573.299 5064.17184 54.4 3656 10.792 1.52 3.496	2247.57 7234.5312 272 18280 53.96 7.6 7.6	2921.841 9404.8906 544 36560 107.92 15.2 34.96	
E F J K L	Roof Trusses, designed, manufactured, supplied and installed by specialist Sub Contractor, complete with all bracings 屬國地震, fingue, central walkway boards; openings for access hatches 船口 and the like servegueta to complete installation. Intal roof area - on plan; unit 10 Assumed to be taylawniaed mild steel; fingto to be plan with the server of the server trusp; assumed to be plan with the server fingto to the plan with the server method and maximum server with approved batters (18 x 25mm) fixed to and including approved fite 특용 // breather membrane and the like to complete installation, pitch 33 degrees Natural site roofing (no details); complete with approved batters (18 x 25mm) fixed to and including approved fite 특용 // breather membrane and the like to complete installation, pitch 33 degrees Natural site roofing (no details); complete with approved batters (18 x 25mm) fixed to and including approved fite 千용 light / breather membrane and the like to complete installation, pitch 33 degrees Natural site roofing (no details); complete with approved batters (18 x 25mm) fixed to and including approved fite 千용 light / breather membrane and the like to complete installation, butters (18 x 25mm) fixed to and including approved fite 千용 light / breather membrane and the like to complete installation, Automents Stift; complete with all additional batters, including over sized or cut sizes to suit, hristionati to tops of pitch Natural size roofing (no details); complete with approved batters (18 x 25mm) fixed to and including approved fite 千용 light / breather membrane and the like to complete installation, Automents Stift; complete with all additional batters, including over sized or cut sizes to suit, hristionation to tops of pitch Natural size roofing (no details); complete with	104 158 50 228 1 68 914 71 10 23 318	m2 m Nr ITEM m2 m m m m m	E27.83 E10.00 E9.20 E8.38 E500.00 E45.00 E13.00 E8.00 E13.00 E13.00	£2,894.32 £1,580.00 £1,910.64 £3,060.00 £31,990.00 £832.00 £852.00 £882.00 £1,380.00	30 23 24 24 24 17 17 17 17 17 17 17 17	60 36 34 34 34 36 26 26 26 26 26	80 49 42 42 36 36 36 36 36 36	0.01275 0.04104 0.34 22.85 0.06745 0.0095	7800 7800 1600 1600 1600 1600		15.82 15.82 0.1 0.1 0.1 0.1 0.1 0.1	222.6 222.6 0.5 0.5 0.5 0.5 0.5	29.38 29.38 1 1 1 1 1 1 1 1	1573.299 5064.17184 54.4 3656 10.792 1.52 3.496	2247.57 7234.5312 272 18280 53.96 7.6 7.6	2921.841 9404.8906 544 36560 107.92 15.2 34.96	
E F I J K L N	Roof Trusses, designed, manufactured, supplied and installed by specialist Sub Contractor, complete with all bracings 플립融資膏, finging, central walkways boards; openings for access hatches Mill and the like as required to complete installation. Intel arO area - on plan; unit 10 Assumed to be 1100 mpl/modil, nalled to tryraps assummaly to be galvenised mid steel; fixed to timber and mascory, assumed to be 1700 x 50 x 3mm, bent onc; to verges Straps, assumed to be galvenised mid steel; fixed to timber and mascory, Straps, assumed to be galvenised mid steel; fixed to timber and mascory, Storps, assumed to be galvenised mid steel; fixed to timber and mascory, Storps, assumed to be galvenised mid steel; fixed to timber and mascory, Storps, assumed to be galvenised mid steel; fixed to timber and mascory, Storps, assumed to be galvenised mid steel; fixed to timber and mascory, Storps, assumed to be galvenised mid steel; fixed to timber and mascory, Storps, assumed the step to complete mistallation, platters [38 x 25mm] fixed to and including approved fix 毛용 10 reacher membrane and the like to complete installation, Abutments [38 x 25mm] fixed to and including approved fix 毛용 10 reacher membrane and the like to complete installation, buttens [38 x 25mm] fixed to and including approved fix 毛용 10 reacher membrane and the like to complete installation, Abutments [38 x 25mm] fixed to and including approved fixet 毛용 10 reacher membrane and the like to complete installation, Abutments [38 x 25mm] fixed to and including approved fixet E& 10 reacher membrane and the like to complete installation, Abutments [38 x 25mm] fixed to and including approved fixet E& 10 reacher membrane and the like to complete installation, Abutens [38 x 25mm] fixed to and including approved fixet E& 10 reacher membrane and the like to complete installation, babtens [38 x 25mm] fixed to and including approved fixet E& 10 reacher membrane and the like to complete installation, Abutens [38 x 25mm] fixed to and including approved fixet E& 10 reacher memb	104 158 50 228 1 68 914 71 10 23 318 60 103	m2 m Nr m2 m m m m m	£27.83 £10.00 £9.20 £8.38 £500.00 £45.00 £35.00 £12.00 £8.00 £13.00 £13.00 £13.00 £13.00 £13.00	£2,894.32 £1,580.00 £1,910.64 £3,060.00 £3,060.00 £31,990.00 £852.00 £88.00 £1,84.00 £4,134.00 £1,380.00	30 23 24 24 27 17 17 17 17 17 17 17 17 17	60 36 34 34 34 36 26 26 26 26 26 26 26	80 49 42 42 36 36 36 36 36 36 36	0.01275 0.04104 0.34 22.85 0.06745 0.0095	7800 7800 1600 1600 1600 1600		15.82 15.82 0.1 0.1 0.1 0.1 0.1 0.1 0.1	2226 2226 0.5 0.5 0.5 0.5 0.5 0.5	29.38 29.38 1 1 1 1 1 1 1 1 1	1573.299 5064.17184 54.4 3656 10.792 1.52 3.496	2247.57 7234.5312 272 18280 53.96 7.6 7.6	2921.841 9404.8906 544 36560 107.92 15.2 34.96	
E F J K L N	Roof Trusses, designed, manufactured, supplied and installed by specialist Sub Contractor, complete with all bracings 篇書で, findialed by specialist openings for access hatches 船口 and the like server the second second second second second area - on plan; unit 10 Assumed to be taylanisated mild steel; fixed to sub-er and maxony, assumed to be Trups; assumed to be galanisated mild steel; fixed to sub-er and maxony, assumed to be Trups; assumed to be galanisated mild steel; fixed to sub-er and maxony, assumed to be trusses, and the second second second second to sub-er and maxony, assumed to be trusses, and the second second second second to sub-er and maxony, assumed to be trusses, and the second second second second to sub-er and maxony. Sub-erastical second the like, as required to complete installation thatural size roofing (no details); complete with approved batters (18 x 25mm) fixed to and including approved fite 4614 <i>111</i> 41141111111111111	104 158 50 228 1 68 914 71 10 23 318	m2 m Nr ITEM m2 m m m m m	E27.83 E10.00 E9.20 E8.38 E500.00 E45.00 E13.00 E8.00 E13.00 E13.00	£2,894.32 £1,580.00 £1,910.64 £3,060.00 £31,990.00 £832.00 £852.00 £882.00 £1,380.00	30 23 24 24 24 17 17 17 17 17 17 17 17	60 36 34 34 34 36 26 26 26 26 26	80 49 42 42 36 36 36 36 36 36	0.01275 0.04104 0.34 22.85 0.06745 0.0095	7800 7800 1600 1600 1600 1600		15.82 15.82 0.1 0.1 0.1 0.1 0.1 0.1	222.6 222.6 0.5 0.5 0.5 0.5 0.5	29.38 29.38 1 1 1 1 1 1 1 1	1573.299 5064.17184 54.4 3656 10.792 1.52 3.496	2247.57 7234.5312 272 18280 53.96 7.6 7.6	2921.841 9404.8906 544 36560 107.92 15.2 34.96	

E F	Roof Hip irons, generally Code 4 lead flashings; Flashings to abutments; complete with dressing into masonry as required; finishing with one coat of patination oil, stepped flashing to pitched abutment from roof tiles to masonry; dressing up face of	36	Nr	£7.00	£252.00	17	26	36	0.081	7870			11.7	24.62	36.3	7458.399	15694.5114	23140.161
G	masonry and over slates; girth nominally 350mm Code 4 lead flashings; Flashings to abutments; complete with dressing into masonry as	15	m	£53.00	£795.00	32	60	82	0.00945	11340			16	25.2	33	1714.608	2700.5076	3536.379
н	required; finishing with one coat of patination oil, horizontal flashing to abutment from roof tiles to masonry; dressing up face of masonry and over slates; girth nominally 300mm Code 4 lead flashings; Flashings to abutments; complete with dressing into masonry as	7	m	£33.00	£231.00	32	60	82	0.00378	11340			16	25.2	33	685.8432	1080.20304	1414.5516
I	required; finishing with one coat of patination oil, horizontal flashing to flat roof skirting to masonry; dressing up face of masonry and over skirting; girth nominally 300mm Code 4 lead flashings; Flashings to abutments;	42	m	£33.00	£1,386.00	32	60	82	0.02268	11340			16	25.2	33	4115.0592	6481.21824	8487.3096
	complete with dressing into masonry as required; finishing with one coat of patination oil, soakers to flashing to pitched abutment from roof tiles to masonry; dressing under and over slates and up face of masonry; nominally															2241.2376		
l	soakers of 300 x 400mm Code 5 lead flashings. Flashings to valleys; complete with dressing onto timber battens and over plywood; finishing with one coat of patination oil, valley lining; nominally 450mm	61	Nr	£5.00	£305.00	32	60	82	0.013176	11340			15	25.2	33	2241.23/6	3/65.2/91/	4930.7227
A	girth; bent five times; fixed to battens; in lengths not exceeding 1.50m, with 150mm lap Bill 6 Roof, secret gutter valley lining; nominally 450mm girth; bent five times; fixed to battens; in lengths not exceeding 1.50m, with 150m fixed.	54	m		£3,726.00	32	60		0.054432				15	25.2		9258.8832		
В	with 150nm lap Assumed to be Sanafil or similar approved single ply 极层 warm roof covering; complete with all required vapour barriers; insulation, breather membranes, fleeces till, fixings, trims, seals and the like; laid on prc cast concrete planks; designed, manufactured and installed by specialist Sub Contractor, pitch not	64	m	£69.00	£4,416.00	32	60		0.064512				15	25.2		10973.4912		
c	exceeding 4 degrees Assumed to be Sarnafil or similar approved single ply 极辰 warm roof covering; complete with all required vapour barriers, insulation, breather membranes, fleeces affid, fixings, trims, seals and the like; laid on pre cast concrete plank; designed, manufactured and installed by specialist Sub Contractor, plich 5	44	m2	£81.00	£3,564.00	17	30	43	0.0528	1380			54.04	77.2	100.36	3937.57056	5625.1008	7312.631
D	degrees; with standing seam effect rolls at 600mm centres Roof covering Skirtings 基板; complete with all required insulation and the like; dressing up face of walls / parapets 扶手 and the like;	32	m2	£81.00	£2,592.00	17	30	43	0.0384	1380			55.44	79.2	102.96	2937.87648	4196.9664	5456.0563
E	make good as required; including all cappings, trims, formers, not exceeding 200mm girth Roof covering Flashings; complete with all required insulation and the like; dressing up roof trusses behind slates; make good as	42	m	£30.00	£1,260.00	17	30	43	0.1512	1380			55.44	79.2	102.96	11567.88864	16525.5552	21483.222
F	required; including all cappings, trims, formers, 400 to 600mm girth Roof covering Eaves; complete with all required insulation and the like; dressing over and into gutter; make good as required; including all cappings, trims, formers, 200 to	44	m	£30.00	£1,320.00	17	30	43	0.0396	1380			55.44	79.2	102.96	3029.68512	4328.1216	5626.5581
G	400mm girth Roof covering Approved paving slabs, on and including pedestals 基座 as required to	9	m	£30.00	£270.00	17	30	43	0.00648	1380			55.44	79.2	102.96	495.766656	708.23808	920.7095
А	provide working terrace to flat roof, no details, pitch not exceeding 4 degrees Softwood fascias; fixed to timber framing (measured elsewhere); complete with all trims, supports and the like to complete installation;	34	m2	£40.00	£1,360.00	50	75	100	2.04	1380			55.44	79.2	102.96	156074.688	222963.84	289852.99
В	assumed to be 22mm thick, fascia, nominally 250mm deep 50ftwood fascias; fixed to timber framing (measured elsewhere); complete with all trims, supports and the like to complete installation; assumed to be 22mm thick, verge fascia,	318	m	£8.15	£2,591.70	5	10	15	1.749	630			0.72	7.4	13	793.3464	8153.838	14324.31
с	nominally 250mm deep Softwood soffits; fixed to timber framing (measured elsewhere); complete with all trims装饰, ventilators通风口, supports and the like to complete installation, soffit,	60	m	£9.15	£549.00	5	10	15	0.33	630			0.72	7.4	13	149.688	1538.46	2702.7
D	nominally 250mm wide; assumed to be 15mm thick Dormer window framing WBP plywood; fixed to timber frame (measured elsewhere);	378	m	£9.15	£3,458.70	5	10	15	1.4175	630			0.72	7.4	13	642.978	6608.385	11609.325
E	to timber ir ame (measured essewhere); vertical, nominally 18mm thick, to dormer faces and cheeks; over 300mm wide Dormer window framing WBP plywood; fixed to timber frame (measured elsewhere); vertical, nominally 18mm thick, to dormer	40	m2	£25.64	£1,025.60	41	68	107	0.72	620			10	15	20	4464	6696	8928
F	faces and cheeks; not exceeding 300mm wide Cementious 水泥 render board, on and including approved battens to provide	25	m	£11.29	£282.25	41	68	107	0.135	620			10	15	20	837	1255.5	1674
G	ventilation gap fixed to plywood substrate, to dormer faces and cheeks; over 300mm wide Cementious XF 2E render board, on and including approved battens to provide ventilation gap fixed to plywood substrate, to dormer faces and cheeks; not exceeding	40	m2	£20.69	£827.60				0.4	1860			1.42	5.32	11.73	1056.48	3958.08	8727.12
н	300mm wide Painting fascias and soffits; Assumed to be Dulux Trade Exterior Gloss, prime, prepare, apply two undercoats and two finish coats;	25	m	£12.17 £12.50	£304.25		6	6	0.075	1860			1.42	5.32	11.73	198.09	742.14	1636.335 3969
I	general surfaces, over 300mm girth Roof insulation; Assumed to be Rockwool or similar approved mineral fibre insulation quilt,	189	m2	£12.50	£2,362.50	6	ь	ь					21	21	21	3969	3969	3969
1	nominally 400mm thick overall, horizontal, between joists nominally 150mm thick Roof insulation; Assumed to be Rockwool or similar approved mineral fibre insulation quilt, nominally 400mm thick overall, horizontal,	429	m2	£2.10	£900.90	50	75	100	64.35	100			16.8	16.8	16.8	108108	108108	108108
к	over joists nominally 100mm thick Roof insulation; Assumed to be Rockwool or similar approved mineral fibre insulation quilt, nominally 400mm thick overall, horizontal,	429	m2	£1.80	£772.20	50	75	100	42.9	100			16.8	16.8	16.8	72072	72072	72072
A	over joists nominally 150mm thick Roof insulation; Assumed to be Rockwool or similar approved mineral fibre insulation quilt,	429	m2	£2.10	£900.90	50	75	100	64.35	100			16.8	16.8	16.8	108108	108108	108108
В	nominally 400mm thick overall, vertical, between studs nominally 100mm thick Roof insulation, Assumed to be Kingspan or similar approved rigid insulation boards, nominally 175mm thick overall, pitched,	40	m2	£4.00	£160.00	50	75	100	4	100			16.8	16.8	16.8	6720	6720	6720
с	between Joists nominally 75mm thick Roof insulation, Assumed to be Kingspan or similar approved rigid insulation boards, nominally 175mm thick overall, pitched,	287	m2	£23.00	£6,601.00	17	22	31	21.525	30		Polystyrene	31.5	45	58.5	20341.125		37776.375
D	between joists nominally 100mm thick Gravity rainwater drainage system; Black uPVC rainwater pipes; complete with all elbows, connections, brackets, fixings and the like as	287	m2	£25.00	£7,175.00	17	22	31	28.7	30			31.5	45	58.5	27121.5	38745	50368.5
E	required, nominally 75mm diameter Gravity rainwater drainage system; Black uPVC	233	m	£6.91	£1,610.03	18	26	35	0.256067	1380	Asif et al. (2005)	pvc pipe	69.4	94.7	120	24524.04872	33464.372	42404.695
F	rainwater pipes; complete with all elbows, connections, brackets, fixings and the like as required; connection to below ground drainage Gravity rainwater drainage system; Black uPVC rainwater pipes; complete with all elbows, connections bracket filmers and the like ar	41	Nr	£12.25	£502.25	18	26	35			<u>Asif et al. (2005)</u>							
	connections, brackets, fixings and the like as required, off set bends, 250mm	41	Nr	£9.10	£373.10	18	26	35			Asif et al. (2005)							

G	Black uPVC rainwater gutters; complete with all elbows, connections, brackets, fixings and																	
	the like as required, half round, nominally																	
н	100mm diameter Black uPVC rainwater gutters; complete with	318	m	£8.13	£2,585.34	18	26	35	0.474297	1380 Asif et al. (2005)		69.4	94.7	120 4	5424.37228 6	1983.9777	78543.583	
	all elbows, connections, brackets, fixings and																	
I.	the like as required, ends Black uPVC rainwater gutters; complete with	46	Nr	£5.10	£234.60	18	26	35		Asif et al. (2005)								
	all elbows, connections, brackets, fixings and the like as required, running outlets	41	Nr	£7.15	£293.15	18	26	35		Asif et al. (2005)								
J	Black uPVC rainwater gutters; complete with all elbows, connections, brackets, fixings and																	
	the like as required, bends		Nr	£7.15	£207.35	18	26	35		Asif et al. (2005)								
K	Testing and commissioning, as required Softwood framed staircases; with MDF treads	1	ITEM	£600.00	£600.00	1	1	1										
	and plywood risers; treads nominally 900mm																	
	wide; floor to floor height of 2775mm; ground to first floor; comprising of five treads, quarter																	
	landing, one tread, quarter landing and five treads; balustrade to landing return; unit 1		Ne	62 919 00	£2.818.00	32	62	76		630		0.72	7.4	13				
в	Softwood framed staircases; with MDF treads	-		22,010.00	22,010.00	52	01	,,,		0.00		0.72	7.4	15				
	and plywood risers; treads nominally 900mm wide; floor to floor height of 2775mm; ground																	
	to first floor; comprising of thirteen treads; balustrade to landing return; unit 2			ca cca aa	£2,660.00	32	62	76		630		0.72	7.4	13				
с	Softwood framed staircases; with MDF treads	1	INF	12,000.00	12,000.00	32	62	70		630		0.72	7.4	15				
	and plywood risers; treads nominally 900mm wide; floor to floor height of 2775mm; ground																	
	to first floor; comprising of thirteen treads;			62 200 00	£2.709.00	32	62	76		630		0.72	7.4	13				
D	balustrade to landing return; unit 3 Softwood framed staircases; with MDF treads	1	Nr	£2,709.00	£2,709.00	32	62	76		630		0.72	7.4	13				
	and plywood risers; treads nominally 900mm wide; floor to floor height of 2775mm; ground																	
	to first floor; comprising of thirteen treads;																	
E	balustrade to landing return; unit 4 Softwood framed staircases; with MDF treads	1	Nr	£2,709.00	£2,709.00	32	62	76		630		0.72	7.4	13				
	and plywood risers; treads nominally 900mm wide; floor to floor height of 2775mm; ground																	
	to first floor; comprising of three winder																	
	treads, six straight treads and three winder treads; unit 10	1	Nr	£3,676.00	£3,676.00	32	62	76		630		0.72	7.4	13				
F	Complete installation of precast concrete stair																	
	and landings; designed to approved British																	
	Standards and Engineers requirements; stairs to units 5 to 9; comprising of three flights of																	
	two, six and five treads with two quarter landings with one corner splayed; 950mm wide																	
	treads; 2650m overall rise; ground to first floor	1	Nr	£5,340.00	£5,340.00	42	73	95 sta	airs structu	re: concrete	stairs structure: conc	0.99	1.1	1.17				
A	Complete installation of precast concrete stair																	
	and landings; designed to approved British Standards and Engineers requirements; stairs																	
	to units 5 to 9; comprising of three flights of																	
	two, six and five treads with two quarter landings with one corner splayed; 950mm wide																	
	treads; 2625m overall rise; first to second floor	1	Nr	Included	Included													
В	Balustrading扶手; Assumed to be polyester 聚酯纤维 powder coated mild steel framed																	
	with vertical pilasters; complete with handrail to match; raking	10	m	£436 55	£4,365.50	15	20	25										
с	Balustrading扶手; Assumed to be polyester	10		2450.55	24,303.30	15	20	25										
	聚酯纤维 powder coated mild steel framed with vertical pilasters; complete with handrail																	
D	to match; horizontal Balustrading扶手; Assumed to be polyester	4	m	£476.47	£1,905.88	15	20	25										
b	聚酯纤维 powder coated mild steel framed																	
	with vertical pilasters; complete with handrail to match; ends	4	Nr	£40.22	£160.88	15	20	25										
E	Balustrading扶手; Assumed to be polyester																	
	聚酯纤维 powder coated mild steel framed with vertical pilasters; complete with handrail																	
E	to match; connection to balustrade 扶手 Balustrading扶手; Assumed to be polyester	2	Nr	£40.22	£80.44	15	20	25										
r	聚酯纤维 powder coated mild steel framed																	
	with vertical pilasters; complete with handrail to match; bends	6	Nr	£40.22	£241.32	15	20	25										
G	Balustrading扶手; Assumed to be polyester 聚酯纤维 powder coated mild steel framed																	
	with vertical pilasters; complete with handrail																	
н	to match; ramps 斜坡 Assumed to be polyester powder coated	14	Nr	£80.44	£1,126.16	15	20	25										
	handrails on brackets to masonry walls; raking Assumed to be polyester powder coated	8	m	£173.32	£1,386.56	15	20	25										
1	handrails on brackets to masonry walls;																	
J	horizontal Assumed to be polyester powder coated	8	m	£173.32	£1,386.56	15	20	25										
ĸ	handrails on brackets to masonry walls; ends	2	Nr	£40.22	£80.44	15	20	25										
ĸ	Assumed to be polyester powder coated handrails on brackets to masonry walls; bends	8	Nr	£40.22	£321.76	15	20	25										
L	Assumed to be polyester powder coated handrails on brackets to masonry walls; ramps	10	Nr	£80.44	£804.40	15	20	25										
м	Painting stair strings 楼梯梁 Assumed to be ICI																	
	Dulux Trade Satinwood or similar approved; touch up primer, undercoat and two coats of																	
N	finish paint, over 300mm girth Painting staircases and balustrades. Prepare,	5	m2	£15.00	£75.00	6	6	6				21	21	21	105	105	105	
	touch up primer and apply one undercoat and																	
	one gloss finishing coat of oil paint; general surfaces; strings, over 300mm girth	9	m2	£15.00	£135.00							21	21	21	189	189	189	
А	Painting staircases and balustrades. Prepare, touch up primer and apply one undercoat and																	
	one gloss finishing coat of oil paint; not				a													
в	exceeding 300mm girth Prepare, touch up primer and apply one	27	m	£4.00	£108.00													
	undercoat and one gloss finishing coat of oil paint; balustrades; measured both sides, over																	
-	300 girth	66	m2	£15.00	£990.00							21	21	21	1386	1386	1386	
c	Cover panels to stair strings. Assumed to be MDF; factory primed; mechanically fixed to pre																	
	cast concrete stair strings, nominally 19mm thick; 350mm high; all edges rounded	12	m	£20.17	£242.04	21	36	48	0.0798	510	softwood	11	11	11	447.678	447.678	447.678	
А	Dense aggregate blockwork; 7.3N/mm2	12	-11	220.1/	2242.04		20	40	0.0798		JULWOOD			11	-+/.0/8			
	nominally 100mm thick; in cement mortar; stretcher bond, 100mm thick	2228	m2	£22.80	£50,798.40	52	72	101	222.8	2200		0.525	0.75	0.975	257334	257334	257334	
В	Dense aggregate blockwork; 7.3N/mm2 nominally 100mm thick; in cement mortar;		-					-					-					
	stretcher bond, 100mm thick, fair faced one																	
с	side Dense aggregate blockwork; 7.3N/mm2	94	m2	£24.30	£2,284.20	52	72	101	9.4	2200		0.525	0.75	0.975	10857	10857	10857	
-	nominally 100mm thick; in cement mortar;																	
	stretcher bond, 100mm thick, fair faced both sides	40	m2	£26.30	£1,052.00	52	72	101	4	2200		0.525	0.75	0.975	4620	4620	4620	
D	Dense aggregate blockwork; 7.3N/mm2																	
	nominally 100mm thick; in cement mortar;																	
	stretcher bond, 215mm thick; two skins of 100mm blockwork tied together with ties at																	
	the rate of five per square metre and central			ere	£236.65	52	73	101		2200		0.525	0.75	0.075		*****	1305	
E	joint fully filled with mortar; fair faced one side Dense aggregate blockwork; 7.3N/mm2	6	m2	£56.11	£336.66	52	72	101	1.2	2200		0.525	0.75	U.975	1386	1386	1386	
	nominally 100mm thick; in cement mortar; stretcher bond, 100mm thick, in piers, overall																	
_	215mm thick; fair faced to three sides	5	m2	£50.11	£250.55	52	72	101	1.075	2200		0.525	0.75	0.975	1241.625	1241.625	1241.625	
F	Dense aggregate blockwork; 7.3N/mm2 nominally 100mm thick; in cement mortar;																	
	stretcher bond, 100mm thick, in piers, overall	4	m2	£51.11	£204.44	52	72	101	0.86	2200		0.525	0.75	0.075	993.3	993.3	993.3	
G	215mm thick; fair faced to four sides Dense aggregate blockwork; 7.3N/mm2	4	m2	121.11	1204.44	32	12	101	U.8b			0.325	J.75	0.375	333.3	393.5	393.3	
	nominally 100mm thick; in cement mortar; stretcher bond, 100mm thick, in piers, overall																	
	335mm thick; fair faced to three sides	2	m2	£77.91	£155.82	52	72	101	0.67	2200		0.525	0.75	0.975	773.85	773.85	773.85	
н	Dense aggregate blockwork; 7.3N/mm2 nominally 100mm thick; in cement mortar;																	
	stretcher bond, 100mm thick, in piers, overall 440mm thick; fair faced to three sides	1	m2	£104.21	£104.21	52	72	101										
	,	•		/ 4			-											

I	Dense aggregate blockwork; 7.3N/mm2 nominally 100mm thick; in cement mortar;															
	stretcher bond, cutting blockwork to course 100mm thick	501	m	£5.00	£2,505.00	52	72	101		2200	0.525	0.75	0.975			
1	Dense aggregate blockwork; 7.3N/mm2 nominally 100mm thick; in cement mortar;															
	stretcher bond, cutting blockwork to course 100mm thick; raking	21	m	£10.00	£210.00	52	72	101								
К	Engineering bricks; manufacturer and product reference to be agreed; 7.5N/mm2															
	compressive strength; half lap stretcher bond; flush joints; walls, half brick thick =102.5 mm	59	m2	£70.82	£4,178.38	70	93	131	6.0475	2000	0.63	3	6	7619.85	36285	72570
L	Natural stone walling; Assumed to be															
	limestone or similar walling to match boundary walls; in cement mortar; complete with facing															
	to suit wall thickness, including trimming and the like of stone; random courses; brushed															
А	finish, nominally 100mm thick Stonework; Assumed to be cast stone to match	22	m2	£143.35	£3,153.70	43	60	79	2.2	1900	0.7	0.85	1.01	2926	3553	4221.8
	adjacent邻近的 environment; bedding in mortar; building in as work proceeds;															
	nominally 425mm wide; 55mm deep; splayed top edge with two throats to underside;															
в	coppings, generally Stonework; Assumed to be cast stone to match	26	m	£97.00	£2,522.00	43	60	79	0.60775	470	1.2	2.18	3.8	342.771	622.70065	1085.4415
	adjacent environment; bedding in mortar; building in as work proceeds; nominally															
	125mm thick; 215mm deep; splayed bottom edge with throating; lintels, to suit opening															
с	1248mm wide	2	Nr	£270.00	£540.00	43	60	79	0.06708	470	1.2	2.18	3.8	37.83312	68.730168	119.80488
	Stonework; Assumed to be cast stone to match adjacent environment; bedding in mortar;															
	building in as work proceeds; nominally 150mm thick; 215mm deep; splayed top edge															
	and stools to both ends with throating to underside; sills, to suit opening 685mm wide	9	Nr	£95.00	£855.00	43	60	79	0.1988213	470	1.2	2.18	3.8	112.135185	203.712253	355.09475
D	Stonework; Assumed to be cast stone to match															
	adjacent environment; bedding in mortar; building in as work proceeds; nominally															
	150mm thick; 215mm deep; splayed top edge and stools to both ends with throating to															
E	underside; sills, to suit opening 1135mm wide	6	Nr	£138.00	£828.00	43	60	79	0.2196225	470	1.2	2.18	3.8	123.86709	225.025214	392.24579
	Stonework; Assumed to be cast stone to match adjacent environment; bedding in mortar;															
	building in as work proceeds; nominally 150mm thick; 215mm deep; splayed top edge															
	and stools to both ends with throating to underside; sills, to suit opening 1248mm wide	19	Nr	£150.00	£2,850.00	43	60	79	0.764712	470	1.2	2.18	3.8	431.297568	783.523915	1365.7756
F	Stonework; Assumed to be cast stone to match															
	adjacent environment; bedding in mortar; building in as work proceeds; nominally															
	150mm thick; 215mm deep; splayed top edge and stools to both ends with throating to															
G	underside; sills, to suit opening 1360mm wide	2	Nr	£157.50	£315.00	43	60	79	0.08772	470	1.2	2.18	3.8	49.47408	89.877912	156.66792
	Stonework; Assumed to be cast stone to match adjacent environment; bedding in mortar;															
	building in as work proceeds; nominally 150mm thick; 215mm deep; splayed top edge															
	and stools to both ends with throating to underside; sills, to suit opening 1698mm wide	1	Nr	£205.00	£205.00	43	60	79	0.0547605	470	1.2	2.18	3.8	30.884922	56.1076083	97.802253
н	Stonework; Assumed to be cast stone to match															
	adjacent environment; bedding in mortar; building in as work proceeds; nominally															
	150mm thick; 215mm deep; splayed top edge and stools to both ends with throating to															
I	underside; sills, to suit opening 1810mm wide	4	Nr	£212.00	£848.00	43	60	79	0.23349	470	1.2	2.18	3.8	131.68836	239.233854	417.01314
	Stonework; Assumed to be cast stone to match adjacent environment; bedding in mortar;															
	building in as work proceeds; nominally 150mm thick; 215mm deep; splayed top edge															
	and stools to both ends with throating to underside; sills, to suit opening 2710mm wide	1	Nr	£310.00	£310.00	43	60	79	0.087075	470	1.2	2.18	3.8	49.1103	89.217045	155.51595
1	Forming cavities in hollow walls; complete with Ancon stainless steel HRT4 safety ties at the															
	rate of five per square metre; and approved cavity wall insulation 75mm thick, 125mm															
к	wide Cavity trays; Visqueen Zedex Housing grade	1187	m2	£14.06	£16,689.22	52	72	101	0.0232949	8000	40.2	48.36	51.48	7491.6318	9012.32124	9593.7613 assumming diameter of steel wall tie is 5mm
	damp proof course; bedding in cement mortar, over 225mm wide	311	m2	£16.45	£5,115.95	52	72	101	69.975	1650	0.1	1.54	3.49	11545.875	177806.475	402951.04
L	Cavity closers; Assumed to be Kingspan or similar approved Thermabate cavity closer															
	system, complete with all required insulation, brackets and the like; suitable for use in party															
А	walls, 100mm wide, vertical Cavity closers; Assumed to be Kingspan or	248	m	£8.15	£2,021.20	50	75	100	0.7936	1380	69.4	94.7	120	76004.6592	103712.41	131420.16
	similar approved Thermabate cavity closer system, complete with all required insulation,															
	brackets and the like; suitable for use in party walls, 100mm wide, horizontal	150	m	£8.15	£1,222.50	50	75	100	0.48	1380	69.4	94.7	120	45970.56	62729.28	79488
в	Weepholes 排水孔, Rytons Rytweep or similar approved; building in as work proceeds,															
с	generally IG Lintels, building in as work proceeds;	611	Nr	£1.78	£1,087.58	52	72	101	0.0407293							
	reference L1/S or similar; to suit structural opening of; to suit structural opening 572mm	-														
D	wide; in cavity wall IG Lintels, building in as work proceeds;	6	Nr	£23.17	£139.02	50	75	100	J.U004832	7800 https://iglintels.com/product/l1: 88*1.6	6	29.36	77	22.61495808	110.662528	290.2253
	reference L1/S or similar; to suit structural opening of; to suit structural opening 685mm wide; in cavity wall	16	Nr	£25.39	£406.24	50	75		0.000	7000 http:///.		29.36	-		353.397817	000 0007
E	IG Lintels, building in as work proceeds;	16	Nr	£25.39	£406.24	50	/5	100	0.0015432	7800 https://iglintels.com/product/l1: 88*1.6	6	29.36	//	72.2202624	353.39/81/	926.8267
	reference L1/S or similar; to suit structural opening of; to suit structural opening 910mm wide; in cavity wall	1	Nr	£32.63	£32.63	50	75	100	0.000707	7800 https://iglintels.com/product/l1: 88*1.6		29.36		E 0000000	20 242225	76 052677
F	IG Lintels, building in as work proceeds; reference L1/S or similar: to suit structural	1	INF	£32.03	132.03	50	/5	100	0.0001281	7800 https://iginteis.com/product/11:88-1.6	6	29.30		5.9963904	29.342337	//9626.0/
	opening of; to suit structural opening 1022mm wide; in cavity wall	6	Nr	£33.63	£201.78	50	75	100	0.000862	7800 https://iglintels.com/product/l1: 88*1.6		29.36	77	40 40644600	197.722209	518 54939
G	IG Lintels, building in as work proceeds; reference L1/S or similar; to suit structural	0		_33.03	0			200			e	20.00				
	opening of; to suit structural opening 1135mm wide; in cavity wall	10	Nr	£36.06	£360.60	50	75	100	0.0159808	7800 https://iglintels.com/product/l1: 88*1.6	F	29.36	77	747 90144	3659.73105	9598 0685
н	IG Lintels, building in as work proceeds; reference L1/S or similar; to suit structural	10		200.00							u u	_3.33				
	opening of; to suit structural opening 1248mm wide; in cavity wall	28	Nr	£41.92	£1,173.76	50	75	100	0.0049201	7800 https://iglintels.com/product/l1: 88*1.6	F	29.36	77	230.2613914	1126.74574	2955.0212
I.	IG Lintels, building in as work proceeds; reference L1/S or similar; to suit structural		-				-									
	opening of; to suit structural opening 1360mm wide; in cavity wall	5	Nr	£45.32	£226.60	50	75	100	0.001154	7800 https://iglintels.com/product/l1: 85*2.0	F	29.36	77	54.1008	264.733248	694.2936
1	G Lintels, building in as work proceeds; reference L1/S or similar; to suit structural	5		32	0			200			e	20.00	.,	34.2008		
	opening of; to suit structural opening 1585mm wide; in cavity wall	2	Nr	£58.17	£116.34	50	75	100	0.0005389	7800 https://iglintels.com/product/l1: 85*2.0	F	29.36	77	25.22052	123.412411	323.66334
К	IG Lintels, building in as work proceeds; reference L1/S or similar; to suit structural	-	-				-									
	opening of; to suit structural opening 1698mm wide; in cavity wall	2	Nr	£60.18	£120.36	50	75	100	0.0007267	7800 https://iglintels.com/product/l1: 107*2.0	6	29.36	77	34.0116192	166.43019	436.48245
L	IG Lintels, building in as work proceeds; reference L1/S or similar; to suit structural	-					-			20 2.0	u u					
	opening of; to suit structural opening 1810mm wide; in cavity wall	7	Nr	£84.37	£590.59	50	75	100	0.0027134	7800 https://iglintels.com/product/l1: 107*2.0	6	29.36	77	126.892584	620.927711	1628.4548
м	IG Lintels, building in as work proceeds; reference L1/HD or similar; to suit structural		-													
	opening of; to suit structural opening 2373mm wide; in cavity wall	2	Nr	£111.14	£222.28	50	75	100	0.0014238	7800 https://iglintels.com/product/l1: 150*2.0	6	29.36	77	66.63384	326.06159	855.13428

N	IG Lintels, building in as work proceeds; reference L1/HD or similar; to suit structural																
	opening of; to suit structural opening 2485mm wide; in 215mm thick wall	5	Nr	£145.06	£725.30	50	75	100 01	052334	7800 https://iglintels.com/product/l1: 162*2.6	6	29.36	77	244.923588	1198 49276	3143 186	
0	IG Lintels, building in as work proceeds; reference L1/HD or similar; to suit structural	-									-						
	opening of; to suit structural opening 2598mm																
А	wide; in cavity wall IG Lintels, building in as work proceeds;	1	Nr	£150.06	£150.06	50	75	100 0.0	0010943	7800 https://iglintels.com/product/l1: 162*2.6	6	29.36	77	51.21219168	250.598325	657.22313	
	reference L1/HD or similar; to suit structural opening of: to suit structural opening 2710mm																
	wide; in cavity wall	1	Nr	£150.06	£150.06	50	75	100 0.	0011415	7800 https://iglintels.com/product/l1: 162*2.6	6	29.36	77	53.4199536	261.40164	685.55607	
В	IG Lintels, building in as work proceeds; reference L1/HD or similar; to suit structural																
	opening of; to suit structural opening 2935mm wide; in cavity wall	6	Nr	£155.47	£932.82	50	75	100 01	1078204	7800 https://iglintels.com/product/l1: 171*2.6	6	29.36	77	366.4162008	1702 00661	4702 3412	
с	Sawn softwood; to timber store; Sawn	0	NI.	1155.47	1932.02	50	/5	100 0.0	5078234	7800 https://iginiteis.com/product/11:171-2.0	0	25.50		300.4102008	1752.55001	4702.3412	
	softwood; preservative treated, assumed to be grade C24, wall or partition members; 125 x																
D	125mm posts Sawn softwood; to timber store; Sawn	18	m	£10.80	£194.40	39	56	72	0.28125	550	0.72	7.4	13	111.375	1144.6875	2010.9375	
D	softwood; preservative treated, assumed to be																
	grade C24, wall or partition members; 125 x 50mm rails	26	m	£5.45	£141.70	39	56	72	0.1625	550	0.72	7.4	13	64.35	661.375	1161.875	
E	Sawn softwood; to car port; Sawn softwood; preservative treated, assumed to be grade																
	C24, wall or partition members; 150 x 150mm																
F	posts Sawn softwood; to car port; Sawn softwood;	18	m	£11.33	£203.94	39	56	72	0.405	550	0.72	7.4	13	160.38	1648.35	2895.75	
	preservative treated, assumed to be grade C24, wall or partition members; 300 x 200mm																
	beams	40	m	£37.50	£1,500.00	39	56	72	2.4	550	0.72	7.4	13	950.4	9768	17160	
G	Sawn softwood; to car port; Sawn softwood; preservative treated, assumed to be grade																
	C24, wall or partition members; 200 x 150mm bracings - assumed to be dowelled mortice and																
	tenon jointed	20	m	£19.35	£387.00	39	56	72	0.6	550	0.72	7.4	13	237.6	2442	4290	
н	Sawn softwood; to car port; Sawn softwood; preservative treated, assumed to be grade																
	C24, wall or partition members; 200 x 150mm curved entrance bracings - assumed to be																
	dowelled mortice and tenon jointed	3	m	£33.35	£100.05	39	56	72	0.09	550	0.72	7.4	13	35.64	366.3	643.5	
I.	Sawn softwood; to car port; Sawn softwood; preservative treated, assumed to be grade																
	C24, wall or partition members; 50 x 100mm	73	m	£4.17	£304.41	39	56	72	0.365	550	0.72	7.4	13	144.54	1485.55	2609.75	
1	Fixings; Assumed to be stainless steel shoes, resin bolted to concrete floor slab; complete																
	with all required fixings, bolts and the like; to suit 125 x 125mm post	8	Nr	£87.50	£700.00												
к	suit 125 x 125mm post Fixings; Assumed to be stainless steel shoes,	٥	out.	207.30	2,00.00												
	resin bolted to concrete floor slab; complete with all required fixings, bolts and the like; to																
L	suit 150 x 150mm post Truss clips; to accept rails; nailed as required;	8	Nr	£87.50	£700.00												
	to suit 125 x 50mm rails	44	Nr	£2.27	£99.88												
A	H30 FIBRE CEMENT PROFILED SHEET																
	CLADDING/COVERING /SIDING; Assumed to be profiled large format cladding panels; including																
	all insulation, vapour barriers, breather																
	membranes, brackets, fixings and the like to complete installation: wall claddings; vertical	13	m2	£280.32	£3.644.16	24	38	49	0.26	350	7.28	10.4	13 52	662.48	946.4	1230.32	
в	H30 FIBRE CEMENT PROFILED SHEET																
	CLADDING/COVERING /SIDING; Abutments; as required, no details; to roof profile, to head																
с	and sill; generally H30 FIBRE CEMENT PROFILED SHEET	26	m	£31.90	£829.40	24	38	49	0.0624	350	7.28	10.4	13.52	158.9952	227.136	295.2768	
c	CLADDING/COVERING /SIDING; Trims to																
D	windows and the like; generally H30 FIBRE CEMENT PROFILED SHEET	5	m	£31.90	£159.50	24	38	49									
	CLADDING/COVERING /SIDING; Holes, no details	1	ITEM	£1,000.00	61 000 00	24	38	49									
E	H41 GLASS REINFORCED PLASTICS PANEL	1	TIEM	11,000.00	11,000.00	24	30	49									
	CLADDING / FEATURES; Approved timber framed or Glass Reinforced Plastic off site																
	manufactured chimney unit with brickwork to match below DPC; including capping and two																
	chimney pots, blanking panels and the like;																
F	generally H41 GLASS REINFORCED PLASTICS PANEL	2	Nr	£800.00	£1,600.00	24	37	48									
	CLADDING / FEATURES; Approved timber framed or Glass Reinforced Plastic off site																
	manufactured entrance porch with slate																
	roofing to match main roof; including supporting framing fixed to masonry walls;																
	generally; 2.00m wide; 900mm projection, to																
G	unit 2 H41 GLASS REINFORCED PLASTICS PANEL	1	Nr	£609.95	£609.95	24	37	48									
	CLADDING / FEATURES; Approved timber framed or Glass Reinforced Plastic off site																
	manufactured entrance porch with slate																
	roofing to match main roof; including supporting framing fixed to masonry walls;																
	generally; 2.30m wide; 900mm projection, to units 3 and 4					24	37	48									
н	H41 GLASS REINFORCED PLASTICS PANEL	2	Nr	£609.95	£1,219.90	24	37	48									
	CLADDING / FEATURES; Approved timber framed or Glass Reinforced Plastic off site																
	manufactured entrance porch with slate																
	roofing to match main roof; including supporting framing fixed to masonry walls;																
	generally; 3.47m wide; 600mm projection, to units 5 to 9	1	Nr	£609.95	£609.95	24	37	48									
А	Timber boarding; James Hardiplank timber	Ţ	out.	2003.90	2003.30		-1	-0									
	effect Fibre Cement boarding; over 300mm wide	109	m2	£65.99	£7,192.91	17	29	42	0.872	1300 https://www.jameshardie.co.uk/en/cladding/hardiepli	7.28	10.4	13.52	8252.608	11789.44	15326.272	
в	Timber boarding; James Hardiplank timber effect Fibre Cement boarding; not exceeding																
	300mm wide	32	m	£34.30	£1,097.60	17	29	42	0.256	1300 https://www.jameshardie.co.uk/en/cladding/hardiepla	7.28	10.4	13.52	2422.784	3461.12	4499.456	
с	Timber boarding; James Hardiplank timber effect Fibre Cement boarding; over 300mm																
	wide; to soffits; complete with 100mm of apporved insulation board	9	m2	£78.66	£707.94	17	29	42	0.072	1300 https://www.lameshardie.co.uk/en/cladding/hardiepla	7.28	10.4	13.52	681.408	973.44	1265.472	
D	Timber boarding; Abutments; complete with all																
E	additional framing and the like; to render Timber boarding; Finished external angles;	22	m	£17.09	£375.98	17	29	42	0.0528	1300 https://www.jameshardie.co.uk/en/cladding/hardiepla	7.28	10.4	13.52	499.6992	713.856	928.0128	
	complete with feature trim and the like;	59		612 50	£801.81	17	29	42									
F	external angles generally Timber boarding; Sills; complete with feature		m	£13.59													
G	trim and the like; sills generally Timber boarding; Holes, generally	48 1	m ITEM	£13.59 £100.00	£652.32 £100.00	17 17	29 29	42 42									
н	Timber boarding; Raking cutting to tops of																
1	walls, generally Timber boarding; to timber store; Assumed to	20	m	£4.00	£80.00	17	29	42									
	be preservative treated tongue and groove 凹槽 horizontal boarding; in 19 x 150mm																
	planks, secret fixed to timber framing; walls;																
J	over 300mm wide Timber boarding; to timber store; Finished	21	m2	£65.79	£1,381.59	17	29	42	0.399	480	0.72	7.11	21.3	137.8944	1361.7072	4079.376	
	external angles; complete with feature trim			£20.30	£263.90	17	29	42	0.0312	490	0.72	7.11	21.3	10 30037	106.47936	210 0000	
к	and the like; external angles generally Timber boarding; to timber store; Sills基石;	13	m	±20.30	1203.90	1/	29	42	0.0312	400	J./2	7.11	21.3	10./8272	100.4/936	310.9888	
	complete with feature trim and the like; sills generally	8	m	£7.84	£62.72	17	29	42									
L	Timber boarding; to timber store; Raking	0															
м	cutting to tops of walls; generally Timber boarding; to car port; Assumed to be	6	m	£4.84	£29.04	17	29	42									
	preservative treated tongue and groove horizontal boarding; in 19 x 150mm planks,																
	secret fixed to timber framing; walls; over																
А	300mm wide Timber boarding; to car port; Finished external	44	m2	£65.79	£2,894.76	17	29	42	0.836	480	0.72	7.11	21.3	288.9216	2853.1008	8547.264	
										480	0.72	7.11				122.688	
	angles; complete with feature trim and the	-		£12 00	EEE AF									4 1 4 7 7	40.0520		
в	like; external angles generally Timber boarding; to car port; Finished ends;	5	m	£13.09	£65.45	17	29	42	0.012	400	0.72	7.11	21.3	4.1472	40.9536	122.088	
В	like; external angles generally	5		£13.09 £13.09	£65.45 £65.45	17	29	42	0.012		0.72			4.1472	40.9536	122.688	
В	like; external angles generally Timber boarding; to car port; Finished ends; complete with feature trim and the like; open																

C	Timber boarding; to car port; Sills; complete with feature trim and the like; sills generally Assumed to be stainless steel framed balustrading, with safety laminated glass infill panels; fixed to masonry walls with approved	20	m	£13.09	£261.80	17	29	42	0.048	480	0.72	7.11	21.3	16.5888	163.8144	490.752
E	brackets; 2710mm long; 1100mm high; to unit 2 Assumed to be stainless steel framed balustrading, with safety laminated glass infill panels; clamp fixed at base to masonry walls	1	Nr	£2,149.31	£2,149.31	15	20	25	0.0049014	8000	40.2	48.36	51.48	1576.294871	1896.2592	2018.5985
F	with approved brackets; 500mm high; to unit 10 Assumed to be stainless steel framed balustrading, with safety laminated glass infill panels; clamp fixed at base to masonry walls	6	m	£607.95	£3,647.70	15	20	25	0.0108518	8000	40.2	48.36	51.48	3489.951744	4198.35986	4469.2218
G	with approved brackets; 1100mm high; to unit 3 and 4 Assumed to be stainless steel framed balustrading, with safety laminated glass infill panels; clamp fixed at base to masonry walls	17	m	£623.25	£10,595.25	15	20	25	3.074688	8000	40.2	48.36	51.48	988819.6608	1189535.29	1266279.5
н	with approved brackets; 1500mm high; to unit 3 and 4; obscure glass Assumed to be stainless steel framed balustrading, with safety laminated glass infill panels; clamp fixed at base to masonry walls	3	m	£1,001.89	£3,005.67	15	20	25	0.542592	8000	40.2	48.36	51.48	174497.5872	209917.993	223461.09
I	with approved brackets; ends / abutments to walls Assumed to be stainless steel framed balustrading, with safety laminated glass infill	5	Nr	£95.91	£479.55	15	20	25								
l	panels; clamp fixed at base to masonry walls with approved brackets; bends Assumed to be stainless steel framed balustrading, with safety laminated glass infill	4	Nr	£95.91	£383.64	15	20	25								
к	panels; clamp fixed at base to masonry walls with approved brackets; junctions Assumed to be stainless steel framed balustrading, with safety laminated glass infill panels; clamp fixed at base to masonry walls	1	Nr	£95.91	£95.91	15	20	25								
L	with approved brackets; 1100mm high; to unit 3 and 4 Assumed to be stainless steel framed balustrading, with safety laminated glass infill panels; clamp fixed at base to masonry walls	24	m	£586.86	£14,084.64	15	20	25	4.340736	8000	40.2	48.36	51.48	1395980.698	1679343.94	1787688.7
м	with approved brackets; ends / abutments to walls Assumed to be stainless steel framed balustrading, with safety laminated glass infill	8	Nr	£95.91	£767.28	15	20	25								
А	panels; clamp fixed at base to masonry walls with approved brackets; bends M20 PLASTERED /RENDERED /ROUGHCAST COATINGS; Proprietary two coat render system; to blockwork, through colour, over	8	Nr	£95.91	£767.28	15	20	25								
В	300mm wide M20 PLASTERED /RENDERED /ROUGHCAST COATINGS; Proprietary two coat render system; to blockwork, through colour, not	954	m2	£26.00	£24,804.00	32	52	81	9.54	1900	0.1	1.54	3.49	1812.6	27914.04	63259.74
с	exceeding 300mm wide M20 PLASTERED /RENDERED /ROUGHCAST COATINGS; Waterproof proprietary two coat render system; to blockwork, through colour,	338	m	£8.00	£2,704.00	32	52	81	1.014		0.1	1.54	3.49	192.66	2966.964	
D	over 300mm wide M20 PLASTERED /RENDERED /ROUGHCAST COATINGS; Waterproof proprietary two coat render system; to blockwork, through colour,	80	m2	£52.00	£4,160.00	32	52	81		1900	0.1	1.54	3.49	152	2340.8	5304.8
E	not exceeding 300mm wide M20 PLASTERED /ROUGHCAST COATINGS; Waterproof proprietary two coat render system; to blockwork, through colour, Approved beads to suit render system, external	26	m	£10.00	£260.00	32	52	81	0.078	1900	0.1	1.54	3.49	14.82	228.228	517.218
F	angle beads M20 PLASTERED /RENDERED /ROUGHCAST COATINGS; Waterproof proprietary two coat render system; to blockwork, through colour,	495	m	£1.15	£569.25	32	52	81								
ε	Approved beads to suit render system, belicast stop bead Sashles.云窗框的 Windows Company Limited; White fluxh casement timber windows; handles to match syle of internal door handles and be do hushed staines stele: complete unit comprising all framing. EPDM seals (invinium of 300mm wide), iromongery, opening restrictors, insulated infill panets, aluminitum sall and head fashings, all and head ends, sealant internally and deternally trickle vents and the like as required to complete the installation; 570 x1010mm; pilots; 6, 7, 8 and 9; reference W03, W05, W06, W13, W19 and W21; comprising of 1Wr obscure glared finded	230	m	£1.15	£264.50	32	52	81								
F	pane Sashles无實確性的 Windows Company Limited; white flush casement timber windows; handles to match style of internal door handles and be of brushed stainless steel; complete unit comprising all framing, EPDM seals (minimum of 300mm wide); hommorger, opening restrictors; nisulatel infill panel; summinum sall and head flashings, all and head ends, sealant internally and externally; trick events	6	Nr f	\$10,004.50	£60,027.00	22	34	45	4.104	30	12.3	16.81	25.09	1514.376	2069.6472	3089.0808
G	and the like as required to complete the installation; 685 x 685mm; plot 10; reference W08; comprising of 1Nr side opening pane Sashless无窗框的 Windows Company Limited;	1	Nr	£35.00	£35.00	22	34	45	0.469225	30	12.3	16.81	25.09	173.144025	236.630168	353.18566
	white fluxh casement timber windows; handles to match siyle or internal door handles and be of brushed stainless steel; complete unit comprising all fraining; EPOM seaks (innihum of 300mn wide), icommonger, opening restrictors, inculated infill panel; auminium sill and head flushings, ill and head ends, sealant internally and externally tricke vents and the like as required to complete the installation; 682 × 685mm; polt C1 preferences															
A	W04 and W07; comprising of 1№ obscure glazesi side opening pane Sashies.5(富 程务) Windows Company Limitel; white flukh casement timber windows; handles to match style of internal door handles and be of brushed staines steel; complete unit comprising all framing, EPDM seals (ininimum of 300mm wide), komongero, poening restrictors, insulated infli panels, aluminium sill and head flasmes, sill and head ends, sealant internally and externally, trickle vents and the like as required to complete the installator; 685 x 1060mm; plots 3 and 4; references W02, W05, W07, W08, W14 and	2	Nr	£35.00	£70.00	22	34	45	0.93845	30	12.3	16.81	25.09	346.28805	473.260335	706.37132
В	W14; comprising of 1Nr obscure glazed fixed pane Scalates:石宽度的 Windows Company Limited; white fluch casement timber windows; handles to match syle of internal door handles and be of busided statines step; complete unit comprising all framing, EPDM seals (Intinimum of 300mm wide), normogery, opening restrictors, insulated intill panels, aluminium sealant hermally and externally, trickle vents sealant hermally and externally, trickle vents and the like as required to complete the	6	Nr	£35.00	£210.00	22	34	45	4.3566	30	12.3	16.81	25.09	1607.5854	2197.03338	3279.2128
	installation;685 x 1060mm; plots 1 and 2; references W04, W15 and W16; comprising of 1Nr obscure glazed fixed pane	3	Nr	£35.00	£105.00	22	34	45	2.1783	30	12.3	16.81	25.09	803.7927	1098.51669	1639.6064

Sashless无窗框的 Windows Company Limited;															
white flush casement timber windows; handles to match style of internal door handles and be															
of brushed stainless steel; complete unit comprising all framing, EPDM seals (minimum															
of 300mm wide), ironmongery, opening restrictors, insulated infill panels, aluminium															
sill and head flashings, sill and head ends, sealant internally and externally, trickle vents															
and the like as required to complete the installation;685 x 1210mm; plot 10; reference															
W01; comprising of 1Nr side opening pane	1	Nr	£35.00	£35.00	22	34	45	0.82885	30	12.3	16.81	25.09	305.84565	417.989055	623.8754
Sashless无窗框的 Windows Company Limited; white flush casement timber windows; handles															
to match style of internal door handles and be of brushed stainless steel; complete unit															
comprising all framing, EPDM seals (minimum of 300mm wide), ironmongery, opening															
restrictors, insulated infill panels, aluminium sill and head flashings, sill and head ends.															
sealant internally and externally, trickle vents and the like as required to complete the															
installation;685 x 1210mm; plot 10; reference W02; egress window comprising of 1Nr side															
opening pane	1	Nr	£35.00	£35.00	22	34	45	0.82885	30	12.3	16.81	25.09	305.84565	417.989055	623.8754
Sashless无窗框的 Windows Company Limited; white flush casement timber windows; handles															
to match style of internal door handles and be of brushed stainless steel: complete unit															
comprising all framing, EPDM seals (minimum of 300mm wide), ironmongery, opening															
restrictors, insulated infill panels, aluminium sill and head flashings, sill and head ends,															
sealant internally and externally, trickle vents and the like as required to complete the															
installation; 685 x 1210mm; plot 10; reference W05; comprising of 1Nr obscure glazed side															
opening pane Sashless天窗框的 Windows Company Limited:	1	Nr	£35.00	£35.00	22	34	45	0.82885	30	12.3	16.81	25.09	305.84565	417.989055	623.8754
white flush casement timber windows; handles to match style of internal door handles and be															
of brushed stainless steel; complete unit comprising all framing, EPDM seals (minimum															
of 300mm wide), ironmongery, opening															
restrictors, insulated infill panels, aluminium sill and head flashings, sill and head ends,															
sealant internally and externally, trickle vents and the like as required to complete the															
installation; 685 x 1810mm; plot 10; reference W06; comprising of 1Nr obscure glazed fixed															
pane Sashless无窗框的 Windows Company Limited; white flush casement timber windows: handles	1	Nr	£38.00	£38.00	22	34	45	1.23985	30	12.3	16.81	25.09	457.50465	625.256355	933.2351
to match style of internal door handles and be															
of brushed stainless steel; complete unit comprising all framing, EPDM seals (minimum															
of 300mm wide), ironmongery, opening restrictors, insulated infill panels, aluminium															
sill and head flashings, sill and head ends, sealant internally and externally, trickle vents															
and the like as required to complete the installation; 1023 x 1210mm; plots 5, 6, 7, 8 and 9; references W24, W25 and W26;															
comprising of 1Nr side opening pane and 1Nr						34									
fixed pane Sashless无窗框的 Windows Company Limited;	3	Nr	£38.00	£114.00	22	34	45	3.71349	30	12.3	16.81	25.09	1370.27781	1872.71301	2795.1439
white flush casement timber windows; handles to match style of internal door handles and be															
of brushed stainless steel; complete unit comprising all framing, EPDM seals (minimum															
of 300mm wide), ironmongery, opening restrictors, insulated infill panels, aluminium															
sill and head flashings, sill and head ends, sealant internally and externally, trickle vents															
and the like as required to complete the installation; 1023 x 1210mm; plots 5, 6, 7, 8															
and 9; reference W23; egress window comprising of 1Nr side opening pane and 1Nr	1	Nr	£38.00	£38.00	22	34	45	1.23783	30		10.01	25.00	456.75927	C24 227CC0	021 71464
fixed pane Sashless无窗框的 Windows Company Limited;	1	N	138.00	138.00	22	34	45	1.23783	30	12.5	10.81	25.09	450./592/	024.237009	931.71404
white flush casement timber windows; handles to match style of internal door handles and be of brushed stainless steel; complete unit															
comprising all framing, EPDM seals (minimum															
of 300mm wide), ironmongery, opening restrictors, insulated infill panels, aluminium sill and head flashings, sill and head ends.															
sealant internally and externally, trickle vents															
and the like as required to complete the installation; 1135 x 1060mm; plots 1 and 2;															
reference W09; comprising of 2Nr side opening panes	1	Nr	£38.00	£38.00	22	34	45	1.2031	30	12.3	16.81	25.09	443.9439	606.72333	905.57337
Sashless无窗框的 Windows Company Limited;															
white flush casement timber windows; handles to match style of internal door handles and be															
of brushed stainless steel; complete unit comprising all framing, EPDM seals (minimum															
of 300mm wide), ironmongery, opening restrictors, insulated infill panels, aluminium															
sill and head flashings, sill and head ends, sealant internally and externally, trickle vents															
and the like as required to complete the installation; 1135 x 1360mm; plots 1 and 2; references W05, W06 and W11; comprising of															
2Nr side opening panes	3	Nr	£38.00	£114.00	22	34	45	4.6308	30	12.3	16.81	25.09	1708.7652	2335.31244	3485.6032
Sashless无窗框的 Windows Company Limited; white flush casement timber windows; handles															
to match style of internal door handles and be of brushed stainless steel: complete unit															
of brushed starness steer; complete unit comprising all framing, EPDM seals (minimum of 300mm wide), ironmongery, opening															
restrictors, insulated infill panels, aluminium sill and head flashings, sill and head ends,															
sealant internally and externally, trickle vents and the like as required to complete the															
installation; 1135 x 1360mm; plots 1 and 2; reference W12; egress window comprising of															
2Nr side opening panes Sashless无窗框的 Windows Company Limited:	1	Nr	£38.00	£38.00	22	34	45	1.5436	30	12.3	16.81	25.09	569.5884	778.43748	1161.8677
white flush casement timber windows; handles to match style of internal door handles and be															
of brushed stainless steel; complete unit comprising all framing, EPDM seals (minimum															
of 300mm wide), ironmongery, opening restrictors, insulated infill panels, aluminium															
sill and head flashings, sill and head ends, sealant internally and externally, trickle vents															
and the like as required to complete the installation; 1135 x 1660mm; plots 1 and 2;															
reference W08; comprising of 2Nr side opening panes	1	Nr	£38.00	£38.00	22	34	45	1.8841	30	12.3	16.81	25.09	695.2329	950.15163	1418.1621

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	Sashless无窗框的 Windows Company Limited;																
	white flush casement timber windows; handles to match style of internal door handles and be																
	of brushed stainless steel; complete unit comprising all framing, EPDM seals (minimum																
	of 300mm wide), ironmongery, opening																
	restrictors, insulated infill panels, aluminium sill and head flashings, sill and head ends,																
	sealant internally and externally, trickle vents and the like as required to complete the																
	installation; 1248 x 685mm; plots 1 and 2;																
	reference W10; comprising of 1Nr obscure glazed bottom opening pane	1	Nr	£35.00	£35.00	22	34	45 0.3	.85488	30	12.3	16.81	25.09	315.45072	431.115984	643.46818	
N																	
	Sashless无窗框的 Windows Company Limited; white flush casement timber windows; handles																
	to match style of internal door handles and be of brushed stainless steel; complete unit																
	comprising all framing, EPDM seals (minimum																
	of 300mm wide), ironmongery, opening restrictors, insulated infill panels, aluminium																
	sill and head flashings, sill and head ends, sealant internally and externally, trickle vents																
	and the like as required to complete the installation: 1248 x 1210mm: plots 3 and 4:																
	references W01 and W06; comprising of 1Nr																
А	side opening pane and 1Nr fixed pane Bill 9 Windows and External Doors; 1248 x	2	Nr	£38.00	£76.00	22	34	45 3.	.02016	30	12.3	16.81	25.09	1114.43904	1523.06669	2273.2744	
	1210mm; plots 5, 6, 7, 8 and 9; references W04, W06, W07, W11, W12, W16, W20, W22																
	and W33; comprising of 1Nr side opening pane						34										
в	and 1Nr fixed pane Bill 9 Windows and External Doors; 1248 x	9	Nr	£38.00	£342.00	22	34	45 13.	.59072	30	12.3	16.81	25.09	5014.97568	6853.8001	10229.735	
	1210mm; plots 3 and 4; references W03, W04, W09, W10, W11 and W12; egress window																
	comprising of 1Nr side opening pane and 1Nr fixed pane	6	Nr	£38.00	£228.00	22	34	45 9.0	.06048	30	12.3	10.00	35.00	3343.31712	45.00.20000	6040 0222	
с	Bill 9 Windows and External Doors; 1248 x	0	ner	138.00	1228.00	22	34	45 9.	.00048	30	12.3	10.81	25.09	3343.31/12	4569.20006	0819.8233	
	1210mm; plots 5, 6, 7, 8 and 9; references W01, W02, W09, W10, W14, W15, W17 and																
	W18; egress window comprising of 1Nr side opening pane and 1Nr fixed pane		Nr	£38.00	£304.00	22	34	45 12.	08064	30	12.3	16.91	25.00	4457.75616	6002 26675	0002 0077	
D	Bill 9 Windows and External Doors; 1248 x	٥	INF	138.00	1304.00	22	34	45 12.	.08064	30	12.5	10.61	25.09	4457.75616	0092.20075	9093.0977	
	1210mm; plot 10; reference W12; comprising of 1Nr side opening pane and 1Nr fixed pane	1	Nr	£38.00	£38.00	22	34	45 1.	.51008	30	12.3	16.81	25.09	557.21952	761.533344	1136.6372	
E	Bill 9 Windows and External Doors; 1360 x 1210mm; plots 1 and 2; references W13 and																
	W17; egress window comprising of 2Nr side				ar								ar :				
F	opening panes and 1Nr fixed pane Bill 9 Windows and External Doors; 1360 x	2	Nr	£38.00	£76.00	22	34	45 3	3.2912	30	12.3	16.81	25.09	1214.4528	1659.75216	2477.2862	
	1210mm; plot 10; reference W10; comprising of 2Nr side opening panes and 1Nr fixed pane	1	Nr	£38.00	£38.00	22	34	45 1	1.6456	30	12.3	16.81	25.09	607 2264	829.87608	1238 6431	
G	Bill 9 Windows and External Doors; 1698 x	-		250.00	_30.00		- /			50	3	-5.61	20.00	-07.6204	223.07008		
	1210mm; plots 1 and 2; reference W02; comprising of 2Nr obscure glazed side opening																
н	panes and 1Nr obscure glazed fixed pane Bill 9 Windows and External Doors; 1698 x	1	Nr	£38.00	£38.00	22	34	45 2.	.05458	30	12.3	16.81	25.09	758.14002	1036.12469	1546.4824	
	1210mm; plot 10; reference W11; comprising																
	of 2Nr obscure glazed side opening panes and 1Nr obscure glazed fixed pane	1	Nr	£38.00	£38.00	22	34	45 2.0	.05458	30	12.3	16.81	25.09	758.14002	1036.12469	1546.4824	
1	Bill 9 Windows and External Doors; 1810 x 1210mm: plots 1 and 2: reference W01:																
	comprising of 2Nr side opening panes and 1Nr																
J	fixed pane Bill 9 Windows and External Doors; 1810 x	1	Nr	£38.00	£38.00	22	34	45 2	2.1901	30	12.3	16.81	25.09	808.1469	1104.46743	1648.4883	
	1210mm; plot 10; reference W09; comprising of 2Nr side opening panes and 1Nr fixed pane	1	Nr	£38.00	£38.00	22	34	45 2	2.1901	30	12.3	16.81	25.09	808.1469	1104.46743	1648.4883	
к	Bill 9 Windows and External Doors; 1810 x																
	1210mm; plots 1 and 2; reference W03, W07 and W14; egress windows comprising of 2Nr																
L	side opening panes and 1Nr fixed pane Bill 9 Windows and External Doors: 1810 x	3	Nr	£38.00	£114.00	22	34	45 E	6.5703	30	12.3	16.81	25.09	2424.4407	3313.40229	4945.4648	
	1210mm; plot 10; reference W03; egress																
L	windows comprising of 2Nr side opening panes and 1Nr fixed pane	1	Nr	£38.00	£38.00	22	34	45 4	4.3802	30	12.3	16.81	25.09	1616.2938	2208.93486	3296.9765	
A	windows comprising of 2Nr side opening panes	1 3	Nr Nr		£38.00 £1,755.00	22	34 35		4.3802	30 30	12.3 12.3	16.81 16.81	25.09 25.09	1616.2938 596.673			
	windows comprising of 2Nr side opening panes and 1Nr fixed pane Velux windows; 550 x 980mm; plots 5, 6, 7, 8 and 9; references W35, W36 and W37 Velux windows; 660 x 1398mm; plots 5, 6, 7, 8			£38.00 £585.00											2208.93486 815.4531		
A	windows comprising of 2Nr side opening panes and 1Nr fixed pane Velux windows; 550 x 980mm; plots 5, 6, 7, 8 and 9; references W35, W36 and W37 Velux windows; 660 x 1398m; plots 5, 6, 7, 8 and 9; references W27, W28, W29, W30, W31 and W32							45							815.4531	1217.1159	
A	windows comprising of ZNV side opening panes and 1Nr fixed pane Velux windows; 550 x 950mm; plots 5, 6, 7, 8 and 9; references WBS, WBS and W47 Velux windows; 660 x 1398mm; plots 5, 6, 7, 8 and 9; references WBS, WBS, WBS, WBS, WBS, WBS, WBS, WBS, WBS, WBS, WBS, WBS, and WB2 The Rooflight Company Plateau Similare Profile or similar approxed; fat rooflight; 669 x	3 6	Nr Nr	£585.00 £690.00	£1,755.00 £4,140.00	24 24	35 35	45 45 5.	1.617 53608	30 30	12.3 12.3	16.81 16.81	25.09 25.09	596.673 2042.81352	815.4531 2791.84514	1217.1159 4167.0074	
A	windows comprising of Zhrs ideo gening panes and 11k field pane Velox windows; 550 x 930mm; plots 5, 6, 7, 8 and 9; references W35, W36 and W47 Velox windows; 660 x 1398mm; plots 5, 6, 7, 8 and 9; references W27, W28, W29, W30, W31 and W32 The Rooflight Company Plateau Similare Profile or similar approved; flat rooflight; 669 x 690mm; plots 5, 7, 8 and 9; reference W34	3	Nr Nr	£585.00 £690.00	£1,755.00	24	35	45	1.617 53608	30	12.3 12.3	16.81 16.81	25.09 25.09	596.673	815.4531 2791.84514	1217.1159 4167.0074	
A B C	windows comprising of Zhrs ideo gening panes and 1Nr fixed pane Velax windows; 550 x 950mm; plots 5, 6, 7, 8 and 9; references W35, W36 and W47 Velax windows; 660 x 1394mm; plots 5, 6, 7, 8 and 9; references W27, W28, W29, W30, W31 and W32 The Roollight Company Pitetas Binline Profile or similar approved; flat roollight; 669 x 609mm; plots 5, 7, 8 and 9; reference W34 Triangle roof element; 2900 x 1020mm (maximum height; plots 5, 6, 7, 8 and 9; reference W34	3 6 1	Nr Nr Nr	£585.00 £690.00 £1,438.00	£1,755.00 £4,140.00 £1,438.00	24 24 24	35 35 35	45 45 5.: 45 0.4	1.617 53608 147561	30 30 30	12.3 12.3 12.3	16.81 16.81 16.81	25.09 25.09 25.09	596.673 2042.81352 165.150009	815.4531 2791.84514 225.705012	1217.1159 4167.0074 336.87916	
A B C	windows comprising of Zhrs ideo gening panes and 1Nr fixed pane Velox windows; 550 x 950mm; plots 5, 6, 7, 8 and 9; references W35, W36 and W37 Velox windows; 660 x 1398mm; plots 5, 6, 7, 8 and 9; references W27, W28, W30, W31 and W32 The Rooflight Company Pitetau Similare Profile or similar approved; flat rooflight; 669 x 6090nm; plots 5, 7, 8 and 9; reference W34 Triangle roof element; 2000 x 1020mm (maximum height); plots 5, 6, 7, 8 and 9; reference W40 Patio / French doorset; Profile 22 uPUC or	3 6	Nr Nr	£585.00 £690.00	£1,755.00 £4,140.00	24 24	35 35	45 45 5.: 45 0.4	1.617 53608	30 30	12.3 12.3 12.3	16.81 16.81	25.09 25.09 25.09	596.673 2042.81352 165.150009	815.4531 2791.84514	1217.1159 4167.0074 336.87916	
A B C D	windows comprising of Zhv side opening panes and 1 Mr fixed pane Velax windows; S50 x 950mm; plots 5, 6, 7, 8 and 9; references W33, W53 and W47 Velax windows; 660 x 1386mm; plots 5, 6, 7, 8 and 9; references W27, W28, W29, W30, W31 and W32 The Rooflight Company Plateau Silmline Profile or similar approxel; flat rooflight; 669 x 690mm; plots 5, 6, 7, 8 and 9; reference W34 rinanje roof element; 2900 x 100mm (maximum height;) plots 5, 6, 7, 8 and 9; reference W40	3 6 1	Nr Nr Nr	£585.00 £690.00 £1,438.00	£1,755.00 £4,140.00 £1,438.00	24 24 24	35 35 35	45 45 5.: 45 0.4	1.617 53608 147561	30 30 30	12.3 12.3 12.3	16.81 16.81 16.81	25.09 25.09 25.09	596.673 2042.81352 165.150009	815.4531 2791.84514 225.705012	1217.1159 4167.0074 336.87916	
A B C D	windows comprising of Zhrs ideo pening panes and 1 Mr fixed pane Velax windows; 550 x 980mm; plots 5, 6, 7, 8 and 9; references W33, W36 and W47 Velax windows; 660 x 1398mm; plots 5, 6, 7, 8 and 9; references W37, W28, W29, W30, W31 and W32 The Rooflight Company Plateau Siteliniae Profile or similar approved, flat rooflight; 669 x 690mm; plots 5, 6, 7, 8 and 9; reference W40 Plato / French doorset; Profile 22 uPVC or similar approved glazed with Ovolo beas&tight(\$); plots 1, of reference E002; safety glazed single door with Vis rafety	3 6 1	Nr Nr Nr	£585.00 £690.00 £1,438.00	£1,755.00 £4,140.00 £1,438.00	24 24 24	35 35 35	45 45 5.: 45 0.4	1.617 53608 147561	30 30 30	12.3 12.3 12.3	16.81 16.81 16.81	25.09 25.09 25.09	596.673 2042.81352 165.150009	815.4531 2791.84514 225.705012	1217.1159 4167.0074 336.87916	
А В С Д	windows comprising of Zhrs idea opening panes and 1 Mr field pane Velax windows; 550 x 930mm; plots 5, 6, 7, 8 and 9; references W35, W36 and W37 Velax windows; 660 x 1398mm; plots 5, 6, 7, 8 and 9; reference W37, W38, W37 W30, W31 and W32 the isosfiptic Company Plateau Slinnline Profile or similar approved; fait rodinght; 669 x fringing rodiz, plots, 19300 x 1000 W34 Pringing rodiz, 19300 x 1000 W34 Pato / French doorset; Profile 22 uPUC or similar approved glotzed with Yout Doizy, safety glated with Post Sinstery glazed side lights and Zhr top hung opening vents	3 6 1	Nr Nr Nr	£585.00 £690.00 £1,438.00	£1,755.00 £4,140.00 £1,438.00 £165.00	24 24 24	35 35 35	45 45 5. 45 0.4 45	1.617 53608 147561	30 30 30 30	12.3 12.3 12.3	16.81 16.81 16.81	25.09 25.09 25.09 25.09	596.673 2042.81352 165.150009	815.4531 2791.84514 225.705012 1491.7194	1217.1159 4167.0074 336.87916 2226.4866	
A B C D	windows comprising of Zhrs idea opening panes and 1Nr fixed pane Velax windows; 550 x 930mm; plots 5, 6, 7, 8 and 9; references W35, W36 and W37 Velax windows; 660 x 1398mm; plots 5, 6, 7, 8 and 9; references W37, W36, W37 W30, W31 and W32 The Rooflight Company Plateau Slimline Profile or similar approved; flat rooflight; 669 x 6050mm; plots 5, 6, 7, 8 and 9; reference W34 Triangle roof element; 2900 x 1020mm (performer: W40, plots 5, 6, 7, and 9; reference: W40 Patio / French diocres; Profile 22 uPVC or similar approved glated wth Oxel D20; safety glated ungle clower (D20; safety glated ungle clower). Patio / reference W40 Patio / French diocres; Profile 22 uPVC or similar approved angle glazed wth Oxel safety glated side lights and 2hr top hung opening vents	3 6 1 1	Nr Nr Nr	£585.00 £690.00 £1,438.00 £165.00	£1,755.00 £4,140.00 £1,438.00 £165.00	24 24 24 24	35 35 35 35	45 45 5. 45 0.4 45	1.617 53608 447561 2.958	30 30 30 30	12.3 12.3 12.3 12.3	16.81 16.81 16.81	25.09 25.09 25.09 25.09	596.673 2042.81352 165.150009 1091.502	815.4531 2791.84514 225.705012 1491.7194	1217.1159 4167.0074 336.87916 2226.4866	
А В С Д	windows comprising of Zhrs ideo gening panes and 11k field pane Velox windows; 550 x 950mm; plots 5, 6, 7, 8 and 9; references W35, W36 and W37 Velox windows; 660 x 1398mm; plots 5, 6, 7, 8 and 9; references W37, W38, W39, W30, W31 and W32 The Roollight Company Plateas Binlinite Profile or similar approved; flat roollight; 669 x 690mm; plots 5, 7, 8, and 9; reference W34 Triangle roof element; 2900 x 1020mm (maximum height); plots 5, 6, 7, 8 and 9; reference W40 Patio / French doorset; Profile 22 uPUC or similar approved; glazed with Ovolo beads §87,897; j110 x 2110, plot 10; reference ED02; aftery glazed single door with 2Ns aftery jlazed side lights and 2Nr top hung opening vents Patio / French doorset; Profile 22 uPUC or similar approved; glazed with Ovolo beads §87,897; j270 x 2110, plots 1 and 2;	3 6 1 1	Nr Nr Nr	£585.00 £690.00 £1,438.00 £165.00	£1,755.00 £4,140.00 £1,438.00 £165.00	24 24 24 24	35 35 35 35	45 45 5. 45 0.4 45	1.617 53608 447561 2.958	30 30 30 30	12.3 12.3 12.3 12.3	16.81 16.81 16.81	25.09 25.09 25.09 25.09	596.673 2042.81352 165.150009 1091.502	815.4531 2791.84514 225.705012 1491.7194	1217.1159 4167.0074 336.87916 2226.4866	
A B C D F	windows comprising of Zhrs idea opening panes and 1Nr fixed pane Velax windows; 550 x 950mm; plots 5, 6, 7, 8 and 9; references W35, W36 and W37 Velax windows; 660 x 1398mm; plots 5, 6, 7, 8 and 9; references W37, W38, W39, W30, W31 and W32 The Roollight Company Plateas Binline Profile or similar approved; flat roollight; 669 x 690mm; plots 5, 7, 8, and 9; reference W34 Triangle roof element; 2900 x 1020mm (maximum height); plots 5, 6, 7, 8 and 5; reference W40 Patio / French doorset; Profile 22 uPUC or similar approved; glazed with Ovolo beads kit 8% Fils 103 x 2110, plot 10; reference ED02; aftery glazed single door with 2Nr safety plazed side lights and 2Nr top hung opening vents Deads kit 8% Fils and 2Nr top hung opening verts image approved; glazed with Ovolo	3 6 1 1	Nr Nr Nr	£585.00 £690.00 £1,438.00 £165.00	£1,755.00 £4,140.00 £1,438.00 £165.00 £1,183.15	24 24 24 24	35 35 35 35	45 45 5. 45 0.4 45 41 0.0	1.617 53608 447561 2.958	30 30 30 30 30	12.3 12.3 12.3 12.3	16.81 16.81 16.81	25.09 25.09 25.09 25.09 69.4	596.673 2042.81352 165.150009 1091.502	815.4531 2791.84514 225.705012 1491.7194 7421.27512	1217.1159 4167.0074 336.87916 2226.4866 7421.2751	
А В С Д	windows comprising of Zhrs ideo gening panes and 1Nr fixed pane Velox windows; 550 x 950mm; plots 5, 6, 7, 8 and 9; references W35, W36 and W37 Velox windows; 660 x 1398mm; plots 5, 6, 7, 8 and 9; references W37, W38, W39, W30, W31 and W32 The Roollight Company Plateas Binline Profile or similar approved; flat roollight; 669 x 690mm; plots 5, 7, 8, and 9; reference W34 Triangle roof element; 2900 x 1020mm (maximum height); plots 5, 6, 7, 8 and 9; reference W40 Patio / French doorset; Profile 22 uPUC or similar approved; glazed with Ovolo beads §8; 8%; Tisl0 x 2110; plot 10; reference ED02; aftery glazed single door with 2Ns aftery jazed side lights and 2Nr top hung opening vents Deads §8; 8%; T300 x 2110; plots 1 and 2; reference ED05; double door with 6Nr side lights and 2Nr top hung opening vents Patio / French doorset; Profile 22 uPUC or similar approved; glazed with Ovolo	3 6 1 1	Nr Nr Nr	£585.00 £690.00 £1,438.00 £165.00 £1,183.15	£1,755.00 £4,140.00 £1,438.00 £165.00 £1,183.15	24 24 24 24 22	35 35 35 35 35	45 45 5. 45 0.4 45 41 0.0	1.617 .53608 447561 2.958	30 30 30 30 30	12.3 12.3 12.3 12.3 69.4	16.81 16.81 16.81 16.81	25.09 25.09 25.09 25.09 69.4	596.673 2042.81352 165.150009 1091.502 7421.27512	815.4531 2791.84514 225.705012 1491.7194 7421.27512	1217.1159 4167.0074 336.87916 2226.4866 7421.2751	
A B C D F	windows comprising of Zhrs ide opening panes and 11k field pane Velox windows; 550 x 950mm; plots 5, 6, 7, 8 and 9; references W35, W36 and W37 Velox windows; 660 x 1398mm; plots 5, 6, 7, 8 and 9; references W37, W38, W39, W31 and W32 The Roollight Company Plateas Binline Profile or similar approved; flat roollight; 669 x 690mm; plots 5, 7, 8 and 9; reference W34 Triangle roof element; 2900 x 1020mm (maximum height); plots 5, 6, 7, 8 and 9; reference W40 Patio / French doorset; Profile 22 uPUC or similar approved; glazed with Ovolo beads Rig RB; 110 x 2110, plot 10; reference ED02; aftery glazed single door with 2Ns aftery jazed side lights and 2Nr top hung opening vents Patio / French doorset; Profile 22 uPUC or similar approved; glazed with Ovolo beads Rig RB; 7200 x 2110, plots 1 and 2; reference ED05; double door with 6Nr side lights and 2Nr top hung opening vents Patio / French doorset; Profile 22 uPUC or similar approved; glazed with Ovolo beads Rig RB; 7240 x 2110, plots 3 and 4; references: ED05 and ED05; asterg Bazed	3 6 1 1	Nr Nr Nr	£585.00 £690.00 £1,438.00 £165.00 £1,183.15	£1,755.00 £4,140.00 £1,438.00 £165.00 £1,183.15	24 24 24 24 22	35 35 35 35 35	45 45 5. 45 0.4 45 41 0.0	1.617 .53608 447561 2.958	30 30 30 30 30	12.3 12.3 12.3 12.3 69.4	16.81 16.81 16.81 16.81	25.09 25.09 25.09 25.09 69.4	596.673 2042.81352 165.150009 1091.502 7421.27512	815.4531 2791.84514 225.705012 1491.7194 7421.27512	1217.1159 4167.0074 336.87916 2226.4866 7421.2751	
A B C D F	windows comprising of Zhrs idea opening panes and 1Nr fixed pane Velax windows; 550 x 980mm; plots 5, 6, 7, 8 and 9; references W35, W36 and W37 Velax windows; 660 x 1398mm; plots 5, 6, 7, 8 and 9; references W37, W38, W39, W31 and W32 The Roollight Company Plateau Simline Profile or similar approved; flat roollight; 669 x 600mm; plots 5, 6, 7, 8 and 9; reference W34 Triangle roof element; 2900 x 1020mm (maximum height); plots 5, 6, 7, 8 and 9; reference W40 Disamber approved mst Profile 22 uPVC or imiliar approved pixel with Choice basistificitific that and sign of the Choice basistific that 101 x 2110 p 2110; plot 10, reference D202; safry dgated single down with Choice basistific that and place with Choice basistific that and 2Nr top hung opening vents Patio / French doorset; Profile 22 uPVC or imiliar approved; glazed with Choice basistific that 2Nr top hung opening vents Patio / French doorset; Profile 22 uPVC or imiliar approved; glazed with Choice basistific that 2Nr top hung opening vents Patio / French doorset; Profile 22 uPVC or imiliar approved; glazed with Choice basistific that 20Nr top hung opening vents Patio / French doorset; Profile 22 uPVC or imiliar approved; glazed with Choice basistific that 20Nr top hung opening vents Patio / French doorset; Profile 22 uPVC or imiliar approved; glazed with Choice basistific that 20Nr top hung opening vents Patio / French doorset; Profile 22 uPVC or imiliar approved; glazed with Choice basistific that 20Nr top hung opening vents Patio / French doorset; Profile 22 uPVC or imiliar approved; glazed with Choice basistific that 20Nr top hung opening vents Patio / French doorset; Profile 22 uPVC or imiliar approved; glazed with Choice basistific that 20Nr top hung opening vents Patio / French doorset; Profile 22 uPVC or imiliar approved; glazed with Choice basistific that 20Nr top hung opening vents Patio / French doorset; Profile 22 uPVC or imiliar approved; glazed with Choice Basistific that 20Nr top hung opening vents Patio / French doorset; Profile 22 uPVC or	3 6 1 1	Nr Nr Nr Nr	£585.00 £690.00 £1,438.00 £165.00 £1,183.15	£1,755.00 £4,140.00 £1,438.00 £165.00 £1,183.15 £1,183.15	24 24 24 24 22	35 35 35 35 35	45 45 5. 45 0.4 45 41 0.0 41 0.1	1.617 .53608 447561 2.958	30 30 30 30 30	12.3 12.3 12.3 12.3 69.4	16.81 16.81 16.81 16.81	25.09 25.09 25.09 25.09 69.4 69.4	596.673 2042.81352 165.150009 1091.502 7421.27512	815.4531 2791.84514 225.705012 1491.7194 7421.27512 11193.415	1217.1159 4167.0074 336.87916 2226.4866 7421.2751 11193.415	
A B C D F	windswis comprising of Zhrs idea opening panes and 1Nr fixed pane Velax windswis; 550 x 950mm; plots 5, 6, 7, 8 and 9; reference W35, W35 and W37 Velax windswis; 660 x 1398mm; plots 5, 6, 7, 8 and 9; reference W37, W38, W39, W31 and W32 The Roollight Company Plateau Slimline Profile or similar approved; flat roollight; 669 x 690mm; plots 5, 7, 8 and 9; reference W34 Triangle roof element; 2900 x 1020mm (maximum height); plots 5, 6, 7, 8 and 9; reference W40 Patto / French doorset; Profile 22 uPVC or similar approved; glazed with Ovalo E023; Plots 2110; plots 10, 7, 8 and 9; reference W40 Patto / French doorset; Profile 22, uPVC or similar approved; glazed with Ovalo Berds; Plots 2110; plot 10; 20; French glazed sized with Ovalo Berds; Plots 10; 20 km 20; Plots 1 and 2; reference E055; olduel 6ont with 6 km ide lights and 2Nt top hung opening verts Pato / French doorset; Profile 22, uPVC or similar approved; glazed with Ovalo Beads; BER#9; 2730 x 2110; plots 1 and 3; reference E055 and 2006 x 2004 Cor similar approved; glazed with Ovalo Beads; BER#9; 2730 x 2110; plots 3 and 4; references: E053 and 2005; safety glazed double door with Km safety glazed side jibts and 2Nt top hung opening verts Pato / French doorset; Profile 22 uPVC or	3 6 1 1 1	Nr Nr Nr Nr	£585.00 £690.00 £1,438.00 £165.00 £1,183.15 £1,183.15	£1,755.00 £4,140.00 £1,438.00 £165.00 £1,183.15 £1,183.15	24 24 24 22 22	35 35 35 35 32 32	45 45 5. 45 0.4 45 41 0.0 41 0.1	1.617 .53608 447561 2.958 976382	30 30 30 30 30	12.3 12.3 12.3 12.3 12.3 69.4	16.81 16.81 16.81 16.81 69.4	25.09 25.09 25.09 25.09 69.4 69.4	596.673 2042.81352 165.150009 1091.502 7421.27512 11193.41496	815.4531 2791.84514 225.705012 1491.7194 7421.27512 11193.415	1217.1159 4167.0074 336.87916 2226.4866 7421.2751 11193.415	
A B D E G	windows comprising of Zhrs ideo gening panes and 1Nr fixed pane Velax windows; 550 x 950mm; plots 5, 6, 7, 8 and 9; references W35, W36 and W37 Velax windows; 660 x 1398mm; plots 5, 6, 7, 8 and 9; references W37, W38, W39, W31 and W32 The Roollight Company Plateau Simline Profile or similar approved; flat roollight; 669 x 690mm; plots 5, 6, 7, 8 and 9; reference W34 Triangle rool element; 2900 x 1020mm (maximum height; plots 5, 6, 7, 8 and 9; reference W40 Patio / French doorset; Profile 22 uPUC or similar approved; glazed wind hovido beads KR 89; tol 2110, plot 10; reference ED02; jaffery glazed angle door with 2hr safety glazed side lights and 2hr top hung pening version / French doorset; Profile 22 uPUC or similar approved; glazed with Ovido beads KR 89; 7270 x 2110; plots 1 and 2; reference ED05; double door with 5hr side lights and 2hr top hung pening verts Patio / French doorset; Profile 22 uPUC or similar approved; glazed with Ovido beads KR 849; 7230 x 2110; plots 1 and 4; references ED05 and 2000 x 2100; plots 3 and 4; references ED05 and 2000 x 2100; plots 3 and 4; references ED05 and ED06 x safety glazed double door with Kr safety glazed big lights and 2hr top hung opening verts Patio / French doorset; Profile 22 uPUC or similar approved; glazed with Ovido beads KR 840 x 2000 x 2110; plots 3 and 4; references ED05 and ED06; safety glazed double door with Kr safety glazed big lights and 2hr top hung opening verts Patio / French doorset; Profile 22 uPUC or similar approved; glazed with Ovido beads KR 840 x 2000 x 2110; plots 5, 6, 7, 8 and	3 6 1 1 1	Nr Nr Nr Nr	£585.00 £690.00 £1,438.00 £165.00 £1,183.15 £1,183.15	£1,755.00 £4,140.00 £1,438.00 £165.00 £1,183.15 £1,183.15	24 24 24 22 22	35 35 35 35 32 32	45 45 5. 45 0.4 45 41 0.0 41 0.1	1.617 .53608 447561 2.958 976382	30 30 30 30 30	12.3 12.3 12.3 12.3 12.3 69.4	16.81 16.81 16.81 16.81 69.4	25.09 25.09 25.09 25.09 69.4 69.4	596.673 2042.81352 165.150009 1091.502 7421.27512 11193.41496	815.4531 2791.84514 225.705012 1491.7194 7421.27512 11193.415	1217.1159 4167.0074 336.87916 2226.4866 7421.2751 11193.415	
A B D E G	windows comprising of Zhrs ide opening panes and 11k field pane Velox windows; 550 x 950mm; plots 5, 6, 7, 8 and 9; references W35, W36 and W37 Velox windows; 660 x 1398mm; plots 5, 6, 7, 8 and 9; references W37, W32, W30, W31 and W32 The Roollight Company Plateas Binline Profile or similar approved; flat roollight; 669 x 690mm; plots 5, 7, 8 and 9; reference W34 Triangle roof element; 2900 x 1020mm (maximum height); plots 5, 6, 7, 8 and 9; reference W40 Patio / French doorset; Profile 22 uPUC or similar approved; glazed with Ovolo beads Rig RB; 110 x 2110, plot 10; reference ED02; aftery glazed single door with 2Ns aftery jazed side lights and 2Nr top hung opening vents Patio / French doorset; Profile 22 uPUC or similar approved; glazed with Ovolo beads Rig RB; 7200 x 2110, plots 1 and 2; reference ED05; double door with 6Nr side lights and 2Nr top hung opening vents Patio / French doorset; Profile 22 uPUC or similar approved; glazed with Ovolo beads Rig RB; 7200 x 2110, plots 3 and 4; references: ED05 and ED05; anterg Rigzed double door with 6Nr side lights and 2Nr top hung opening vents Patio / French doorset; Profile 22 uPUC or andlar approved; glazed with Ovolo beads Rig RB; 7240 x 2110, plots 3 and 4; references: ED05 and ED05; anterg Rigzed double door with 6Nr side lights and 2Nr top hung opening vents Patio / French doorset; Profile 22 uPUC or andlar top hung opening vents Patio / French doorset; Profile 22 uPUC or andlar approved; glazed with Ovolo	3 6 1 1 1	Nr Nr Nr Nr	£585.00 £690.00 £1,438.00 £165.00 £1,183.15 £1,183.15	£1,755.00 £4,140.00 £1,438.00 £165.00 £1,183.15 £1,183.15	24 24 24 22 22	35 35 35 35 32 32	45 45 5. 45 0.4 45 41 0.0 41 0.1	1.617 .53608 447561 2.958 976382	30 30 30 30 30	12.3 12.3 12.3 12.3 12.3 69.4	16.81 16.81 16.81 16.81 69.4	25.09 25.09 25.09 25.09 69.4 69.4	596.673 2042.81352 165.150009 1091.502 7421.27512 11193.41496	815.4531 2791.84514 225.705012 1491.7194 7421.27512 11193.415	1217.1159 4167.0074 336.87916 2226.4866 7421.2751 11193.415	
A B D E G	windows comprising of Zhrs lide opening panes and IN fixed pane Velax windows; 550 x 950mm; plots 5, 6, 7, 8 and 9; references WS3, WS3 and W37 Velax windows; 660 x 1398mm; plots 5, 6, 7, 8 and 9; references WS7, WS3, WS3 WS3, WS1 and W22 The Rooflight Company Plateau Slinnine Profile or similar approved; fait rooflight; 669 x WS3, JS3, JS3, JS309, 1900 WS34 Viringing; Ports 2, JS 2509, 1900 WS34 Viringing; Ports 2, JS 2509, 1900 WS34 Plato / French doorset; Profile 22 uPUC or similar approved; glazed with Ovelo beask: glisb; 1100 x 2110; plot 10; reference US02; safety glazed single door with Xrs safety glazed side lights and Zhr top hung opening vents Patio / French doorset; Profile 22 uPUC or similar approved; glazed with Ovelo beask: glisb; 7300 x 2110; plots 1, or eference WS16 / French doorset; Profile 22 uPUC or similar approved; glazed with Ovelo beask: glisb; Ald Zhr top hung opening vents Patio / French doorset; Profile 22 uPUC or similar approved; glazed with Ovelo beask: glisb; Ald Chro, plots file glisb; Ald Chro, plots glisb; glisb; Ald Or Viroth Ovelo beask: glisb; Ald Chro, plots glisb; Ald Or Viroth Ovelo beask: glisb; JS Ald Chro, plots glisb; Ald Or Viroth Queening vents Patio / French doorset; Profile 22 uPUC or similar approved; glisb; and 21V top Dross; Batio / French doorset; Profile 22 uPUC or similar approved; glisb; and 21V top Dross; Patio / French doorset; Profile 22 uPUC or similar approved; glisb; and 21V top Dross; Diffie Ald Dross; Diffie 22 uPUC or similar approved; glisb; and 21V top Dross; Diffie Patier (Stress CH); Diffie 22 uPUC or similar approved; glisb; and 21V top Dross; Diffie Chross; Diffie 22 uPUC or similar approved; glisb; and 21V top Dross; Diffie Chross; Diffie 22 uPUC or similar approved; glisb; and 21V top Dross; Diffie Chross; Diffie 22 uPUC or similar approved; glisb; and 21V top Dross; Diffie Chross; Diffie 22 uPUC or similar approved; glisb; and 21V top Dross; Diffie Chross; Diffie 22 uPUC or similar approved; glisb; and 21V top Dross; Diffie Chross; Diffie	3 6 1 1 1 1 2	Nr Nr Nr Nr Nr	£585.00 £690.00 £1,438.00 £165.00 £1,183.15 £1,183.15 £1,183.15	E1,755.00 E4,140.00 E1,438.00 E1,438.00 E1,183.15 E1,183.15 E2,366.30	24 24 24 22 22 22	 35 35 35 35 35 32 32 32 32 	45 45 5. 45 0.4 45 41 0.0 41 0.1 41 0.2	1.617 53608 447561 2.958 776382 15206	30 30 30 30 1400 1400	 12.3 12.3 12.3 12.3 69.4 69.4 69.4 	 16.81 16.81 16.81 16.81 69.4 69.4 69.4 	25.09 25.09 25.09 25.09 25.09 69.4 69.4	596.673 2042.81352 165.150009 1091.502 7421.27512 11193.41496 24108.89376	815.4531 2791.84514 225.705012 1491.7194 7421.27512 11193.415 24108.8938	1217.1159 4167.0074 336.87916 2226.4866 7421.2751 11193.415 24108.894	
A B D E G	windows comprising of Zivi side opening panes and IN fixed pane Velax windows; 550 x 950mm; plots 5, 6, 7, 8 and 9; references W35, W36 and W37 Velax windows; 660 x 1398mm; plots 5, 6, 7, 8 and 9; references W37, W38, W39, W31 and W32 The Rooflight Company Plateau Slimline Profile or similar approved; fait rooflight; 669 x 690mm; plots 5, 7, 8 and 9; references W34 Transmire height; h; 2, 2004 x 100 Pato / French doorset; Profile 22 uPVC or similar approved; glazed with Ovelo beackst@H87, 1130 x 2110; plot 10; reference D20; safety glazed single door with V2 wastery glazed side lights and 21r top hung opening verts Pato / French doorset; Profile 22 uPVC or similar approved; glazed with Ovelo beackst@H87, 1230 x 2110; plots 1, and 2; reference: W40 bato / French doorset; Profile 22 uPVC or similar approved; glazed with Ovelo beackst@H87, 1230 x 2110; plots 1, and 3; references: ED05 and ED06; safety glazed double door with Vark safety glazed dis lights and a Vit top hung opening verts Pato / French doorset; Profile 22 uPVC or similar approved; glazed with Ovelo beackst@H87, 1240 x 2110; plots 3, and 4; references: ED05 and ED06; safety glazed double door with Vark safety glazed dis lights and/ar glazed with Ovelo beackst@H87, 1240 x 2110; plots 3, and 4; references: ED05, and ED06; safety glized double door with Ovelo beackst@H87, 1240 x 2110; plots 5, 6, 7, 8 and y reference: ED05, ED06 and ED07; safety glized dubode door with 270 reference ED05; eD06; ED06	3 6 1 1 1	Nr Nr Nr Nr Nr	£585.00 £690.00 £1,438.00 £165.00 £1,183.15 £1,183.15	E1,755.00 E4,140.00 E1,438.00 E1,438.00 E1,183.15 E1,183.15 E2,366.30	24 24 24 22 22	35 35 35 35 32 32	45 45 5. 45 0.4 45 41 0.0 41 0.1 41 0.2	1.617 .53608 447561 2.958 976382	30 30 30 30 1400 1400	12.3 12.3 12.3 12.3 12.3 69.4	16.81 16.81 16.81 16.81 69.4	25.09 25.09 25.09 25.09 25.09 69.4 69.4	596.673 2042.81352 165.150009 1091.502 7421.27512 11193.41496	815.4531 2791.84514 225.705012 1491.7194 7421.27512 11193.415 24108.8938	1217.1159 4167.0074 336.87916 2226.4866 7421.2751 11193.415 24108.894	
A B C D E F G	windows comprising of Zhrs ideo gening panes and 1Nr fixed pane Velax windows; 550 x 950mm; plots 5, 6, 7, 8 and 9; references VBS, WB3 and WJ7 Velax windows; 660 x 1398mm; plots 5, 6, 7, 8 and 9; references WS3, WB3 and WJ7 He Roollight Company Plateau Simline Profile or similar approved; flat roollight; 669 x 690mm; plots 5, 0, 8 and 9; references W34 Triangle rool element; 2000 x 1000mm (maximum height; plots 5, 6, 7, 8 and 9; reference W40 Patho / French doorset; Profile 22 uPVC or similar approved; glazed wind hovido beads BR4 BP; 100 x 2110, plot 10; reference ED02; jaffery glazed angle door with 2hr safety glazed side lights and 2hr top hung pening vents plated side lights and 2hr top hung pening vents plato / French doorset; Profile 22 uPVC or similar approved; glazed with Ovido beads BR4 BP; 720 x 2110; plots 1 and 2; reference ED05; doolde door with Abria det lights and 2hr top hung opening vents plato / French doorset; Profile 22 uPVC or similar approved; glazed with Ovido beads BR4 BP; 720 x 2110; plots 1 and 4; references ED05 and ED06; safety glazed doubel door with Versifety glazed dub flots and 20% rotop hung opening vents pato/ / French doorset; Profile 22 uPVC or similar approved; glazed with Ovido beads BR4 DP valo 2110; plots 3 and 4; references ED05 and ED06; safety glazed doubel door with 2Art top hung opening vents pato/ / French doorset; Profile 20; uPVC or similar approved; glazed with Ovido beads BR4 DP valo 2110; plots 5, 6, 7, 8 and 9; references ED02, ED03, ED04, ED05, ED05, ED06 and ED07; safety glazed doubel door with 2Art safety glazed doub dato with 2Art safety glazed doubel door with 2Art	3 6 1 1 1 1 2	Nr Nr Nr Nr Nr	£585.00 £690.00 £1,438.00 £165.00 £1,183.15 £1,183.15 £1,183.15	E1,755.00 E4,140.00 E1,438.00 E1,438.00 E1,183.15 E1,183.15 E2,366.30	24 24 24 22 22 22	 35 35 35 35 35 32 32 32 32 	45 45 5. 45 0.4 45 41 0.0 41 0.1 41 0.2	1.617 53608 447561 2.958 776382 15206	30 30 30 30 1400 1400	 12.3 12.3 12.3 12.3 69.4 69.4 69.4 	 16.81 16.81 16.81 16.81 69.4 69.4 69.4 	25.09 25.09 25.09 25.09 25.09 69.4 69.4	596.673 2042.81352 165.150009 1091.502 7421.27512 11193.41496 24108.89376	815.4531 2791.84514 225.705012 1491.7194 7421.27512 11193.415 24108.8938	1217.1159 4167.0074 336.87916 2226.4866 7421.2751 11193.415 24108.894	
A B C D E F G	windows comprising of Zhrs ideo gening panes and IN fixed pane Velax windows; 550 x 980mm; plots 5, 6, 7, 8 and 9; references W35, W36 and W37 Velax windows; 660 x 1398mm; plots 5, 6, 7, 8 and 9; references W37, W38, W30, W31 and W32 The Roollight Company Plateau Silmline Profile or similar approved; flat roollight; 669 x 690mm; plots 5, 0, 7, 8 and 9; reference W34 Triangle roof element; 2000 x 1020mm (maximum height; plots 5, 6, 7, 8 and 9; reference W40 Patho / French doorset; Profile 22 uPVC or similar approved; glazed with Ovelo beauditike Bio x 2110, plot 10; reference ED02; jaffery glazed single door with Zhr safety glazed sile lights and 2hr top hung pening vents patho / French doorset; Profile 22 uPVC or similar approved; glazed with Ovelo beauditike Bio x 2100, plot 1, and 2 mathor Bio x 2000 x 2000 x 2000 mills approved; glazed with Ovelo beauditike Bio x 2000 x 2000 x 2000 rom and 2000 x 2000 x 2000 x 2000 x 2000 rom and 2000 x 2000 x 2000 x 2000 x 2000 x 2000 rom and 2000 x	3 1 1 1 2 6	Nr Nr Nr Nr Nr	<pre>1585.00 1690.00 161.438.00 161.438.00 161.5.00 161.183.15 161.183.15 161.183.15 161.183.15</pre>	E1,755.00 E4,140.00 E1,438.00 E1,438.00 E1,183.15 E1,183.15 E2,366.30 E7,751.88	24 24 24 22 22 22 22	 35 35 35 35 32 32 32 32 32 32 32 	45 45 5.: 45 0.4 41 0.0 41 0.1 41 0.2 41 0.7	1.617 533608 447561 2.958 15206 448136 448136	30 30 30 30 1400 1400	12.3 12.3 12.3 12.3 69.4 69.4 69.4	 16.81 16.81 16.81 16.81 69.4 69.4 69.4 69.4 69.4 	 25.09 25.09 25.09 25.09 25.09 69.4 69.4 69.4 69.4 	596.673 2042.81352 165.150009 1091.502 7421.27512 11193.41496 24108.89376 72326.68128	815.4531 2791.84514 225.705012 1491.7194 7421.27512 11193.415 24108.8938 72326.6813	1217.1159 4167.0074 336.87916 22226.4866 7421.2751 11193.415 24108.894 72326.681	
A B C D E F G	windows comprising of Zhrs ideo gening panes and IN fixed pane Velox windows; 550 x 980mm; plots 5, 6, 7, 8 and 9; references W35, W36 and W37 Velox windows; 660 x 1398mm; plots 5, 6, 7, 8 and 9; references W37, W38, W30, W31 and W32 The Roollight Company Plateau Silmline Profile or similar approved; flat roollight; 669 x 690mm; plots 5, 0, 7, 8 and 9; reference W34 Triangle roof element; 2000 x 1020mm (maximum height; plots 5, 6, 7, 8 and 9; reference W40 Patto / French doorset; Profile 22 uPVC or similar approved; glazed with Ovelo beauditight; plots 5, 6, 7, 8 and 9; reference W40 Patto / French doorset; Profile 22 uPVC or similar approved; glazed with Ovelo beauditight; plots 1, 0, 7, 8 and 9; reference W40 Patto / French doorset; Profile 22 uPVC or similar approved; glazed with Ovelo beauditight; plots 1, 0, 7, 8 and 9; references W40 Patto / French doorset; Profile 22 uPVC or similar approved; glazed with Ovelo beauditight; plots 1, 0, 7, 8 and 9; references ED05 and 1206; slefty glazed double door with Ovelos beauditight; plots 2, 0, 7, 8 and 9; references ED05 and ED05; slefty glazed double door with Ovelos beauditight; plots 2, 0, 7, 8 and 9; references ED05, 2003, clofb, S, 6, 7, 8 and 9; references ED02, ED03, clofb, S, 6, 7, 8 and 9; references ED02, 2003, clofb, S, 6, 7, 8 and 9; references ED02, 2003, clofb, and 2/tr top hung opening vents Sables; 5 ; 8 ; 8 ; 8 ; 0 ; M ; 0	3 6 1 1 1 1 2	Nr Nr Nr Nr Nr	£585.00 £690.00 £1,438.00 £165.00 £1,183.15 £1,183.15 £1,183.15	E1,755.00 E4,140.00 E1,438.00 E1,438.00 E1,183.15 E1,183.15 E2,366.30	24 24 24 22 22 22	 35 35 35 35 35 32 32 32 32 	45 45 5. 45 0.4 45 41 0.0 41 0.1 41 0.2	1.617 533608 447561 2.958 15206 448136 448136	30 30 30 30 1400	 12.3 12.3 12.3 12.3 69.4 69.4 69.4 	 16.81 16.81 16.81 16.81 69.4 69.4 69.4 	 25.09 25.09 25.09 25.09 25.09 69.4 69.4 69.4 69.4 	596.673 2042.81352 165.150009 1091.502 7421.27512 11193.41496 24108.89376	815.4531 2791.84514 225.705012 1491.7194 7421.27512 11193.415 24108.8938 72326.6813	1217.1159 4167.0074 336.87916 22226.4866 7421.2751 11193.415 24108.894 72326.681	
A B C D E F G A B	windows comprising of Zhrs ideo gening panes and IN fixed pane Velax windows; 550 x 980mm; plots 5, 6, 7, 8 and 9; references W35, W36 and W37 Velax windows; 660 x 1398mm; plots 5, 6, 7, 8 and 9; references W37, W38, W30, W31 and W32 The Roollight Company Plateau Similare Profile or similar approved; fait roollight; 669 x 6990m; plots 5, 6, 7, 8 and 9; reference W34 Triangle roof element; 2900 x 1020mm (maximum height; plots 5, 6, 7, 8 and 9; reference W40 Patto / French doorset; Profile 22 uPVC or similar approved; glazed with Ovelo beauds; W48, Platto 2110; plot 10; reference ED02; affery glazed angle door with Zhr affect pateol Similar approved; glazed with Ovelo beauds; W48, Platto 2110; plot 10; reference ED02; affery glazed angle door with Zhr affect pateol Similar approved; glazed with Ovelo beauds; W48, Platto 2110; plot 1 and 2; reference ED05; glazel with Ovelo beauds; W48, Platto 22 uPVC or similar approved; glazed with Ovelo beauds; W48, Platto 22 uPVC or similar approved; glazed with Ovelo beauds; W48, Platto 22 uPVC or similar approved; glazed with Ovelo beauds; W48, Platto 22 uPVC or similar approved; glazed with Ovelo beauds; W48, Platto 22 uPVC or similar approved; glazed with Ovelo beauds; W40 valor capsure with 2010; fremto Morest; Profile 22 uPVC or similar approved; glazed with Ovelo beauds; W40 valor valor with Sint and 2010; advelo doorst; Platto 22 uPVC or similar approved; glazed duble dow with All pint Generas; ED03 vall Color, D03 vall D04, D05, ED06 and ED07; astley 020 vall 2010; plots 5, 6, 7, 8 and 9; reference; ED02; 2030; 2010; plots 5, 6, 7, 8 and 9; reference; ED02; 2030; 2010; plots 5, 6, 7, 8 and 9; reference; ED02; apple door with 2014 and ED07; astley 020 vall 2010; plots 1, 0, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,	3 1 1 1 2 6	Nr Nr Nr Nr Nr	<pre>1585.00 1690.00 161.438.00 161.438.00 161.5.00 161.183.15 161.183.15 161.183.15 161.183.15</pre>	E1,755.00 E4,140.00 E1,438.00 E1,438.00 E1,183.15 E1,183.15 E2,366.30 E7,751.88	24 24 24 22 22 22 22	 35 35 35 35 32 32 32 32 32 32 32 	45 45 5.: 45 0.4 41 0.0 41 0.1 41 0.2 41 0.7	1.617 533608 447561 2.958 15206 448136 448136	30 30 30 30 1400 1400	12.3 12.3 12.3 12.3 69.4 69.4 69.4	 16.81 16.81 16.81 16.81 69.4 69.4 69.4 69.4 69.4 	 25.09 25.09 25.09 25.09 25.09 69.4 69.4 69.4 69.4 	596.673 2042.81352 165.150009 1091.502 7421.27512 11193.41496 24108.89376 72326.68128	815.4531 2791.84514 225.705012 1491.7194 7421.27512 11193.415 24108.8938 72326.6813	1217.1159 4167.0074 336.87916 22226.4866 7421.2751 11193.415 24108.894 72326.681	
A B C D E F G A B	windswo comprising of Zivi side opening panes and IN fixed pane Velax windsws; 550 x 980mm; plots 5, 6, 7, 8 and 9; reference W35, W36 and W37 Velax windsws; 660 x 1398mm; plots 5, 6, 7, 8 and 9; reference W37, W38, W39, W31 and W32 The Roollight Company Plateau Simline Profile or similar approved; fait roollight; 669 x 630mm; plots 5, 7, 8 and 9; reference W34 Triangle roof element; 2900 x 1000mm (maximum height); plots 5, 6, 7, 8 and 9; reference W34, plots 5, 6, 7, 8 and 9; reference S1005, and E005, sletty glazed double door with Was slety glazed with Ovolo beadstight 9; 2004 x 2110; plots 3, and 4; references E005, and E005, sletty glazed double door with Vas slety glazed double door with Vas slety glazed double door with Vas slety glazed double door with 0; 8, 6, 7, 8 and 9; references E002, 2004 z 2100; plots 5, 6, 7, 8 and 9; references E002, 2004 z 2100; plots 5, 6, 7, 8 and 9; references E002, 2004 z 2100; plots 5, 6, 7, 8 and 9; references E002, 2004 z 210; plots 1, 2005, 1200 and 1207; radie VM W104000 Company United or similar approved; European Oak with a Light and 20; reference E002; allegie double with 210; slates 5; 7 8 (240 ; W1040 company United or similar approved; European Oak with a Light slates 5; 7 8 (240 ; W1040 company United or similar approved; European Oak with a Light slates 5; 7 8 (240 ; W1040 company United or similar approved; European Oak with a Light	3 1 1 1 2 6	Nr Nr Nr Nr Nr	<pre>1585.00 1690.00 161.438.00 161.438.00 161.5.00 161.183.15 161.183.15 161.183.15 161.183.15</pre>	E1,755.00 E4,140.00 E1,438.00 E1,438.00 E1,183.15 E1,183.15 E2,366.30 E7,751.88	24 24 24 22 22 22 22	 35 35 35 35 32 32 32 32 32 32 32 	45 45 5.: 45 0.4 41 0.0 41 0.1 41 0.2 41 0.7	1.617 53608 447561 2.958 2.958 1.15206 448136 444408	30 30 30 30 1400 1400	12.3 12.3 12.3 12.3 69.4 69.4 69.4	 16.81 16.81 16.81 16.81 69.4 69.4 69.4 69.4 69.4 	25.09 25.09 25.09 25.09 69.4 69.4 69.4 69.4	596.673 2042.81352 165.150009 1091.502 7421.27512 11193.41496 24108.89376 72326.68128	815.4531 2791.84514 225.705012 1491.7194 7421.27512 11193.415 24108.8938 72326.6813 284.515839	1217.1159 4167.0074 336.87916 22226.4866 7421.2751 11193.415 24108.894 72326.681 846.14376	
A B C D E F G A B	windows comprising of Zivi side opening panes and IN fixed pane Velax windows; 550 x 980mm; plots 5, 6, 7, 8 and 9; reference W35, W36 and W37 Velax windows; 660 x 1398mm; plots 5, 6, 7, 8 data 9; reference W34, W37 He Roollight Company Plateau Simline Profile or similar approved; fait roollight; 669 x 630mm; plots 2, 6, 7, 8 and 9; reference W34 Triangle roof element; 2900 x 1000mm (maximum height); plots 5, 6, 7, 8 and 9; reference W34, plots 5, 6, 7, 8 and 9; references ED03, and P; plots 3, and 4; references ED03, and P 2004, z1010, plots 3, and 4; references ED03, and P 2004, z1010, plots 3, 6, 7, 8 and 9; references ED03, 2004, z1010, plots 5, 6, 7, 8 and 9; reference ED03, 2004, z1010, plots 5, 6, 7, 8 and 9; references ED03, 2004, z1010, plots 5, 6, 7, 8 and 9; references ED03, zand P 2004, z1004, z1004 r 5, 8 and ED07, zashty 0, 8 and 2 ht top hung optimilar approved; Biazed with Ovelo beadstigt B, 7204 v 2110, plots 1, 9, 6, 1 and 2; reference ED02; zand plot 2 u/PUC or similar approved; European Oak with a Light Oak finkh; PAS 24 door; 1023 v 2110; plots 1 and 2; reference ED03; and plot ownth 2 W1 boxurd Safet W1, Plots 9 and 2; reference ED03; and plot ownth 2 W1 boxurd Safet M3; Plots 9 and 2; reference ED03; and plot ownth 2 W1 boxurd Safet M3; M36 W1, M304 Company Limted Dashtes 5; Tagt BM3 W1, W304 Company Limted	3 1 1 1 2 6 1	Nr Nr Nr Nr Nr	<pre>1585.00 1690.00 161.438.00 161.438.00 161.438.15 161.183.15 161.183.15 161.291.98 161.291 161.291.98 161.291.98 161.291 161.291.98 161.291 161.29</pre>	E1,755.00 E4,140.00 E1,438.00 E1,438.00 E1,183.15 E1,183.15 E2,366.30 E7,751.88 E95.00	24 24 24 22 22 22 22 22	35 35 35 35 32 32 32 32 32 32	45 45 5. 45 0.4 41 0.0 41 0.1 41 0.2 41 0.7 50 0.07	1.617 53608 447561 2.958 2.958 1.15206 448136 444408	30 30 30 30 1400 1400 1400	 12.3 12.3 12.3 12.3 69.4 69.4 69.4 69.4 69.4 0.33 	 16.81 16.81 16.81 16.81 16.81 69.4 69.4 69.4 69.4 5.38 	25.09 25.09 25.09 25.09 69.4 69.4 69.4 69.4	596.673 2042.81352 165.150009 1091.502 7421.27512 11193.41496 24108.89376 72326.68128 17.45171505	815.4531 2791.84514 225.705012 1491.7194 7421.27512 11193.415 24108.8938 72326.6813 284.515839	1217.1159 4167.0074 336.87916 22226.4866 7421.2751 11193.415 24108.894 72326.681 846.14376	
A B C D E F G A B C	windows comprising of Zhrs lide opening panes and IN fixed pane Velax windows; 550 x 980mm; plots 5, 6, 7, 8 and 9; reference W35, W36 and W37 Velax windows; 660 x 1398mm; plots 5, 6, 7, 8 draw of the Roollight Company Plateau Similine Profile or similar approved; fatr collight; 669 x 630mm; plots 2, 6, 7, 8 and 9; reference W34 Transfer col element; 2900 x 1000mm (maximum height); plots 5, 6, 7, 8 and 9; reference W34 printing the Short Short Short Short Short Short Maximum height (blots 5, 6, 7, 8 and 9; reference W34 printing the Short Short Short Short Short Short Short Short Short Short Short Short Short Pathol Prench Good Short Short Short Short Short Short Short Short Short Pathol Prench Good Short Short Short Short Short Short Short Short Short Short Short	3 1 1 1 2 6 1	Nr Nr Nr Nr Nr	<pre>1585.00 1690.00 161.438.00 161.438.00 161.438.15 161.183.15 161.183.15 161.291.98 161.291 161.291.98 161.291.98 161.291 161.291.98 161.291 161.29</pre>	E1,755.00 E4,140.00 E1,438.00 E1,438.00 E1,183.15 E1,183.15 E2,366.30 E7,751.88 E95.00	24 24 24 22 22 22 22 22	35 35 35 35 32 32 32 32 32 32	45 45 5. 45 0.4 41 0.0 41 0.1 41 0.2 41 0.7 50 0.07	1.617 53608 447561 2.958 2.958 1.15206 448136 444408	30 30 30 30 1400 1400 1400	 12.3 12.3 12.3 12.3 69.4 69.4 69.4 69.4 69.4 0.33 	 16.81 16.81 16.81 16.81 16.81 69.4 69.4 69.4 69.4 5.38 	25.09 25.09 25.09 25.09 69.4 69.4 69.4 69.4	596.673 2042.81352 165.150009 1091.502 7421.27512 11193.41496 24108.89376 72326.68128 17.45171505	815.4531 2791.84514 225.705012 1491.7194 7421.27512 11193.415 24108.8938 72326.6813 284.515839	1217.1159 4167.0074 336.87916 22226.4866 7421.2751 11193.415 24108.894 72326.681 846.14376	
A B C D E F G A B C	windows comprising of Zhrs ideo gening panes and IN fixed pane Velax windows; 550 x 980mm; plots 5, 6, 7, 8 and 9; references W35, W36 and W37 Velax windows; 660 x 1398mm; plots 5, 6, 7, 8 and 9; references W37, W38, W30, W31 and W32 The Roollight Company Plateau Similar Profile or similar approved; fait roollight; 669 x 6990m; plots 5, 6, 7, 8 and 9; reference W34 Triangle roof element; 2900 x 1020mm (maximum height; plots 5, 6, 7, 8 and 9; reference W40 Patto / French doorset; Profile 22 uPVC or similar approved; glazed with Ovelo beauds; W48, Visito x 2110; plot 10; reference ED02; affery glazed single door with Zhr affect pateol Signal and 2hr top hung pening vents Patto / French doorset; Profile 22 uPVC or similar approved; glazed with Ovelo beauds; W48, Visito x 2110; plot 1 and 2; reference ED05; glazels with Ovelo beauds; W48, Visito x 2110; plot 1 and 2; reference ED05; glazels with Ovelo beauds; W48, Visito x 2110; plots 1 and 2; references ED05 and ED05; slefty glazed doubed door with KHr sidet glazed with X and XHr box y 2110; plots 1 and 4; references ED05; and 2006; slefty glazed doubed door with KHr sidet glazed doube door with ZH rafety glazed side lights and ZHr top hung opening vents Sables; Zig BK Window Company Limted or similar approved; European Oak with a Light Oak finkh; PAS 24 door; 1023 x 2110; plots 1 and 2; reference ED02; single door with XHr alleft Oak finkh; PAS 24 door; 1023 x 2110; plots 1 and 2; reference ED02; single door with XH alleft Oak finkh; PAS 24 door; 1023 x 2110; plots 1 and 2; reference ED02; single door with XH alleft Oak finkh; PAS 24 door; 1023 x 1210; plots 1 and 2; reference ED02; single door with XH alleft Oak finkh; PAS 24 door; 1023 x 1210; plots 1 and 2; reference ED02; single door with X	3 1 1 1 2 6 1	Nr Nr Nr Nr Nr	<pre>1585.00 1690.00 161.438.00 161.438.00 161.438.15 161.183.15 161.183.15 161.291.98 161.291 161.291.98 161.291.98 161.291 161.291.98 161.291 161.29</pre>	E1,755.00 E4,140.00 E1,438.00 E1,438.00 E1,183.15 E1,183.15 E2,366.30 E7,751.88 E95.00	24 24 24 22 22 22 22 22	35 35 35 35 32 32 32 32 32 32	45 45 5. 45 0.4 41 0.0 41 0.1 41 0.2 41 0.7 50 0.07	1.617 53608 447561 2.958 2.958 448136 448136 448136 555486 555486	30 30 30 30 1400 1400 1400	 12.3 12.3 12.3 12.3 69.4 69.4 69.4 69.4 69.4 0.33 	 16.81 16.81 16.81 16.81 16.81 69.4 69.4 69.4 69.4 5.38 	25.09 25.09 25.09 25.09 69.4 69.4 69.4 69.4 16	596.673 2042.81352 165.150009 1091.502 7421.27512 11193.41496 24108.89376 72326.68128 17.45171505	815.4531 2791.84514 225.705012 1491.7194 7421.27512 11193.415 24108.8938 72326.6813 284.515839 284.515839	1217.1159 4167.0074 336.87916 22226.4866 7421.2751 11193.415 24108.894 72326.681 846.14376 846.14376	
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A B C F G A B C D	windows comprising of Zhrs lide opening panes and IN fixed pane Velax windows; 550 x 950mm; plots 5, 6, 7, 8 and 9; references VBS, WB3 and W37 Velax windows; 660 x 1398mm; plots 5, 6, 7, 8 and 9; references VA7, WB3, W23 W31 and W22 The Rooflight Company Plateau Slinnine Profile or similar approved; fait rooflight; 669 x 690mm; plots 5, 6, 7, 8 and 9; references W34 Tima:imum height; plots 5, 6, 7, 8 and 9; reference W30 Pato / French doorset; Profile 22 uPVC or similar approved; plat rooflight; 660 x 6000 pato 2000 pato 2000 pato 2000 Pato / French doorset; Profile 22 uPVC or plato / French doorset; Profile 22 uPVC or similar approved; glazed wth Ovdo beacktight; plots 1, 2000 pato 2000 pato plato 2000 pato 2000 pato 2000 pato beacktight; plots 2, 2000 pato plato 2000 pato 2000 pato beacktight; plots 2, 2000 pato beacktigh	3 6 1 1 1 2 6 1 1	Nr Nr Nr Nr Nr Nr	(1585.00) (1690.00) (11,438.00) (165.00) (11,183.15) (E1,755.00 E4,140.00 E1,438.00 E1,183.15 E1,183.15 E2,366.30 E7,751.88 E95.00	24 24 24 22 22 22 22 25	 35 35 35 35 32 32 32 32 32 32 33 39 	45 45 5. 45 0.4 41 0.0 41 0.1 41 0.2 41 0.7 50 0.07	1.617 53608 447561 2.958 2.958 448136 448136 448136 555486 555486	30 30 30 30 1400 1400 1400 700 700	 12.3 12.3 12.3 12.3 69.4 69.4 69.4 69.4 0.33 0.33 	 16.81 16.81 16.81 16.81 16.81 69.4 69.4 69.4 69.4 5.38 5.38 	25.09 25.09 25.09 25.09 69.4 69.4 69.4 69.4 16	596.673 2042.81352 165.150009 1091.502 7421.27512 11193.41496 24108.89376 72326.68128 17.45171505 17.45171505	815.4531 2791.84514 225.705012 1491.7194 7421.27512 11193.415 24108.8938 72326.6813 284.515839 284.515839	1217.1159 4167.0074 336.87916 22226.4866 7421.2751 11193.415 24108.894 72326.681 846.14376 846.14376	
A B C D F G A B C D	windows comprising of Zivi side opening panes and IN fixed pane Velax windows; 550 x 950mm; plots 5, 6, 7, 8 and 9; references US3, W36 and W37 Velax windows; 660 x 1398mm; plots 5, 6, 7, 8 and 9; references V37, W38, W39, W31 and W32 The Rooflight Company Plateau Slimline Profile or similar approved; fait rooflight; 669 x 690mm; plots 5, 6, 7, 8 and 9; references W34 Tringing roof estimatic, 2000 x 1000mm plots 5, 6, 7, 8 and 9; references W34 Tringing roof estimatic, 2000 x 1000mm plots 5, 6, 7, 8 and 9; references W34 Tringing roof estimatic, 2000 x 1000mm plots 5, 6, 7, 8 and 9; reference W34 Tringing approved glozed with Ovelo beackstights; 1130 x 2110; plot 10; reference D20; safety glozed single door with V2 safety glozed side lights and 21r top hung opening verts Patio / French doorset; Profile 22 uPVC or similar approved; glozed with Ovelo beackstights; 2730 x 2110; plots 1 and 2; reference E005; adde 2004 v2100 c similar approved; glozed with Ovelo beackstights; 2740 x 2110; plots 3 and 4; references E005 and E006; safety glozed double door with Varia Patio / French doorset; Profile 22 uPVC or similar approved; glozed with Ovelo beackstights; 2740 x 2110; plots 3 and 4; references E005; adde 2004 x 2100 c beackstights; 2004 x 2110; plots 3 and 4; references E005; adde 2004 x 2100 c beackstights; 2004 x 2110; plots 5, 6, 7, 8 and y references E005; adde 2004 x 2100 c beackstights; 2004 x 2110; plots 5, 6, 7, 8 and y references E005; adde 2004 x 2100 c beackstights; 2004 x 2110; plots 5, 6, 7, 8 and y references E005; adde 2004 x 2100 c beackstights; 2004 x 2110; plots 5, 6, 7, 8 and y references E005; adde 2004 x 2004 x 2004 plots; 2004 x 2004 x 2004 x 2004 x 2004 plots; 2004 x 2004 x 2004 x 2004 x 2004 plots; 2004 x 2004 x 2004 x 2004 x 2004 plots; 2004 x 2005, 2005 adde 3000 x 2004 x 200	3 6 1 1 1 2 6 1 1	Nr Nr Nr Nr Nr Nr	(1585.00) (1690.00) (11,438.00) (165.00) (11,183.15) (E1,755.00 E4,140.00 E1,438.00 E1,183.15 E1,183.15 E2,366.30 E7,751.88 E95.00	24 24 24 22 22 22 22 25	 35 35 35 35 32 32 32 32 32 32 33 39 	45 45 5. 45 0.4 41 0.0 41 0.1 41 0.2 41 0.7 50 0.07	1.617 53608 447561 2.958 2.958 15206 448136 44408 555486 555486	30 30 30 30 1400 1400 1400 700 700	 12.3 12.3 12.3 12.3 69.4 69.4 69.4 69.4 0.33 0.33 	 16.81 16.81 16.81 16.81 16.81 69.4 69.4 69.4 69.4 5.38 5.38 	25.09 25.09 25.09 25.09 25.09 69.4 69.4 69.4 69.4 16 16	596.673 2042.81352 165.150009 1091.502 7421.27512 11193.41496 24108.89376 72326.68128 17.45171505 17.45171505	815.4531 2791.84514 225.705012 1491.7194 7421.27512 11193.415 24108.8938 72326.6813 284.515839 284.515839	1217.1159 4167.0074 336.87916 2226.4866 7421.2751 11193.415 24108.894 72326.681 846.14376 846.14376 846.14376	
A B C D F G A B C D	windows comprising of Zhrs idea opening panes and IN fixed pane Velax windows; 550 x 950mm; plots 5, 6, 7, 8 and 9; references W35, W35 and W37 Velax windows; 660 x 1398mm; plots 5, 6, 7, 8 and 9; reference W37, W38, W39, W31 and W32 The Roollight Company Plateau Similine Profile or similar approved; fat roollight; 669 x 690mm; plots 5, 7, 8 and 9; reference W34 Triangle roof element; 2300 x 1000mm (maximum height; plots 5, 6, 7, 8 and 9; reference W40 Patho / French doorset; Profile 22 uPVC or similar approved; plate rool with Ovelo EW22; safety plate and 24 trop hung opening verts Patho / French doorset; Profile 22 uPVC or similar approved; plate rool with Ovelo EW22; safety plate and 24 trop hung opening verts Patho / French doorset; Profile 22 uPVC or similar approved; plate with Ovelo beack Big N: 2004 z 2110; plots 1 and 2; reference ED5; double door with 6 vis det lights and 24 trop hung opening verts Patho / French doorset; Profile 22 uPVC or similar approved; plated with Ovelo beack Big N: 2004 z 2110; plots 1 and 3; reference ED5; add 22 uPVC or similar approved; plated with Ovelo beack Big N: 2004 z 2110; plots 3 and 4; references: ED05 and ED6; sletty Blazed double door with W safety glazed dub led bots, 16 with a 18 zb10 / french doorset; Profile 22 uPVC or similar approved; glazed with Ovelo beack Big N: 2004 z 2110; plots 1 and 3; references: ED03 and ED05; sletty Blazed double door with N safety glazed dub led with N slight CaA finish; PAS 24 door; 1023 z 2110; plots 1 and 3; reference ED02; agled Over with 2Nr afety glazed dabe lights and 2Nr top hung opening vents SasHes; Z Big M: Window Company Limited or similar approved; European Ca4 with a Light CaA finish; PAS 24 door; 1023 z 2110; plots 1 and 2; reference ED01; algled over with 2Nr afety glazed diven plots 2 and 4; reference ED01; algled over with N2 rebocured afety dlaod wition panel SasHes; Z Big M; Window Company Limited or similar approved; European Ca4 with a Light Ca4 finish; PAS 24 door; 1023 z 2110; plots 3 and 4; reference E	3 6 1 1 1 2 6 1 1 1	Nr Nr Nr Nr Nr Nr	(585.00 (690.00 (1,438.00 (165.00 (1,183.15 (1,183.15 (1,183.15 (1,291.98 (1,291.98 (1,291.98) (1,2	E1,755.00 E4,140.00 E1,438.00 E1,438.00 E1,183.15 E1,183.15 E2,366.30 E7,751.88 E95.00 E95.00	24 24 24 22 22 22 22 25 25	35 35 35 35 32 32 32 32 32 39 39	45 45 5. 45 0.4 41 0.0 41 0.1 41 0.2 41 0.2 50 0.07 50 0.07	1.617 53608 447561 2.958 2.958 15206 448136 44408 555486 555486	30 30 30 30 1400 1400 1400 700 700	12.3 12.3 12.3 69.4 69.4 69.4 69.4 0.33 0.33	16.81 16.81 16.81 16.81 69.4 69.4 69.4 5.38 5.38	25.09 25.09 25.09 25.09 25.09 69.4 69.4 69.4 69.4 16 16	596.673 2042.81352 165.150009 1091.502 7421.27512 11193.41496 24108.89376 72326.68128 17.45171505 17.45171505	815.4531 2791.84514 225.705012 1491.7194 7421.27512 11193.415 24108.8938 72326.6813 284.515839 284.515839	1217.1159 4167.0074 336.87916 2226.4866 7421.2751 11193.415 24108.894 72326.681 846.14376 846.14376 846.14376	
A B C D F G A B C D E	windows comprising of Zhrs idea opening panes and IN fixed pane Velax windows; 550 x 950mm; plots 5, 6, 7, 8 and 9; references W35, W35 and W37 Velax windows; 660 x 1398mm; plots 5, 6, 7, 8 and 9; references W37, W38, W39, W31 and W32 The Roollight Company Plateau Similine Profile or similar approved; fat roollight; 669 x 690mm; plots 5, 0, 7, 8 and 9; reference W34 Triangle roof element; 2900 x 1000mm (maximum height; plots 5, 6, 7, 8 and 9; reference W40 Patho / French doorset; Profile 22 uPVC or similar approved; glazed with Ovido beau548 [kg], 1010 x 2110, plot 10, 5 derone; beau548 [kg], 2010 x 2110, plots 1 and 2; reference E005, and 22 tho plung opening verts Patho / French doorset; Profile 22 uPVC or similar approved; glazed with Ovido beau548 [kg], 2010 x 2110, plots 1 and 4; references E005 and E005; saftey glazed double door with Ness feet glazed with Ovido beau548 [kg], 2010 x 2110; plots 3 and 4; references E005 and E005; saftey glazed double door with Ness feet glazed with Ovido and E007; saftey 000 x 2110; plots 5, 6, 7, 8 and 9; references E002 and E003 x 2110; plots 1, 7, 8, 7	3 6 1 1 1 2 6 1 1 1	Nr Nr Nr Nr Nr Nr	(585.00 (690.00 (1,438.00 (165.00 (1,183.15 (1,183.15 (1,183.15 (1,291.98 (1,291.98 (1,291.98) (1,2	E1,755.00 E4,140.00 E1,438.00 E1,438.00 E1,183.15 E1,183.15 E2,366.30 E7,751.88 E95.00 E95.00	24 24 24 22 22 22 22 25 25	35 35 35 35 32 32 32 32 32 39 39	45 45 5. 45 0.4 41 0.0 41 0.1 41 0.2 41 0.2 50 0.07 50 0.07	1.617 53608 447561 2.958 2.958 15206 448136 44408 555486 555486	30 30 30 30 1400 1400 1400 700 700	12.3 12.3 12.3 69.4 69.4 69.4 69.4 0.33 0.33	16.81 16.81 16.81 16.81 69.4 69.4 69.4 5.38 5.38	25.09 25.09 25.09 25.09 25.09 69.4 69.4 69.4 69.4 16 16	596.673 2042.81352 165.150009 1091.502 7421.27512 11193.41496 24108.89376 72326.68128 17.45171505 17.45171505	815.4531 2791.84514 225.705012 1491.7194 7421.27512 11193.415 24108.8938 72326.6813 284.515839 284.515839	1217.1159 4167.0074 336.87916 2226.4866 7421.2751 11193.415 24108.894 72326.681 846.14376 846.14376 846.14376	
A B C F G A B C D E F	windows comprising of Zhrs idea opening panes and IN fixed pane Velax windows; 550 x 950mm; plots 5, 6, 7, 8 and 9; references W35, W36 and W37 Velax windows; 660 x 1398mm; plots 5, 6, 7, 8 and 9; references W37, W38, W39, W31 and W32 The Roollight Company Plateau Similine Profile or similar approved; fait roollight; 669 x 690mm; plots 5, 0, 7, 8 and 9; reference W34 Triangle roof element; 2900 x 1000mm (maximum height; plots 5, 6, 7, 8 and 9; reference W40 Patho / French doorset; Profile 22 uPVC or similar approved; glazed with Ovido beads KKR 9; https://doi.org/w16. W160 x 1000 x 1	3 6 1 1 1 2 6 1 1 1	Nr Nr Nr Nr Nr Nr	(585.00 (690.00 (1,438.00 (165.00 (1,183.15 (1,183.15 (1,183.15 (1,291.98 (1,291.98 (1,291.98) (1,2	E1,755.00 E4,140.00 E1,438.00 E1,438.00 E1,183.15 E1,183.15 E2,366.30 E7,751.88 E95.00 E95.00	24 24 24 22 22 22 22 25 25	35 35 35 35 32 32 32 32 32 39 39	45 45 5. 45 0.4 41 0.0 41 0.1 41 0.2 41 0.2 50 0.07 50 0.07	1.617 53608 447561 2.958 15206 448136 448136 55486 55486 55486	30 30 30 30 1400 1400 1400 700 700	12.3 12.3 12.3 69.4 69.4 69.4 69.4 0.33 0.33	16.81 16.81 16.81 16.81 69.4 69.4 69.4 5.38 5.38	25.09 25.09 25.09 25.09 69.4 69.4 69.4 69.4 16 16 16	596.673 2042.81352 165.150009 1091.502 7421.27512 11193.41496 24108.89376 72326.68128 17.45171505 17.45171505	815.4531 2791.84514 225.705012 1491.7194 7421.27512 11193.415 24108.8938 72326.6813 284.515839 284.515839 284.515839	1217.1159 4167.0074 336.87916 22226.4866 7421.2751 11193.415 24108.894 72326.681 846.14376 846.14376 846.14376	
A B C D F G A B C D E	windows comprising of Zhrs lide opening panes and IN fixed pane Velax windows; 550 x 950mm; plots 5, 6, 7, 8 and 9; references USS, W38 and W37 Velax windows; 660 x 1398mm; plots 5, 6, 7, 8 and 9; references USS, W38 and W37 Velax windows; 660 x 1398mm; plots 5, 6, 7, 8 difference W34 Triangle roof element; 2000 x 1000mm (plots 5, 6, 7, 8 and 9; reference W34 Triangle roof element; 2000 x 1000mm (plots 5, 6, 7, 8 and 9; reference W34 Triangle roof element; 2000 x 1000mm (plots 5, 6, 7, 8 and 9; reference W34 Triangle roof element; 2000 x 1000mm (plots 5, 6, 7, 8 and 9; reference W34 Triangle approxed; plats 7 and 7, 8 and 9; reference: W40 D20; safety glated displed onv H1V kr safety glated side lights and 2Hr top hung opening vents D20; safety glated wind hovelo beads tights; 7 210 x 2110; plots 1, 6 reference D20; safety glated single door with V2 kr safety glated side lights and 2Hr top hung opening vents Data / French doorset; Profile 22 uPVC or similar approved; glated with Ovelo beads tights; 7210 x 2110; plots 1 and 2; reference: ED05 and ED06; slatety glated double door with V4 kr slatety glated double door with 2Hr top hung opening vents plats if x 2000 x 2110; plots 3 and 3; reference: ED05 and ED06; slatety glated double door with 2Hr abaltor, French douest; tyrifle 22 uHVC or similar approved; furopano 124 kr 104 top french double door with 2Hr door initiar approved; furopano 124 kr 104 top french double door with 2Hr door initiar approved; furopano 124 kr 104 top further door W104 Kr dons; PS3 kr 2010; slatety glated double door with 2Hr door with 34 top french door 2010; slatety glated double door with 2Hr dockr disety flated withon panes is ables; X z glatety Window Company Limited or similar approved; furopano 124 kr 104 top firsting PA3 kr 204 (sloto; 123 x 2110; plots 3 and 4; reference ED01; single door	3 6 1 1 1 2 6 1 1 1 1	Nr Nr Nr Nr Nr Nr Nr	<pre>1585.00 1690.00 161.438.00 161.438.00 161.438.15 161.183.15 161.183.15 161.183.15 161.291.98 1695.00 1695</pre>	E1,755.00 E4,140.00 E1,438.00 E1,438.00 E1,183.15 E1,183.15 E2,366.30 E7,751.88 E95.00 E95.00 E95.00	24 24 24 22 22 22 22 25 25 25	 35 35 35 35 32 32 32 32 32 32 39 39 39 39 39 39 39 	45 45 5. 45 41 41 41 41 41 41 41 41 41 50 50 50 50 50 50 50 50 50	1.617 53608 447561 2.958 15206 448136 448136 55486 55486 55486	30 30 30 30 1400 1400 1400 700 700 700	12.3 12.3 12.3 12.3 69.4 69.4 69.4 0.33 0.33 0.33	16.81 16.81 16.81 16.81 69.4 69.4 69.4 5.38 5.38 5.38	25.09 25.09 25.09 25.09 69.4 69.4 69.4 69.4 16 16 16	596.673 2042.81352 165.150009 1091.502 7421.27512 11193.41496 24108.89376 72326.68128 17.45171505 17.45171505 17.45171505	815.4531 2791.84514 225.705012 1491.7194 7421.27512 11193.415 24108.8938 72326.6813 284.515839 284.515839 284.515839	1217.1159 4167.0074 336.87916 22226.4866 7421.2751 11193.415 24108.894 72326.681 846.14376 846.14376 846.14376	
A B C F G A B C D E F	windows comprising of Zhrs lide opening panes and IN fixed pane Velax windows; 550 x 980mm; plots 5, 6, 7, 8 and 9; reference W35, W36 and W37 Velax windows; 660 x 1398mm; plots 5, 6, 7, 8 difference W34 Transfer Company Plateau Simine Profile or similar approved; fair confight; 669 x 630mm; plots 5, 6, 7, 8 and 9; reference W34 Transfer conf element; 2900 x 1000mm (First), plots 5, 6, 7, 8 and 9; reference W30, plots 6, 1000 x 1000	3 6 1 1 1 2 6 1 1 1 1	Nr Nr Nr Nr Nr Nr Nr	<pre>1585.00 1690.00 161.438.00 161.438.00 161.438.15 161.183.15 161.183.15 161.183.15 161.291.98 1695.00 1695</pre>	E1,755.00 E4,140.00 E1,438.00 E1,438.00 E1,183.15 E1,183.15 E2,366.30 E7,751.88 E95.00 E95.00 E95.00	24 24 24 22 22 22 22 25 25 25	 35 35 35 35 32 32 32 32 32 32 39 39 39 39 39 39 39 	45 45 5. 45 41 41 41 41 41 41 41 41 41 50 50 50 50 50 50 50 50 50	1.617 53608 447561 2.958 15206 448136 448136 55486 55486 55486	30 30 30 30 1400 1400 1400 700 700 700	12.3 12.3 12.3 12.3 69.4 69.4 69.4 0.33 0.33 0.33	16.81 16.81 16.81 16.81 69.4 69.4 69.4 5.38 5.38 5.38	25.09 25.09 25.09 25.09 69.4 69.4 69.4 69.4 16 16 16	596.673 2042.81352 165.150009 1091.502 7421.27512 11193.41496 24108.89376 72326.68128 17.45171505 17.45171505 17.45171505	815.4531 2791.84514 225.705012 1491.7194 7421.27512 11193.415 24108.8938 72326.6813 284.515839 284.515839 284.515839	1217.1159 4167.0074 336.87916 22226.4866 7421.2751 11193.415 24108.894 72326.681 846.14376 846.14376 846.14376	
A B C D F G A B C D F F A	windows comprising of Zhrs lide opening panes and IN fixed pane Velax windows; 550 x 980mm; plots 5, 6, 7, 8 and 9; reference W35, W36 and W37 Velax windows; 660 x 1398mm; plots 5, 6, 7, 8 dial 9; reference W34 Triangle root element; 2000 x 1000mm (maximum height), plots 5, 6, 7, 8 and 9; reference W34 Triangle root element; 2000 x 1000mm (maximum height), plots 5, 6, 7, 8 and 9; reference W34 Triangle root element; 2000 x 1000mm (maximum height), plots 5, 6, 7, 8 and 9; reference W34 Triangle root element; 2000 x 1000mm (maximum height), plots 5, 6, 7, 8 and 9; reference W34 Triangle root element; 2000 x 1000mm (maximum height), plots 5, 6, 7, 8 and 9; reference 1005; oblicat with Ovelo pass, glicat with Ovelo pass,	3 6 1 1 1 2 6 1 1 1 1	Nr Nr Nr Nr Nr Nr Nr	<pre>1585.00 1690.00 161.438.00 161.438.00 161.63.00 161.183.15 161.183.15 161.291.98 1695.00</pre>	E1,755.00 E4,140.00 E1,438.00 E1,438.00 E1,183.15 E1,183.15 E2,366.30 E7,751.88 E95.00 E95.00 E95.00	24 24 24 22 22 22 22 25 25 25	 35 35 35 35 32 32 32 32 32 32 39 39 39 39 39 39 39 	45 45 5. 45 41 41 41 41 41 41 41 41 41 50 50 50 50 50 50 50 50 50	1.617 53608 447561 2.958 15206 15206 448136 55486 55486 55486 55486	30 30 30 30 1400 1400 1400 700 700 700	12.3 12.3 12.3 12.3 69.4 69.4 69.4 0.33 0.33 0.33	16.81 16.81 16.81 16.81 69.4 69.4 69.4 5.38 5.38 5.38	25.09 25.09 25.09 25.09 69.4 69.4 69.4 16 16 16 16 16	596.673 2042.81352 165.150009 1091.502 7421.27512 11193.41496 24108.89376 72326.68128 17.45171505 17.45171505 17.45171505	815.4531 2791.84514 225.705012 1491.7194 7421.27512 11193.415 24108.8938 72326.6813 284.515839 284.515839 284.515839 284.515839	1217.1159 4167.0074 336.87916 2226.4866 7421.2751 11193.415 24108.894 72326.681 846.14376 846.14376 846.14376 846.14376	
A B C F G A B C D E F	windows comprising of Zhrs lide opening panes and IN field pane Velax windows; 550 x 980mm; plots 5, 6, 7, 8 and 9; reference W35, W36 and W37 Velax windows; 660 x 1398mm; plots 5, 6, 7, 8 difference W34 Transfer Company Plateau Simine Profile or similar approved; fair confight; 669 x 630mm; plots 5, 7, 8, and 9; reference W34 Transfer conf element; 2900 x 1000mm (information); plots 5, 6, 7, 8 and 9; reference W34 Transfer conf element; 2900 x 1000mm (information); plots 5, 6, 7, 8 and 9; reference W34 Transfer conf element; 2900 x 1000mm (information); plots 5, 6, 7, 8 and 9; reference W34 Transfer approved; plats confight; 669 x 6000mm; plots 5, 10, 9 and 9; reference W34 Transfer approved; plats confight; 660 x 6000 x 2000 x 2000 x 2000 x 2000 pasks gitts 1100 x 2110; plot 10; reference D32; safet y alada with Ovelo pasks gitts 1100 x 2110; plots 1 and 2; reference ED05; and ED06 x 2100 v Cor similar approved; glazed with Ovelo pasks gitts 2000 x 2110; plots 3 and 4; references ED05 and ED06; safety glazed doube door with Ovelo X 2000 x 2110; plots 3 and 4; references ED05 and ED06; safety glazed doube door with Ovelo X 2000 x 2	3 6 1 1 1 2 6 1 1 1 1 1	Nr Nr Nr Nr Nr Nr Nr Nr Nr Nr	<pre>1585.00 1690.00 161.438.00 161.438.00 161.63.00 161.183.15 161.183.15 161.291.98 1695.00</pre>	E1,755.00 E4,140.00 E1,438.00 E1,438.00 E1,183.15 E1,183.15 E2,366.30 E7,751.88 E95.00 E95.00 E95.00 E95.00	 24 24 24 22 22 22 25 25 25 25 25 25 25 25 25 	35 35 35 32 32 32 32 32 32 39 39 39	45 45 5.2 45 0.4 41 0.0 41 0.1 41 0.2 41 0.77 50 0.077 50 0.077 50 0.077 50 0.077 50 0.077	1.617 53608 447561 2.958 15206 15206 448136 55486 55486 55486 55486	30 30 30 30 1400 1400 1400 700 700 700 700	12.3 12.3 12.3 69.4 69.4 69.4 69.4 0.33 0.33 0.33	16.81 16.81 16.81 16.81 69.4 69.4 69.4 5.38 5.38 5.38 5.38	25.09 25.09 25.09 25.09 69.4 69.4 69.4 16 16 16 16 16	596.673 2042.81352 1051.50009 1091.502 7421.27512 11193.41496 24108.89376 72326.68128 17.45171505 17.45171505 17.45171505 17.45171505	815.4531 2791.84514 225.705012 1491.7194 7421.27512 11193.415 24108.8938 72326.6813 284.515839 284.515839 284.515839 284.515839	1217.1159 4167.0074 336.87916 2226.4866 7421.2751 11193.415 24108.894 72326.681 846.14376 846.14376 846.14376 846.14376	
A B C D F G A B C D F F A	windows comprising of Zhrs idea opening panes and IN fixed pane Velax windows; 550 x 950mm; plots 5, 6, 7, 8 and 9; references VB3, WB3 and WB7 Velax windows; 660 x 1398mm; plots 5, 6, 7, 8 and 9; references WB3, WB3 and WB7 Velax windows; 660 x 1398mm; plots 5, 6, 7, 8 doorn; plots 5, 6, 7, 8 and 9; reference WB4 Triangle cool element; 2000 x 1000mm (maximum height; plots 5, 6, 7, 8 and 9; reference WB0 Patho / French doorset; Profile 22 uPVC or similar approved; fait cool by 2100 x 1000mm (plots 1000 x 2100 x 1000 x 100	3 6 1 1 1 2 6 1 1 1 1 1	Nr Nr Nr Nr Nr Nr Nr Nr Nr Nr	<pre>1585.00 1690.00 161.438.00 161.438.00 161.63.00 161.183.15 161.183.15 161.291.98 1695.00</pre>	E1,755.00 E4,140.00 E1,438.00 E1,438.00 E1,183.15 E1,183.15 E2,366.30 E7,751.88 E95.00 E95.00 E95.00 E95.00	 24 24 24 22 22 22 25 25 25 25 25 25 25 25 25 	35 35 35 32 32 32 32 32 32 39 39 39	45 45 5.2 45 0.4 41 0.0 41 0.1 41 0.2 41 0.77 50 0.077 50 0.077 50 0.077 50 0.077 50 0.077	1.617 53608 447561 2.958 447561 15206 448136 55486 55486 55486 55486 55486 55486	30 30 30 30 1400 1400 1400 700 700 700 700	12.3 12.3 12.3 69.4 69.4 69.4 69.4 0.33 0.33 0.33	16.81 16.81 16.81 16.81 69.4 69.4 69.4 5.38 5.38 5.38 5.38	25.09 25.09 25.09 69.4 69.4 69.4 16 16 16 16 16	596.673 2042.81352 1051.50009 1091.502 7421.27512 11193.41496 24108.89376 72326.68128 17.45171505 17.45171505 17.45171505 17.45171505	815.4531 2791.84514 225.705012 1491.7194 7421.27512 24108.8938 72326.6813 284.515839 284.515839 284.515839 284.515839 284.515839 284.515839	1217.1159 4167.0074 336.87916 2226.4866 7421.2751 11193.415 24108.894 72326.681 846.14376 846.14376 846.14376 846.14376 846.14376	

	Front doorset to apartments; FD30S; Visofold 1000 Series or similar approved; white																
	aluminium doors; 2373 x 2110; plots 1 and 2; references ED03 and ED04; safety glazed	2	Nr	£2,775.86	£5,551.72	15	30	38 0.35	04921	2700	124	155	186	117344.7551	146680.944	176017.13	
А	Front doorset to apartments; FD30S; Visofold 1000 Series or similar approved; white																
	aluminium doors; 3610 x 2110; plots 3 and 4;																
в	references ED03 and ED04; safety glazed Front doorset to apartments; FD30S; Visofold	2	Nr	£3,577.66	£7,155.32	15	30	38 0.5	33197	2700	124	155	186	178514.3556	223142.945	267771.53	
	1000 Series or similar approved; white aluminium doors; 2598 x 2110; plot 10;																
	reference ED03 Garador or standard 8070 frame or similar	1	Nr	£2,835.32	£2,835.32	15	30	38 0.19	18623	2700	124	155	186	64235.49804	80294.3726	96353.247	
	approved; recessed with Sherwood metal door																
	with laminated oak finish; 2579 x 2194; plot 10; reference ED04	1	Nr	£1,500.00	£1,500.00	15	30	38 0.25	46247	2700	124	155	186	85248.33952	106560.424	127872.51	
D	Garador or standard 8070 frame or similar approved; recessed with Sherwood metal door																
	with laminated oak finish; 2485 x 2185; garage block; reference ED01, 02, 03, 04	4		£1,195.00	64 700 00	15	30	38 0.97	725.05	2700	124	155	100	327216.9474		400035 43	
E	External timber door to match timber	4	INF	1,195.00	14,780.00	15	30	38 0.97	/3505	2700	124	100	190	32/210.94/4	409021.184	490825.42	
	boarding; 1022.5 x 2110; garage block; reference ED05	1	Nr	£1,094.00	£1,094.00	20	30	40 0.06	47243	700	0.33	5.38	16	14.95130175	243.751526	724.9116	
	M60 PAINTING/CLEAR FINISHING, not exceeding 300mm girth	33	m	£4.00	£132.00												
А	MDF window boards; factory primed; generally; 25 x 250mm; bullnosed profile	33	m	£21.00	£693.00												
в	Veneered timber window boards; generally; 25																
А	x 250mm; bullnosed profile Dense aggregate blockwork; 7.3N/mm2	66	m	£27.00	£1,782.00												
	nominally 100mm thick; in cement mortar; stretcher bond: laid flat	162	m2	£22.80	£3,693.60	52	72	101	16.2	2200	0.525	0.75	0 975	18711	26730	34749	
B C	100mm thick; in party walls Dense aggregate blockwork; 7.3N/mm2 in	446	m2		£10,168.80	52	72	101	44.6	2200	0.525	0.75	0.975	51513	73590	95667	
	cement mortar; stretcher bond; laid flat;																
	215mm thick; assumed to be 100mm blocks laid flat	16	m2	£45.58	£729.28	52	72	101	3.44	2200	0.525	0.75	0.975	3973.2	5676	7378.8	
D	Dense aggregate blockwork; 7.3N/mm2 nominally 100mm thick; in cement mortar;																
	stretcher bond; laid flat; cutting blockwork to																
	course 100mm thick Dense aggregate blockwork; 7.3N/mm2	137	m	£5.00	£685.00	52	72	101									
	nominally 100mm thick; in cement mortar; stretcher bond; laid flat; cutting blockwork to																
	course 100mm thick; raking	78	m	£10.00	£780.00	52	72	101									
	Dense aggregate blockwork; 7.3N/mm2 nominally 100mm thick; in cement mortar;																
	stretcher bond; laid flat; cutting blockwork to course 215mm thick	6	m	£10.00	£60.00	52	72	101									
G		-															
	Forming cavities in hollow walls; complete with Ancon stainless steel HRT4 safety ties at the																
н	rate of five per square metre; 100mm wide Cavity closers; 100mm wide, vertical	263 21	m2 m	£18.91 £8.15	£4,973.33 £171.15	52 50	72 75	101 0.00 100	51614	8000	11	56.7	82	454.201	2341.1997	3385.862	
1	Pre cast concrete lintels; 100 x 215mm deep;																
	building in as work proceeds, to suit structural opening 930mm wide	8	Nr	£31.75	£254.00	51	76	106 0.	15996	850	1.2	2.18	3.8	163.1592	296.40588	516.6708	
	Pre cast concrete lintels; 100 x 215mm deep; building in as work proceeds, to suit structural																
	opening 1025mm wide Pre cast concrete lintels; 100 x 215mm deep;	10	Nr	£32.75	£327.50	51	76	106 0.2	20375	850	1.2	2.18	3.8	224.7825	408.354875	711.81125	
	building in as work proceeds, to suit structural																
L	opening 1115mm wide Pre cast concrete lintels; 100 x 215mm deep;	3	Nr	£35.97	£107.91	51	76	106 0.07	19175	850	1.2	2.18	3.8	73.35585	133.263128	232.29353	
	building in as work proceeds, to suit structural opening 1275mm wide	1	Nr	£39.65	£39.65	51	76	106 0.02	74125	850	1.2	2.18	3.8	27 96075	50.7953625	88 542375	
м	Sawn softwood, preservative treated, grade			233.03	233.03	51		100 0.01	/4115	050	1.1	2.10	5.0	27.50075	50.7555025	00.342375	
	C24, wall or partition members, nominally 45 x 89mm	3718	m	£4.10	£15,243.80	39	56	72 14.	89059	630	0.3	5.55	13	2814.32151	52064.9479	121953.93	
N	Sawn softwood, preservative treated, grade C24, wall or partition members, nominally 45 x																
	89mm; fixed to screed or floor boards	274	m	£4.10	£1,123.40	39	56	72 1.	09737	630	0.3	5.55	13	207.40293	3836.95421	8987.4603	
	Standard assumed 12.5mm thick plasterboard linings to timber framing (framing measured																
	elsewhere), generally - measured over	1385	m2	£4.90	£6.786.50	39	56	72 17	7.3125	950	1.4	1.8	3.2	23025.625	29604.375	52630	
	openings																
в	openings Moisture resistant or cement particle board																
в	Moisture resistant or cement particle board linings assumed 12.5mm thick to timber framing (framing measured elsewhere),																
В	Moisture resistant or cement particle board linings assumed 12.5mm thick to timber framing (framing measured elsewhere), generally - measured over openings	370	m2	£6.40	£2,368.00	39	56	72	4.625	950	1.4	1.8	3.2	6151.25	7908.75	14060	
B C	Moisture resistant or cement particle board linings assumed 12.5mm thick to timber framing (framing measured elsewhere), generally - measured over openings Gyproc Soundblock board linings, two layers assumed 12.5mm thick to timber framing	370	m2	£6.40	£2,368.00	39	56	72	4.625	950	1.4	1.8	3.2	6151.25	7908.75	14060	
B C	Moisture resistant or cement particle board linings assumed 12.5mm thick to timber framing (framing measured elsewhere), generally - measured over openings Gyproc Soundblock board linings, two layers assumed 12.5mm thick to timber framing (framing measured elsewhere), generally - measured over openings	370	m2 m2	£6.40 £11.70	£2,368.00 £444.60	39 26	56 39		4.625	950 950	1.4	1.8	3.2	6151.25 631.75	7908.75 812.25	14060	
B C D	Moisture resistant or cement particle board linings assumed 12.5mm thick to timber framing (framing measured elsewhere), generally - measured over openings Gyproc Soundblock board linings, two layers assumed 12.5mm thick to timber framing (framing measured elsewhere), generally -																
B C D	Moisture resistant or cement particle board lineings assumed 12 smm thick to timber framing (framing measured slewhere), generally-measured over openings Grynoc Soundlock board linings, too layers assumed 12.5mm thick to timber framing (framing measured deswhere), generally- measured over openings opynoc Soundlock board linings, two layers assumed 12.5mm thick to timber framing (framing measured deswhere), Angles;																
B C D	Moisture resistant or cement particle board linings assumed 12.5mm thick to timber framing (framing messured elsewhere), generally-messared over openings; Gyproc Soundblock board linings, two layers assumed 12.5mm thick to timber framing (framing messured elsewhere), generally- messured over openings Gyproc Soundblock board linings, two layers assumed 12.5mm thick to timber framing (framing messured elsewhere), andes; complete with all required additional boarding and the like; messured to both sides of walls,	38	m2	£11.70	£444.60												
B C D	Moisture resistant or cement particle board linings assumed 12.5mm thick to timber framing (framing measured elsewhere), generally - measured over openings Gyproc Soundblock board linings, two layers assumed 12.5mm thick to timber framing (framing measured elsewhere), generally - measured over openings Gyproc Soundblock board linings, two layers assumed 12.5mm thick to timber framing (framing measured elsewhere), Angles; complete with all required additional boarding																
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B C D	Moisture resistant or cement particle board linging a sumed 12.5mm thick to timber framing (framing measured elsewhere), generally - measured over openings Gyproc Soundblock board linging, two layers assumed 12.5mm thick to timber framing (framing measured elsewhere), generally - measured over openings Gyproc Soundblock board linging, two layers assumed 12.5mm thick to timber framing (framing measured elsewhere), Angles; complete with all required additional boarding and the like; measured to both sides of walls, generally Gyproc Soundblock board linging, two layers assumed 12.5mm thick to timber framing (framing measured elsewhere), Angles; complete with all required additional boarding (framing measured elsewhere), Angles; complete with all required additional boarding	38	m2	£11.70	£444.60												
B D	Moisture resistant or cement particle board linging a sumed 12.5mm thick to timber framing (framing measured elsewhere), generally - measured over openings Gyproc Soundblock board linging, two layers assumed 12.5mm thick to timber framing (framing measured elsewhere), generally - measured over openings Gyproc Soundblock board linging, two layers assumed 12.5mm thick to timber framing (framing measured elsewhere), Angles; complete with all required additional boarding and the like; measured to both sides of walts, generally Gyproc Soundblock board linging, two layers assumed 12.5mm thick to timber framing (framing measured elsewhere), Angles; complete with all required additional boarding and the like; measured to both sides of walts, generally. 45 degree	38	m2	£11.70	£444.60												
B C D	Noisture resistant or cement particle board linings assumed 12-smm thick to timber framing (framing measured deswhere), generally - measured over openings Gyproc Soundblock board linings, two layers assumed 12-smm thick to timber framing (framing measured deswhere), generally - measured over openings Gyproc Soundblock board linings, two layers assumed 12-smm thick to timber framing (framing measured sewhere), Angles; complete with all required additional boarding and and the service deswhere), Angles; complete with all required additional boarding and the service deswhere), Angles; complete with all required additional boarding assumed 12-smm thick to timber framing (framing measured to both sides of walls, generally, 45 degree Gyproc Soundblock board linings, two layers	38	m2 m	£11.70 £2.00	£444.60 £834.00												
B C D E	Moisture resistant or cement particle board linings assumed 12-smm thick to timber framing (framing measured deswhere), generally - measured over openings Gyproc Soundblock board linings, two layers assumed 12-smm thick to timber framing (framing measured deswhere), generally - measured over openings Gyproc Soundblock board linings, two layers assumed 12-smm thick to timber framing (framing measured sechors), and the second generally and the required additional boarding and the like, measured to both sides of walls, generally, 45 degree Gyproc Soundblock board linings, two layers assumed 12-smm thick to timber framing (framing measured to both sides of walls, generally, 45 degree Gyproc Soundblock board linings, two layers assumed 12-smm thick to timber framing (framing measured to both sides of walls, generally, 45 degree Gyproc Soundblock board linings, two layers	38	m2 m	£11.70 £2.00	£444.60 £834.00												
B C D F	Moisture resistant or cement particle board linings assumed 12.5mm thick to timber framing (framing measured deswhere), generally - measured over openings Gyproc Soundblock board linings, two layers assumed 12.5mm thick to timber framing (framing measured deswhere), generally - measured over openings Gyproc Soundblock board linings, two layers assumed 12.5mm thick to timber framing (framing measured sewhere), Angles; complete with all required additional boarding and the like; measured to both sides of walls, generally. Gsumed 12.5mm thick to timber framing (framing measured deswhere), Angles; complete with all required additional boarding and the like; measured to both sides of walls, generally, 45 degree Gyproc Soundblock board linings, two layers assumed 12.5mm thick to timber framing (framing measured deswhere), frame das, socomplete with all required additional boarding and the like; meaning to thome framing (framing measured deswhere), frame das, socomplete with all required additional boarding and the like; meaning to this fare das, complete with all required additional boarding and the like; meaning the meani	38	m2 m	£11.70 £2.00	£444.60 £834.00												
B C D F	Moisture resistant or cement particle board linings assumed 12.5mm thick to timber framing (framing measured elsewhere), generally - measured over openings Gyproc Soundblock board linings, two layers assumed 12.5mm thick to timber framing (framing measured elsewhere), generally - measured over openings Gyproc Soundblock board linings, two layers assumed 12.5mm thick to timber framing (framing measured elsewhere), Angles; complete with all required additional boarding and the like; measured to both sides of walls, generally Gyproc Soundblock board linings, two layers assumed 12.5mm thick to timber framing (framing measured to both sides of walls, generally, 45 degree Gyproc Soundblock board linings, two layers assumed 12.5mm thick to timber framing (framing measured to both sides of walls, generally, 45 degree Gyproc Soundblock board linings, two layers assumed 12.5mm thick to timber framing (framing measured elsewhere), jrier ends; complete with all required additional boarding and the like; meerally Gyproc Soundblock board linings, two layers assumed 12.5mm thick to timber framing (framing measured to both sides of walls, generally, Gyproc Soundblock board linings, two layers assumed 12.5mm thick to timber framing	38 417 83	m2 m	£11.70 £2.00 £2.00	£444.60 £834.00 £166.00												
B C D F G	Moisture resistant or cement particle board linging a sumed 12.5mm thick to timber framing (framing measured elsewhere), generally - measured over openings Gyproc Soundblock board linging, two layers assumed 12.5mm thick to timber framing (framing measured elsewhere), generally - measured over openings Gyproc Soundblock board linging, two layers assumed 12.5mm thick to timber framing (framing measured elsewhere), Angles; complete with all required additional boarding and the like; measured to both sides of walls, generally Gyproc Soundblock board linging, two layers assumed 12.5mm thick to timber framing (framing measured elsewhere), Angles; complete with all required additional boarding and the like; measured to both sides of walls, generally. 45 degree Gyproc Soundblock board linging, two layers assumed 12.5mm thick to timber framing (framing measured elsewhere), Fair ends; complete with all required additional boarding and the like, generally Gyproc Soundblock board linging, two layers	38 417 83	m2 m	£11.70 £2.00 £2.00	£444.60 £834.00 £166.00												
B C D E F	Moisture resistant or cement particle board linging a sumed 12.5mm thick to timber framing (framing measured elsewhere), generally - measured over openings Gyproc Soundblock board linging, two layers assumed 12.5mm thick to timber framing (framing measured elsewhere), generally - measured over openings Gyproc Soundblock board linging, two layers assumed 12.5mm thick to timber framing (framing measured elsewhere), Angles; complete with all required additional boarding and the like; measured to both sides of walts, generally Gyproc Soundblock board linging, two layers assumed 12.5mm thick to timber framing (framing measured elsewhere), Angles; complete with all required additional boarding and the like; measured to both sides of walts, generally. 35 Gegree Gyproc Soundblock board linging, two layers assumed 12.5mm thick to timber framing (framing measured elsewhere), Faire dnsy complete with all required additional boarding and the like, generaly Gyproc Soundblock board linging, two layers assumed 12.5mm thick to timber framing (framing measured elsewhere), Antuments; to masorry walls; complete with all required assumed to this like measured to both sides of	38 417 83 42	m2 m m	£11.70 £2.00 £2.00 £3.00	£444.50 £834.00 £166.00 £126.00												
B C D F G H	Moisture resistant or cement particle board linging a sumed 12.5mm thick to timber framing (framing measured deswhere), generally - measured over openings Gyproc Soundblock board linging, two layers assumed 12.5mm thick to timber framing (framing measured deswhere), generally - measured over openings Gyproc Soundblock board linging, two layers assumed 12.5mm thick to timber framing (framing measured deswhere), Angles; complete with all required additional boarding and the like; measured to both sides of walls, generally Gyproc Soundblock board linging, two layers assumed 12.5mm thick to timber framing (framing measured deswhere), Angles; complete with all required additional boarding and the like; measured to both sides of walls, generally. 35 Gegree Gyproc Soundblock board linging, two layers assumed 12.5mm thick to timber framing (framing measured deswhere), Faire dnsi; complete with all required additional boarding and the like, generally Gyproc Soundblock board linging, two layers assumed 12.5mm thick to timber framing (framing measured deswhere), faire days complete with all required additional boarding and the like, generally Gyproc Soundblock board linging, two layers assumed 12.5mm thick to timber framing (framing measured deswhere), faire days complete with all required additional boarding and the like, generally Gyproc Soundblock board linging, two layers assumed 12.5mm thick to timber framing (framing measured elsewhere), faire days complete with all required additional boarding and the like, generally	38 417 83 42 635 341	m2 m m m	£11.70 £2.00 £3.00 £1.00 £1.20	E444.60 E834.00 E166.00 E126.00 E635.00 E635.00 E635.00												
B C D E F G G	Noisture resistant or cement particle board linging a sumed 12.5mm thick to timber framing (framing measured deswhere), generally - measured over openings Gyproc Soundblock board linging, two layers assumed 12.5mm thick to timber framing (framing measured deswhere), generally - measured over openings Gyproc Soundblock board linging, two layers assumed 12.5mm thick to timber framing (framing measured deswhere), Angles; complete with all required additional boarding and the like; measured to both sides of walls, generally Gyproc Soundblock board linging, two layers assumed 12.5mm thick to timber framing (framing measured deswhere), Angles; complete with all required additional boarding and the like; measured to both sides of walls, generally. 32 Gegree Gyproc Soundblock board linging, two layers assumed 12.5mm thick to timber framing (framing measured deswhere), Fair ends; complete with all required additional boarding and the like, generally Gyproc Soundblock board linging, two layers assumed 12.5mm thick to timber framing (framing measured deswhere), fair ends; complete with all required additional boarding and the like, generally Gyproc Soundblock board linging, two layers assumed 12.5mm thick to timber framing (framing measured deswhere), fair ends; complete with all required additional boarding and the like, generally Gelection heads, nominally 13mm allowance portybing <i>K</i> pads to partitions; allowance only provision of physico linging between stud	38 417 83 42 635	m2 m m	£11.70 £2.00 £3.00 £1.00	£444.60 £834.00 £126.00 £126.00												
B C D E F G G	Noisture resistant or cement particle board linging a sumed 12.5mm thick to timber framing (framing measured deswhere), generally - measured over openings Gyproc Soundblock board linging, two layers assumed 12.5mm thick to timber framing (framing measured deswhere), generally - measured over openings Gyproc Soundblock board linging, two layers assumed 12.5mm thick to timber framing (framing measured deswhere), Angles; complete with all required additional boarding and the like; measured to both sides of walls, generally Gyproc Soundblock board linging, two layers assumed 12.5mm thick to timber framing (framing measured board linging, two layers assumed 12.5mm thick to timber framing (framing measured board linging, two layers assumed 12.5mm to layers and linging), two layers assumed 12.5mm thick to timber framing (framing tassured deswhere), Jongles; (complete with all required additional boarding and the like, generally (framing measured to both sides of walls, generally. 45 Gyptom defining, two layers assumed 12.5mm thick to timber framing (framing measured deswhere), Jongles; (complete with all required additional boarding and the like, generally (framing measured deswhere), Automents; to assumed 12.5mm thick to timber framing (framing measured deswhere), Automents; to assumed 12.5mm thick to timber framing (framing to accertable) to partitions; allowance only povision heads; nominally 15mm allowance provision of plywood linings tetween stud finaming to accert heavy flangs; future	38 417 83 42 635 341 211	m2 m m m Nr	£11.70 £2.00 £3.00 £1.00 £1.20 £4.50	£444.50 £834.00 £1166.00 £1126.00 £635.00 £635.00 £409.20 £949.50												
B C D E F G J	Noisture resistant or cemen particle board linging assumed 2.5mm thick to timber framing (framing measured deswhere), generally - measured over openings Gyproc Soundblock board linging, two layers assumed 12.5mm thick to timber framing (framing measured deswhere), generally - measured over openings Gyproc Soundblock board linging, two layers assumed 12.5mm thick to timber framing (framing measured deswhere), Angles: complete with all required additional boarding and the like; measured to both sides of walks, generally Gyproc Soundblock board lings, two layers assumed 12.5mm thick to timber framing (framing measured deswhere), Angles: complete with all required additional boarding and the like; measured to both sides of walks, generally. 45 Gener Gyproc Soundblock board lings, two layers assumed 12.5mm thick to timber framing (framing measured sidewhere), Fair ends, complete with all required additional boarding and the like; measured to both sides of walks, generally. 45 Gener Gyproc Soundblock board lings, two layers assumed 12.5mm thick to timber framing (framing measured sidewhere), Fair ends, complete with all required additional boarding measured deswhere), Angles; Gyproc Soundblock board lings, two layers assumed 12.5mm thick to timber framing (framing measured sidewhere), Angles; ounghet with all required additional boarding (framing to acceptive) that in required sealant and the like; measured to both sides of walks, generally control theory that the like installation of approved acoustic insulation	38 417 83 42 635 341	m2 m m m	£11.70 £2.00 £3.00 £1.00 £1.20	E444.60 E834.00 E166.00 E126.00 E635.00 E635.00 E635.00												
B C D E F G J	Noisture resistant or cemen particle board linging a sumed 12.5mm thick to timber framing (framing measured deswhere), generally - measured over openings Gyproc Soundblock board linging, two layers assumed 12.5mm thick to timber framing (framing measured deswhere), generally - measured over openings Gyproc Soundblock board linging, two layers assumed 12.5mm thick to timber framing (framing measured deswhere), Angles; complete with all required additional boarding and the like; measured to both sides of walks, generally Gyproc Soundblock board linging, two layers assumed 12.5mm thick to timber framing (framing measured deswhere), Angles; complete with all required additional boarding and the like; measured to both sides of walks, generally. 45 Gener Gyproc Soundblock board linging, two layers assumed 12.5mm thick to timber framing (framing measured deswhere), frait ends; complete with all required additional boarding and the like; measured to both sides of walks, generally. 45 Gener Gyproc Soundblock board linging, two layers assumed 12.5mm thick to timber framing (framing measured deswhere), frait ends; complete with all required additional boarding and the like; generally (framing measured sisewhere), Apthreming (framing measured sisewhere), Apthreming (framing to acceptive) to partitions; allowance only provision of plywood linning, two layers assumed 12.5mm thick to timber to partitions; aburtily like partitions; allowance only provision of plywood linnings, two requires and the like; installation of approved acoustic insulation between studi assumed to be toorer 50mm thick	38 417 83 42 635 341 211 431 847	m2 m m m Nr m2 m2	£11.70 £2.00 £3.00 £1.00 £1.20 £4.50 £9.85 £2.70	£444.60 £834.00 £166.00 £126.00 £635.00 £649.20 £949.50 £4,245.35 £2,286.90												
B C D E F G H I J K	Moisture resistant or cemen particle board linging assumed 12.5mm thick to timber framing (framing measured deswhere), generally - measured over openings Gyprot Soundblock board linging, two layers assumed 12.5mm thick to timber framing (framing measured elsewhere), generally - measured over openings Gyprot Soundblock board linging, two layers assumed 12.5mm thick to timber framing (framing measured sewhere), Angles; complete with all required additional boarding and the like; measured to both sides of walsi, Gyprot Soundblock board linging, two layers assumed 12.5mm thick to timber framing (framing measured isource), Angles; complete with all required additional boarding and the like; measured to both sides of walsi, generally, 45 degree Gyprot Soundblock board linging, two layers assumed 12.5mm thick to timber framing (framing measured to both sides of walsi, generally, 45 degree Gyprot Soundblock board linging, two layers assumed 12.5mm thick to timber framing (framing measured deswhere), Abutments; to assumed 12.5mm thick to timber framing (framing measured deswhere), Abutments; to assumed 12.5mm thick to timber sensitive and the like; measured to both sides of salant and the like, measured to both sides of selant and the like; measured to both sides of framing to accept heavy fuings, future equipment and the like installation of approved acoustic insulation between studa framing the like installation of approved acoustic insulation between studa framing to single leaf floors	38 417 83 42 635 5341 211 431	m2 m m m Nr	£11.70 £2.00 £3.00 £1.00 £1.20 £4.50 £9.85	E444.60 E834.00 E166.00 E126.00 E635.00 E6405.20 E949.50 E4,245.35												
B C D F G H I J K L M N	Moisture resistant or cement particle board lineings assumed 12.5mm thick to timber framing (framing measured deswhere), generally - measured over openings Gyprot Soundblock board linings, two layers assumed 12.5mm thick to timber framing (framing measured elsewhere), generally - measured over openings Gyprot Soundblock board linings, two layers assumed 12.5mm thick to timber framing (framing measured elsewhere), Angles; complete with all required additional boarding and the like, measured to both sides of walls, generally, 45 degree Gyprot Soundblock board linings, two layers assumed 12.5mm thick to timber framing (framing measured to both sides of walls, generally, 45 degree Gyprot Soundblock board linings, two layers assumed 12.5mm thick to timber framing (framing measured to both sides of walls, generally, 45 degree Gyprot Soundblock board linings, two layers assumed 12.5mm thick to timber framing (framing measured deswhere), Automets; to assumed 12.5mm thick to timber framing (framing measured deswhere), Automets; to assumed 12.5mm thick to timber framing (framing measured deswhere), Automets; to assumed 12.5mm thick to timber framing (framing measured deswhere), Automets; to adthe like, measured to both sides of walls, generally Gyprot Soundblock board linings, two layers assumed 12.5mm thick to timber framing (framing measured deswhere), Automets; to adthe, bits, penerally Gyprot Soundblock board linings, two layers assumed 12.5mm thick to timber framing (framing measured deswhere), Automets; to adthe, bits, penerally defecable; past in particings, allowned and the like, measured to both sides of froming opening for single leaf floors forming opening for samide deors	38 417 83 42 635 341 211 431 847 65	m2 m m m Nr m2 Nr	£11.70 £2.00 £3.00 £1.00 £4.50 £9.85 £2.70	£444.60 £834.00 £166.00 £126.00 £609.20 £949.50 £4,245.35 £4,245.35												
B C D E F G H I J K L L M N A	Noisture resistant or cemen particle board linging a sumed 12.5mm thick to timber framing (framing measured deswhere), generally - measured over openings Gyproc Soundblock board linging, two layers assumed 12.5mm thick to timber framing (framing measured elsewhere), generally - measured over openings Gyproc Soundblock board linging, two layers assumed 12.5mm thick to timber framing (framing measured setwhere), Angles; complete with all required additional boarding and the like; measured to both sides of walls, generally. Gramma 22.5mm thick to timber framing (framing measured deswhere), Angles; complete with all required additional boarding and the like; measured to both sides of walls, generally. 45 degree Gyproc Soundblock board linging, two layers assumed 12.5mm thick to timber framing (framing measured deswhere), Angles; complete with all required additional boarding and the like; meanally to thome framing (framing measured deswhere), Abutments; too layers Cosundblock board linging, two layers assumed 12.5mm thick to timber framing (framing measured deswhere), Abutments; too add the like; meanally deflection heads; nominally 15mm allowance only alls; generally deflection heads; nominally 15mm allowance only provide the like installation of approved 36 acoustic insulation bothers; forming opening for saile leaf floos forming opening for vardrobe doors Allow for forming soil pipe casings; comprising dapproved 38.3 xamme time framing df ar	38 417 83 42 635 341 211 431 847 65 13	m2 m m m Nr m2 Nr Nr	£11.70 £2.00 £3.00 £1.00 £4.50 £9.85 £2.70 £5.00	£444.60 £834.00 £166.00 £126.00 £409.20 £949.50 £4,245.35 £2,286.90 £25.00												
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B C D E F G H IJ K L M N A B	Noisture resistant or cement particle board lineing a susured 12.5mm thick to timber framing (framing measured deswhere), generally - measured over openings Gyproc Soundblock board linings, two layers assumed 12.5mm thick to timber framing (framing measured deswhere), generally - measured over openings Gyproc Soundblock board linings, two layers assumed 12.5mm thick to timber framing (framing measured deswhere), Angles; complete with all required additional boarding and the like; measured to both sides of walls, generally Gyproc Soundblock board linings, two layers assumed 12.5mm thick to timber framing (framing measured deswhere), Angles; complete with all required additional boarding and the like; measured to both sides of walls, generally. 35 Gegree Gyproc Soundblock board linings, two layers assumed 12.5mm thick to timber framing (framing measured deswhere), Angles; complete with all required additional boarding and the like, generally Gyproc Soundblock board linings, two layers assumed 12.5mm thick to timber framing (framing measured deswhere), faire ends; complete with all required additional boarding and the like, generally Gyproc Soundblock board linings, two layers assumed 12.5mm thick to timber framing (framing measured deswhere), faire ends; complete with all required additioned searcher), faire ends assumed 12.5mm thick to timber framing (framing to accept heavy fuirs, future equipment and the like installation of approved acoustic insulation between studi assumed to be Isover 50mm thick forming opening for single leaf floors forming opening for single leaf floors forming opening for wardrobe doors Allow for forming opling carings, comprising of approved 38x 38mm timber framing thig at allow faces overall girth not exceeding 600mm.	38 417 83 42 635 341 211 431 847 65 13	m2 m m m Nr m2 Nr Nr	£11.70 £2.00 £1.00 £1.20 £4.50 £4.50 £9.85 £5.00	£444.60 £834.00 £166.00 £126.00 £409.20 £949.50 £4,245.35 £2,286.90 £25.00			51		950							
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B C D F G H J K L M N A B	Noiscure resistant or cemen particle board linging a sourced 12.5mm thick to timber framing (framing measured deswhere), generally - measured over openings Gyproc Soundblock board linning, two layers assumed 12.5mm thick to timber framing (framing measured deswhere), generally - measured over openings Gyproc Soundblock board linning, two layers assumed 12.5mm thick to timber framing (framing measured deswhere), Angles; complete with all required additional boarding and the like; measured to both sides of walks, sourced 12.5mm thick to timber framing (framing measured deswhere), Angles; complete with all required additional boarding and the like; measured to both sides of walks, sourced 12.5mm thick to timber framing (framing measured seawhere), Angles; complete with all required additional boarding and the like; generally opproc Soundblock board linning, two layers assumed 12.5mm thick to timber framing (framing measured deswhere), Angles; complete with all required additional boarding and the like; generally Gyproc Soundblock board linning, two layers assumed 12.5mm thick to timber framing (framing measured deswhere), Automents; to additional boarding and the like; generally Gyproc Soundblock board linning, two layers assumed 12.5mm thick to timber framing (framing measured deswhere), Automents; to alls; generally deflection heads; nominally 1.5mm allowance only provision of physood linning to be additional between studi framing to acceptive additional boarding and the like; measured to be tower Somm thick froming opening for salies of foros forming opening for salies of additional between studi assument to be tower Somm thick all corners and automents; linning 4% at 600mm certers vertically, with vertical framing all corners and automents; linning 4% at 600m certers vertically, with vertical framing all corners and automents; linning 4% at 600m certers vertically, with vertical framing all corners and automents; linning 4% at 600m certers vertically, with vertical framing all corners and automents; linning 4%	38 417 83 42 635 341 211 431 847 65 13 6	m2 m m m Nr m2 Nr Nr Nr Nr	£11.70 £2.00 £1.00 £1.20 £4.50 £4.50 £9.85 £5.00	£444.60 £834.00 £166.00 £126.00 £409.20 £949.50 £4,245.35 £2,286.90 £25.00 £25.00 £30.00	26	39	51	0.475	950	14	1.8	3.2	631.75	812.25	1444	
B C D E F G HIJ K L MNA B	Noisure resistant or cemen particle board linging a sumed 12.5mm thick to timber framing (framing measured deswhere), generally - measured over openings Gyproc Soundblock board linging, two layers assumed 12.5mm thick to timber framing (framing measured deswhere), generally - measured over openings Gyproc Soundblock board linging, two layers assumed 12.5mm thick to timber framing (framing measured deswhere), Angles; complete with all required additional boarding and the like; measured to both sides of walls, generally Gyproc Soundblock board linging, two layers assumed 12.5mm thick to timber framing (framing measured sewhere), Angles; complete with all required additional boarding and the like; generally Gyproc Soundblock board linging, two layers assumed 12.5mm thick to timber framing (framing measured deswhere), Angles; complete with all required additional boarding and the like; generally Gyproc Soundblock board linging, two layers assumed 12.5mm thick to timber framing (framing measured deswhere), Angles; complete with all required additional boarding and the like; generally Gyproc Soundblock board linging, two layers assumed 12.5mm thick to timber framing (framing measured deswhere), Abutment; to using centrally deflection heads; nominally 15mm allowance englement and the like; measured to both sides of the second for single leaf flows forming opening for single leaf flows forming opening for single leaf flows flow for forming soil pipe casings, comprising all corners and abutments; linning 41% at 600mm centres vertically, with vertical finaming all corners and abutments; linning 41% at 600m centres vertically, with vertical finaming all corners and abutments; linning 41% at 600m centres vertically, with vertical finaming all corners and abutments; linning 41% at 600m centres vertically, with vertical finangs 610 corners and abutments; linning 41% at 600m centres vertically, with vertical finangs 610 corners and abutments; linning 41% at 600m centres vertically, with vertical finangs 610 corners and abutme	38 417 83 42 635 341 211 431 847 65 13 6	m2 m m m Nr m2 Nr Nr Nr Nr	£11.70 £2.00 £1.00 £1.20 £4.50 £4.50 £9.85 £5.00	£444.60 £834.00 £166.00 £126.00 £409.20 £949.50 £4,245.35 £2,286.90 £25.00 £25.00 £30.00	26	39	51	0.475	950	14	1.8	3.2	631.75	812.25	1444	
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B C D E F G H I J K L MNA B B	Noisture resistant or cemen particle board linging assumed 12.5mm thick to timber framing (framing measured deve openings) Gyproc Soundblock board linging, two layers assumed 12.5mm thick to timber framing (framing measured deve openings) Gyproc Soundblock board linging, two layers assumed 12.5mm thick to timber framing (framing measured severher), angles; complete with all required additional boarding and the live; measured to both sides of wals, Gyproc Soundblock board linging, two layers assumed 12.5mm thick to timber framing (framing measured severher), Angles; complete with all required additional boarding and the live; measured to both sides of wals, Gyproc Soundblock board linging, two layers assumed 12.5mm thick to timber framing (framing measured deswhere), fragets; complete with all required additional boarding and the live; measured to both sides of wals, generally, 45 degree Gyproc Soundblock board linging, two layers assumed 12.5mm thick to timber framing (framing measured deswhere), fautoments; too assumed 12.5mm thick to timber framing (framing measured deswhere), fautoments; too additional boarding and the like; measured to both sides of salam to the like, measured to both sides of framing opening for salied east forming opening for salied ea	38 417 83 42 635 341 211 431 847 65 13 6 86	m2 m m m mr Nr m2 Nr Nr Nr Nr Nr	£11.70 £2.00 £1.00 £1.00 £1.00 £4.50 £9.85 £5.00 £5.00 £5.00	£444.60 £834.00 £166.00 £126.00 £409.20 £949.50 £4,245.35 £2,286.90 £30.00 £30.00	26	22	31	0.475	950	1.4	18	32	631.75	812.25	1444	
B C D F G H I J K L M N A B	Moisture resistant or cemen particle board lineings assumed 12.5mm thick to timber framing (framing measured desewhere), generally - measured over openings Gyproc Soundblock board linings, two layers assumed 12.5mm thick to timber framing (framing measured elsewhere), generally - measured over openings Gyproc Soundblock board linings, two layers assumed 12.5mm thick to timber framing (framing measured elsewhere), Angles; complete with all required additional boarding and the like; measured to both sides of walls, generally, 45 degree Gyproc Soundblock board linings, two layers assumed 12.5mm thick to timber framing (framing measured to both sides of walls, generally, 45 degree Gyproc Soundblock board linings, two layers assumed 12.5mm thick to timber framing (framing measured to both sides of walls, generally, 45 degree Gyproc Soundblock board linings, two layers assumed 12.5mm thick to timber framing (framing measured desewhere), Angles; complete with all required additional boarding and the like; measured to both sides of walls, generally, 45 degree Gyproc Soundblock board linings, two layers assumed 12.5mm thick to timber framing (framing measured desewhere), Routhments; to assumed 12.5mm thick to timber straing (framing measured desewhere), Routhenes; two layes of Gyproc Soundblock board linings, two layers assumed 12.5mm thick to timber straing (framing opening minally L5mm silowance optry#& pasts of physics allowance only partising opening for saliele left flors forming opening for saliele left flors forming opening for saliele left flors forming opening for saliele leased all corners and abutments; lining with two layers of Gyproc Soundblock board, lineing 410 corners and abutments; lining with two layers of Gyproc Soundblock board, three frees, overal girth foO to 3000mm ground flors, product reference Vicaim 30 Ai with were inlay#∰; ESISJ, 101 or equal and all corners and abutments; lining with two layers of Gyproc Coundblock board, three frees, overal girth 600 to 3000000000000000000000000000000000	38 417 83 42 635 341 211 431 847 65 13 6 86	m2 m m m mr Nr m2 Nr Nr Nr Nr Nr	£11.70 £2.00 £3.00 £1.20 £4.50 £4.50 £3.65 £35.65 £43.67	£444.60 £834.00 £166.00 £126.00 £409.20 £949.50 £4,245.35 £2,286.90 £30.00 £30.00	26	22	31	0.475	950	1.4	18	3.2 3.2 3.2	631.75	812.25 2647.08 153300	1444	
B C D E F G H J K L M N A B A B	Moisture resistant or cemen particle board linging assumed 12.5mm thick to timber framing (framing measured deswhere), generally - measured over openings Gyproc Soundblock board linging, two layers assumed 12.5mm thick to timber framing (framing measured elsewhere), generally - measured over openings Gyproc Soundblock board linging, two layers assumed 12.5mm thick to timber framing (framing measured elsewhere), Angles; complete with all required additional boarding and the like, measured to both sides of walls, generally. (framing measured setwork), Angles; complete with all required additional boarding and the like, measured to both sides of walls, generally. 45 degree Gyproc Soundblock board linging, two layers assumed 12.5mm thick to timber framing (framing measured to both sides of walls, generally, 45 degree Gyproc Soundblock board linging, two layers assumed 12.5mm thick to timber framing (framing measured deswhere), Angles; complete with all required additional boarding and the like, measured to both sides of walls, generally. 45 degree Gyproc Soundblock board linging, two layers assumed 12.5mm thick to timber framing (framing measured deswhere), Abutments; to assumed 12.5mm thick to timber framing (framing measured deswhere), Abutments; to alls, generally Gyproc Soundblock board linging, two layers assumed 12.5mm thick to timber framing (framing measured deswhere), Abutments; to alls, generally deficition teads; nonmally (Smm allown and the like; measured to be sover 50mm thick forming opening for salls for doors forming opening for salls of doors forming opening for salls for doors Allow for forming sol ippe casings, comprising disproved Sind ghypotact reference Vicama Oak More forting sol ippe casings, comprising dopmore traing the abutments; linning the all corners and a	38 417 83 42 635 341 211 431 847 65 13 6 86	m2 m m m Nr m2 Nr Nr Nr Nr m	£11.70 £2.00 £3.00 £1.20 £4.50 £4.50 £3.65 £35.65 £43.67	£444.60 £834.00 £166.00 £126.00 £409.20 £949.50 £4,245.35 £2,286.90 £3,000 £3,005.90 £174.68	26 18	22	33	0.475	950	14	1.8	3.2 3.2 3.2	631.75 2058.84 119700	812.25 2647.08 153300	1444	
B C D E F G H J K L M N A B A B	Noisure resistant or cemen particle board linging a sumed 12.5mm thick to timber faming (framing measured deswhere), generally - measured over openings Gyproc Soundblock board linging, two layers assumed 12.5mm thick to timber framing (framing measured deswhere), generally - measured over openings Gyproc Soundblock board linging, two layers assumed 12.5mm thick to timber framing (framing measured deswhere), Angles; complete with all required additional boarding and the like; measured to both sides of walks, generally Gyproc Soundblock board linging, two layers assumed 12.5mm thick to timber framing (framing measured deswhere), Angles; complete with all required additional boarding and the like; measured to both sides of walks, generally Gyproc Soundblock board linging, two layers assumed 12.5mm thick to timber framing (framing measured deswhere), Angles; complete with all required additional boarding and the like; generally Gyproc Soundblock board linging, two layers assumed 12.5mm thick to timber framing (framing measured deswhere), Automents; to assumed 12.5mm thick to timber framing (framing measured deswhere), Automents; to assumed 12.5mm thick to timber framing (framing measured deswhere), Automents; to assumed 12.5mm thick to timber framing (framing measured deswhere), Automents; to assumed 12.5mm thick to timber framing (framing to acceptive) that larequired asalant and the like; measured to both sides of the sound adaption of physical between stud forming opening for single leaf floors forming opening for	38 417 83 42 635 341 211 431 847 65 13 6 86	m2 m m m Nr m2 Nr Nr Nr Nr m	£11.70 £2.00 £3.00 £1.20 £4.50 £4.50 £3.65 £35.65 £43.67	£444.60 £834.00 £166.00 £126.00 £409.20 £949.50 £4,245.35 £2,286.90 £3,000 £3,005.90 £174.68	26 18	22	33	0.475	950	14	1.8	3.2 3.2 3.2 16	631.75 2058.84 119700 67.10865315	812.25 2647.08 153900	1444 4705.92 273600 3253.7529	
B C D F G H I J K L M N A B A B	Noisure resistant or cemen particle board linging a sumed 12.5mm thick to timber faming (faming measured deswhere), generally - measured over openings Gyproc Soundblock board linging, two layers sumed 12.5mm thick to timber framing (framing measured deswhere), generally - measured over openings Gyproc Soundblock board linging, two layers susured 12.5mm thick to timber framing (framing measured deswhere), angles; complete with all required additional boarding and the like; measured to both sides of walls, generally Gyproc Soundblock board linging, two layers susured 12.5mm thick to timber framing (framing measured elswhere), angles; complete with all required additional boarding and the like; measured to both sides of walls, generally. 45 Gyper and linging, two layers susured 12.5mm thick to timber framing (framing measured deswhere), layers assumed 12.5mm thick to timber framing and the like; generally (framing measured deswhere), layers susured 12.5mm thick to timber framing and the like; generally (framing measured deswhere), layers susured 12.5mm thick to timber framing (framing measured deswhere), layers susured 12.5mm thick to timber framing thraining measured box thoris layers susured 12.5mm thick to timber framing (framing to acceptive) thal required selation of physood lings, two layers sustant and the like; measured to both sides of walls, generally deflection heads, nominally 15mm allowance only provision of physood lings, two layers forming opening for says of doors forming opening for wardrobe doors Allow for forming the sax difference Vicaim Table at allowers envirable, with weater langers of approved 3s a Samm timber framing flag at form certers vertically, with vertical framing at all corners and abutments, lining with two layers of Gyproc Soundblock board, three foces, overall gift, the SL 100 c	38 417 83 42 635 341 211 431 847 65 13 6 86	m2 m m m Nr m2 Nr Nr Nr Nr m	£11.70 £2.00 £3.00 £1.20 £4.50 £4.50 £3.65 £35.65 £43.67	£444.60 £834.00 £166.00 £126.00 £409.20 £949.50 £4,245.35 £2,286.90 £3,000 £3,005.90 £174.68	26 18	22	33	0.475 1.548 90 05137	950 950 950 700	14 14 14 0.33	1.8	3.2 3.2 3.2 16	631.75 2058.84 119700	812.25 2647.08 153900	1444 4705.92 273600 3253.7529	
B C D E F G H J K L M N A B A B	Noisure resistant or cemen particle board linging assured 2.5mm thick to timber faming (framing measured deswhere), generally - measured over openings Gyproc Soundblock board linging, two layers assured 12.5mm thick to timber framing (framing measured deswhere), generally - measured over openings Gyproc Soundblock board linging, two layers assured 12.5mm thick to timber framing (framing measured deswhere), Angles; complete with all required additional boarding and the like; measured to both sides of walks, generally Gyproc Soundblock board lings, two layers assumed 12.5mm thick to timber framing (framing measured deswhere), Angles; complete with all required additional boarding and the like; measured to both sides of walks, generally. Soundblock board lings, two layers assumed 12.5mm thick to timber framing (framing measured sizewhere), Angles; complete with all required additional boarding and the like; measured to both sides of walks, generally. A5 degreen (framing measured sizewhere), Fair ends; complete with all required additional boarding and the like; measured to both sides of walks, generally. A5 degreen (framing measured sizewhere), Fair ends; complete with all required additional boarding and the like; measured to both sides of walks, generally. Gyproc Soundblock board lings, two layers assumed 12.5mm thick to timber framing (framing to acceptive) thal required sealant and the like; measured to both sides of walks, generally. More forming opening for sairs of doors forming opening for sairs of doors formed doers product reference Vicaima Oak sperowel; single door to plot 1 and 2; 428 x Histmm; reference 1001, 1002, 1003, 1005, 1005.	38 417 83 42 635 341 211 431 847 65 13 36 86 4 5	m2 m m mr m2 Nr Nr Nr Nr Nr	£11.70 £2.00 £3.00 £1.00 £1.00 £4.50 £4.50 £5.00 £5.00 £5.00 £35.65 £43.67 £253.43	£444.50 £834.00 £126.00 £126.00 £4035.00 £40,205 £4,245.35 £2,285.00 £30.00 £30.00 £30,005.90 £1,74.58 £1,267.15	26 18 18 28	39 22 22 41	 51 33 33 53 0.29 	0.475 1.548 90 05137	950 950 950 700	14 14 14 0.33	1.8 1.8 1.8 5.38	3.2 3.2 3.2 16	631.75 2058.84 119700 67.10865315	812.25 2647.08 153900	1444 4705.92 273600 3253.7529	
B C D F G H J J K L M N A B A B C	Noisure resistant or cemen particle board linging assured 2.5mm thick to timber faming (framing measured deswhere), generally - measured over openings Gyproc Soundblock board linging, two layers assured 12.5mm thick to timber framing (framing measured deswhere), generally - measured over openings Gyproc Soundblock board linging, two layers assured 12.5mm thick to timber framing (framing measured deswhere), Angles; complete with all required additional boarding and the like; measured to both sides of walks, generally Gyproc Soundblock board lings, two layers assured 12.5mm thick to timber framing (framing measured deswhere), Angles; complete with all required additional boarding and the like; measured to both sides of walks, generally. Soundblock board lings, two layers assumed 12.5mm thick to timber framing measured site where), Angles; complete with all required additional boarding and the like; measured to both sides of walks, generally. A5 degreen Gyproc Soundblock board lings, two layers assumed 12.5mm thick to timber framing (framing measured site where), Fair ends; complete with all required additional boarding and the like; measured to both sides of walls, generally Gyproc Soundblock board lings, two layers assumed 12.5mm thick to timber framing (framing measured site where), Automents; to alls, generally deflection heads; nominally 1.5mm allowance engument and the like; measured to both sides of walls, generally deflection heads; nominally 1.5mm allowance engument and the like; forming opening for sains of dearros forming opening for sains of doors forming	38 417 83 42 635 341 211 431 847 65 3 6 86 4 5 1	m2 m m m Nr Nr Nr Nr Nr	 £11.70 £2.00 £2.00 £3.00 £1.00 £1.20 £4.50 £5.00 £5.00 £5.00 £5.01 £5.65 £43.67 £253.43 £303.98 	£444.60 £834.00 £1366.00 £126.00 £645.00 £649.50 £4,245.35 £2,286.90 £3,000 £3,005.90 £1,267.15 £1,267.15 £303.98		 39 22 41 41 	51 33 53 0.29 53 0.04	0.475 1.548 90 05137 34037	950 950 950 700	1.4 1.4 0.33 0.33	1.8 1.8 5.38 5.38	3.2 3.2 3.2 16 16	631.75 2058.84 119700 67.10865315 10.02625701	812.25 2647.08 153900 1094.07441 163.458372	1444 4705.92 273600 3253.7529 486.12155	
B C D F G H J J K L M N A B A B C	Noisure resistant or cemen particle board linging a sumed 12.5mm thick to timber framing (framing measured deswhere), generally - measured over openings Gyproc Soundblock board linging, two layers assumed 12.5mm thick to timber framing (framing measured elsewhere), generally - measured over openings Gyproc Soundblock board linging, two layers assumed 12.5mm thick to timber framing (framing measured elsewhere), Angles; complete with all required additional boarding and the like; measured to both sides of walks, generally. Gyproc Soundblock board linging, two layers assumed 12.5mm thick to timber framing (framing measured isswhere), Angles; complete with all required additional boarding and the like; measured to both sides of walks, generally. 45 degree Gyproc Soundblock board linging, two layers assumed 12.5mm thick to timber framing (framing measured elsewhere), and the side orgone Soundblock board linging, two layers assumed 12.5mm thick to timber framing (framing measured deswhere), abutment; to orgone Soundblock board linging, two layers assumed 12.5mm thick to timber framing (framing measured deswhere), abutment; to add the like; meanally Gyproc Soundblock board linging, two layers assumed 12.5mm thick to timber framing (framing measured deswhere), abutment; to add the like; meanally Gyproc Soundblock board linging, two layers assumed 12.5mm thick to timber framing (framing measured deswhere), abutment; to all, generally deflection heads; nominally 15mm allowance only provision of phywood linging between stud framing opening for saile leaf floors forming opening for obudick board, three faces, overall gifth not oblo 5000mm all corers and abutments; linning 412 at 600m ent	38 417 83 42 635 341 211 431 847 65 13 36 86 4 5	m2 m m mr m2 Nr Nr Nr Nr Nr	£11.70 £2.00 £3.00 £1.00 £1.00 £4.50 £4.50 £5.00 £5.00 £5.00 £35.65 £43.67 £253.43	£444.50 £834.00 £126.00 £126.00 £4035.00 £40,205 £4,245.35 £2,285.00 £30.00 £30.00 £30,005.90 £1,74.58 £1,267.15	26 18 18 28	39 22 22 41	 51 33 33 53 0.29 	0.475 1.548 90 05137 34037	950 950 950 700	1.4 1.4 0.33 0.33	1.8 1.8 1.8 5.38	3.2 3.2 3.2 16 16	631.75 2058.84 119700 67.10865315	812.25 2647.08 153900 1094.07441 163.458372	1444 4705.92 273600 3253.7529 486.12155	

D	ground floors, product reference Vicaima Oak with veneer inlay镶嵌; EX5.1/01 or equal and approved; single door to plot 3 and 4; 838 x													
	1981mm; reference ID02, ID03, ID06, ID07, ID08	5	Nr	£241.48	£1,207.40	28	41	53 0.2905137	700	0.33	5.38	16 67.10865315	1094.07441	3253.7529
E	Vicaima or similar approved; internal doors to ground floors, product reference Vicaima Oak	-			,									
	with veneer inlay镶嵌; EX5.1/01 or equal and approved; single door to plot 3 and 4; 686 x													
F	1981mm; reference ID01, ID05, ID10 Vicaima or similar approved; internal doors to	3	Nr	£248.38	£745.14	28	41	53 0.1426914	700	0.33	5.38	16 32.96172033	537.375925	1598.144
	ground floors, product reference Vicaima Oak with veneer inlay镶嵌; EX5.1/01 or equal and													
	approved; single door to plots 5,6,7,8 and 9; 838 x 1981mm; reference ID01, ID03, ID04,													
	ID07, ID11, ID13, ID14, ID16; assumed to be fire rated 30 minutes	8	Nr	£256.43	£2,051.44	28	41	53 0.4648218	700	0.33	5.38	16 107.373845	1750.51905	5206.0046
G	Vicaima or similar approved; internal doors to ground floors, product reference Vicaima Oak													
	with veneer inlay镶嵌; EX5.1/01 or equal and approved; single door to plot 5,6,7,8 and 9;													
	726 x 1981mm; reference ID17; assumed to be fire rated 30 minutes	1	Nr	£285.08	£285.08	28	41	53 0.0503372	700	0.33	5.38	16 11.62789551	189.569933	563.77675
н	Vicaima or similar approved; internal doors to ground floors, product reference Vicaima Oak													
	with veneer inlay镶嵌; EX5.1/01 or equal and approved; double door to plot 5,6,7,8 and 9;													
	1062 x 1981mm; reference ID06, ID10; assumed to be fire rated 30 minutes	2	Nr	£485.20	£970.40	28	41	53 0.1472675	700	0.33	5.38	16 34.01880174	554.609556	1649.3964
I	ground floors, product reference Vicaima Oak with veneer inlay镶嵌; EX5.1/01 or equal and													
	approved; single door to plot 10; 838 x 1981mm; reference ID01, ID02, ID04, ID07,													
1	ID09 Vicaima or similar approved; internal doors to	5	Nr	£244.48	£1,222.40	28	41	53 0.2905137	700	0.33	5.38	16 67.10865315	1094.07441	3253.7529
	ground floors, product reference Vicaima Oak with veneer inlay镶嵌; EX5.1/01 or equal and													
	approved; single door to plot 10; 626 x 1981mm; reference ID06	1	Nr	£306.98	£306.98	28	41	53 0.0434037	700	0.33	5.38	16 10.02625701	163.458372	486.12155
к	Vicaima or similar approved; internal doors to ground floors, product reference Vicaima Oak													
	with veneer inlay镶嵌; EX5.1/01 or equal and approved; single door to plot 10; 762 x													
L	1981mm; reference ID03 Vicaima or similar approved; internal doors to	1	Nr	£239.43	£239.43	28	41	53 0.0528333	700	0.33	5.38	16 12.20448537	198.970095	591.73262
	ground floors, product reference Vicaima Oak with veneer inlay镶嵌; EX5.1/01 or equal and													
	approved; double door to plot 10; 1070 x 1981mm; reference ID05, ID08	2	Nr	£451.45	£902.90	28	41	53 0.1483769	700	0.33	5.38	16 34.2750639	558.787405	1661.8213
А	Vicaima or similar approved; internal doors to living rooms, product reference Vicaima Oak													
	with fully glazed infill panel; EX5.1/1/DFG16 or equal and approved; single door to plot 1 and													
в	2; 838 x 1981mm; reference ID04, ID08 Vicaima or similar approved; internal doors to	2	Nr	£403.06	£806.12	28	41	55 0.1162055	700	0.33	5.38	16 26.84346126	437.629762	1301.5012
	living rooms, product reference Vicaima Oak with fully glazed infill panel; EX5.1/1/DFG16 or													
	equal and approved; single door to plot 3 and 4; 838 x 1981mm; reference ID04, ID09	2	Nr	£403.06	£806.12	28	41	55 0.1162055	700	0.33	5.38	16 26.84346126	437.629762	1301.5012
с	Vicaima or similar approved; internal doors to living rooms, product reference Vicaima Oak													
	with fully glazed infill panel; EX5.1/1/DFG16 or equal and approved; single door to plot 5,6,7,8													
	and 9; 838 x 1981mm; reference ID05, ID12, ID22, ID29; assumed to be fire rated 30													
D	minutes Vicaima or similar approved; internal doors to	4	Nr	£592.43	£2,369.72	28	41	55 0.2324109	700	0.33	5.38	16 53.68692252	875.259525	2603.0023
	living rooms, product reference Vicaima Oak with fully glazed infill panel; EX5.1/1/DFG16 or													
	equal and approved; single door to plot 10; 838 x 1981mm; reference ID11	1	Nr	£592.43	£592.43	28	41	55 0.0581027	700	0.33	5.38	16 13.42173063	218.814881	650.75058
E	Vicaima or similar approved; internal doors to first floors, product reference Vicaima Oak													
	N1000 plain doors with no inlay; EX5.1/01 or equal and approved; single door to plot 1 and													
	2; 838 x 1981mm; reference ID10, ID11, ID12, ID13, ID15, ID18, ID19, ID20, ID21, ID22	10	Nr	£205.97	£2,059.70	28	41	55 0.5810273	700	0.33	5.38	16 134.2173063	2188.14881	6507.5058
F	Vicaima or similar approved; internal doors to first floors, product reference Vicaima Oak													
	N1000 plain doors with no inlay; EX5.1/01 or equal and approved: single door to plot 3 and													
	4; 838 x 1981mm; reference ID12, ID13, ID14, ID15, ID16, ID17, ID18, ID21, ID22, ID23, ID24	11	Nr	£205.97	£2,265.67	28	41	55 0.63913	700	0.33	5.38	16 147.6390369	2406 96369	7158 2563
G	Vicaima or similar approved; internal doors to first floors, product reference Vicaima Oak			2205.57	22,205.07	20		55 0.05515	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	0.33	5.50	10 147.0050505	2400.50505	/150.2505
	N1000 plain doors with no inlay; EX5.1/01 or equal and approved; single door to plot 3 and													
н	4; 762 x 1981mm; reference ID19 Vicaima or similar approved; internal doors to	1	Nr	£201.40	£201.40	28	41	55 0.0528333	700	0.33	5.38	16 12.20448537	198.970095	591.73262
	first floors, product reference Vicaima Oak N1000 plain doors with no inlay; EX5.1/01 or													
	equal and approved; single door to plot 5,6,7,8 and 9; 838 x 1981mm; reference ID18, ID20,													
	ID21, ID24, ID27, ID30, ID31, ID33, ID34, ID35, ID36, ID37, ID38; assumed to be fire rated 30													
1	minutes Vicaima or similar approved; internal doors to	13	Nr	£217.92	£2,832.96	28	41	55 0.7553355	700	0.33	5.38	16 174.4824982	2844.59346	8459.7575
	first floors, product reference Vicaima Oak N1000 plain doors with no inlay; EX5.1/01 or													
	equal and approved; single door to plot 5,6,7,8 and 9; 626 x 1447mm; reference ID39, ID42,													
J	ID45; assumed to be fire rated 30 minutes first floors, product reference Vicalma Oak	3	Nr	£249.02	£747.06	28	41	55 0.0951113	700	0.33	5.38	16 21.97071261	358.189193	1065.2467
	N1000 plain doors with no inlay; EX5.1/01 or equal and approved; double door to plot													
	5,6,7,8 and 9; 1062 x 1981mm; reference ID23, ID28; assumed to be fire rated 30													
к	minutes Vicaima or similar approved; internal doors to	2	Nr	£482.46	£964.92	28	41	55 147.26754	700	0.33	5.38	16 34018.80174	554609.556	1649396.4
	first floors, product reference Vicaima Oak N1000 plain doors with no inlay; EX5.1/01 or													
	equal and approved; single door to plot 10; 838 x 1981mm; reference ID12	1	Nr	£205.97	£205.97	28	41	55 0.0581027	700	0.33	5.38	16 13.42173063	218 814881	650 75058
А	Vicaima or similar approved; internal doors to boiler cupboards, product reference Vicaima	•			,	-	-						1001	
	performance door; single door to plot 1 and 2; 838 x 1981mm; 33 dB acoustic rating; fire													
в	rated; reference ID14 Vicaima or similar approved; internal doors to	1	Nr	£254.52	£254.52	28	41	53 0.0581027	700	0.33	5.38	16 13.42173063	218.814881	650.75058
	boiler cupboards, product reference Vicaima performance door; single door to plot 1 and 2;													
	726 x 1981mm; 33 dB acoustic rating; fire rated; reference ID17	1	Nr	£299.49	£299.49	28	41	53 0.0503372	700	0.33	5.38	16 11.62789551	189.560032	563.77675
с	Vicaima or similar approved; internal doors to boiler cupboards, product reference Vicaima	1												
	performance door; double door to plot 3 and 4; 839 x 1981mm; 33 dB acoustic rating; fire													
D	rated; reference ID11 Vicaima or similar approved; internal doors to	1	Nr	£262.52	£262.52	28	41	53 0.0581721	700	0.33	5.38	16 13.43774702	219.075997	651.52713
-	boller cupboards, product reference Vicaima performance door; single door to plot 3 and 4;													
	762 x 1981mm; 33 dB acoustic rating; fire rated; reference ID20	1	Nr	£299.49	£299.49	28	41	53 0.0528333	700	0.33	5.38	16 12.20448537	198 970007	591 73262
E	boiler cupboards, product reference Vicaima performance door; single door to plot 5,6,7,8	1	ref	2233.49	2233.43		-1	JJ J.UJ28333		0.33	J.JD	-0 +2.20448033/	250.570095	
	and 9; 926 x 1447mm; 33 dB acoustic rating; fire rated; reference ID02, ID15, ID19, ID32,													
F	ID43 sliderobe door to plot 1 and 2; 2Nr sliding	5	Nr	£541.68	£2,708.40	28	41	53 0.2344864	700	0.33	5.38	16 54.16634685	883.075594	2626.2471
	leaves within structural opening of 1828.8 x 2375mm; reference ID23	1	Nr	£620.00	£620.00	28	41	53 0.130302	700	0.33	5.38	16 30.099762	490.717332	1459.3824
G	sliderobe door to plot 1 and 2; 2Nr sliding leaves within structural opening of 1440 x	1		_310.00				0.130302						
н	2375mm; reference ID24, ID25 sliderobe door to plot 3 and 4; 2Nr sliding	2	Nr	£620.00	£1,240.00	28	41	53 0.2052	700	0.33	5.38	16 47.4012	772.7832	2298.24
	leaves within structural opening of 2435 x 2375mm; reference ID25, ID26	2	Nr	£620.00	£1,240.00	28	41	53 0.3469875	700	0.33	5.38	16 80.1541125	1306.75493	3886.26

1	sliderobe door to plot 5,6,7,8 and 9; 2Nr sliding leaves within structural opening of 1828.8 x															
J	2000mm; reference ID40, ID41 sliderobe door to plot 10; 2Nr sliding leaves	2	Nr	£620.00	£1,240.00	28	41	53	0.219456	700	0.33	5.38	16	50.694336	826.471296	2457.9072
	within structural opening of 1825 x 2025mm; reference ID10	1	Nr	£620.00	£620.00	28	41	52 (0.1108688	700	0.33	5.38	16	25.61068125	417 521712	1241.73
А	UPVC White loft hatch; plot 1 and 2; 900 x 900															
в	mm UPVC White loft hatch; plot 3 and 4; 900 x 900	2	Nr	£135.00	£270.00	18	26	35	0.0405	1380 Asif et al. (2005)	69.4	94.7	120	3878.766	5292.783	6706.8
с	mm UPVC White loft hatch; plot 10; 900 x 900 mm	2	Nr Nr	£135.00 £135.00	£270.00 £135.00	18 18	26 26	35 35	0.0405	1380 Asif et al. (2005) 1380 Asif et al. (2005)	69.4 69.4	94.7 94.7	120 120	3878.766 1939.383	5292.783 2646.3915	6706.8 3353.4
D	Dulux water based satin銀子 paint or similar approved; plot 1 and 2; not exceeding 300mm															
	girth	101	m	£2.65	£267.65	6	6	6	30.3		10.5	10.5	10.5	318.15	318.15	318.15
E	Dulux water based satin銀子 paint or similar approved; plot 3 and 4; not exceeding 300mm															
F	girth Dulux water based satin緞子 paint or similar	115	m	£2.65	£304.75	6	6	6	34.5		10.5	10.5	10.5	362.25	362.25	362.25
	approved; plot 5,6,7,8 and 9; not exceeding 300mm girth	174	m	£2.65	£461.10	6	6	6	52.2		10.5	10.5	10.5	548.1	548.1	548.1
G	Dulux water based satin緞子 paint or similar			£2.65	£140.45	6	-	6	15.9		10.5	10.5	10.5	166.95	166.95	166.95
н	approved; plot 10; not exceeding 300mm girth Hardwood architraves; 20 x 75mm to match	53	m	12.05	£140.45	0	6	0	15.9		10.5	10.5	10.5	100.95	100.95	100.95
	skirtings; finished with DUlux water based satin paint as M60; plot 1 and 2; not exceeding															
1	300mm girth Hardwood architraves; 20 x 75mm to match	187	m	£6.70	£1,252.90	29	48	63	0.2805	700	0.33	5.38	16	64.7955	1056.363	3141.6
	skirtings; finished with DUlux water based satin paint as M60; plot 3 and 4; not exceeding															
	300mm girth	229	m	£6.70	£1,534.30	29	48	63	0.3435	700	0.33	5.38	16	79.3485	1293.621	3847.2
1	Hardwood architraves; 20 x 75mm to match skirtings; finished with DUlux water based satin															
	paint as M60; plot 5,6,7,8 and 9; not exceeding 300mm girth	349	m	£6.70	£2,338.30	29	48	63	0.5235	700	0.33	5.38	16	120.9285	1971.501	5863.2
к	Hardwood architraves; 20 x 75mm to match skirtings; finished with DUlux water based satin															
	paint as M60; plot 10; not exceeding 300mm girth	106	m	£6.70	£710.20	29	48	63	0.159	700	0.33	5.38	16	36.729	598.794	1780.8
L	Denleigh Ironmongery or similar approved;					12										
м	single doors; plot 1 and 2; generally Denleigh Ironmongery or similar approved;	13	Nr	£56.70	£737.10		17		0.000312		11.7	25	36.3	28.728648		89.132472
N	double doors; plot 1 and 2; generally Denleigh Ironmongery or similar approved;	2	Nr	£35.00	£70.00	12	17	24	0.000048	7870	11.7	25	36.3	4.419792	9.444	13.712688
А	single doors; plot 3 and 4; generally Denleigh Ironmongery or similar approved:	15	Nr	£58.64	£879.60	12	17	24	0.00036	7870	11.7	25	36.3	33.14844	70.83	102.84516
	double doors; plot 3 and 4; generally	2	Nr	£35.00	£70.00	12	17	24	0.000048	7870	11.7	25	36.3	4.419792	9.444	13.712688
в	Denleigh Ironmongery or similar approved; single doors; plot 5,6,7,8 and 9; generally	18	Nr	£68.91	£1,240.38	12	17	24	0.000432	7870	11.7	25	36.3	39.778128	84.996	123.41419
с	Denleigh Ironmongery or similar approved; double doors; plot 5,6,7,8 and 9; generally	18	Nr	£35.00	£630.00	12	17	24	0.000432	7870	11.7	25	36.3	39.778128	84.996	123.41419
D	Denleigh Ironmongery or similar approved; single doors; plot 10; generally	6	Nr	£63.98	£383.88	12	17	24	0.000144	7870	11.7	25	36.3	13.259376		41.138064
Е	Denleigh Ironmongery or similar approved;	4	Nr	£35.00	£140.00	12	17		0.000096		11.7	25	36.3	8.839584		27.425376
F	double doors; plot 10; generally Denleigh Ironmongery or similar approved;															
G	single doors; plot 1 and 2; generally Denleigh Ironmongery or similar approved;	7	Nr	£29.00	£203.00	12	17		0.000168		11.7	25	36.3	15.469272		47.994408
н	single doors; plot 3 and 4; generally Denleigh Ironmongery or similar approved;	8	Nr	£29.00	£232.00	12	17	24	0.000192	7870	11.7	25	36.3	17.679168	37.776	54.850752
	single doors; plot 5,6,7,8 and 9; generally Denleigh Ironmongery or similar approved;	11	Nr	£29.00	£319.00	12	17	24	0.000264	7870	11.7	25	36.3	24.308856	51.942	75.419784
	single doors; plot 10; generally	3	Nr	£29.00	£87.00	12	17	24	0.000072	7870	11.7	25	36.3	6.629688	14.166	20.569032
1	Bedding and pointing with approved polysulphide sealant; to suit fire and acoustic															
к	rating, plot 1 and 2 Bedding and pointing with approved	101	m	£1.25	£126.25	5	15	25	1.01	1700 https://pad.doncaster.gov.uk/NPSPublicDocs/0051615	8	8	8	13736	13736	13736
	polysulphide sealant; to suit fire and acoustic rating, plot 3 and 4	115	m	£1.25	£143.75	5	15	25	0.0115	1700 https://pad.doncaster.gov.uk/NPSPublicDocs/0051615	8	8	8	156.4	156.4	156.4
L	Bedding and pointing with approved polysulphide sealant; to suit fire and acoustic															
м	rating, plot 5,6,7,8 and 9; fire rated 30 minutes Bedding and pointing with approved	174	m	£1.99	£346.26	5	15	25	0.0174	1700 https://pad.doncaster.gov.uk/NPSPublicDocs/0051615	8	8	8	236.64	236.64	236.64
M	polysulphide sealant; to suit fire and acoustic															
А	rating, plot 10 Standard assumed 12.5mm thick plasterboard	53	m	£1.25	£66.25	5	15	25	0.0053	1700 https://pad.doncaster.gov.uk/NPSPublicDocs/0051615	8	8	8	72.08	72.08	72.08
	linings fixed with plasterboard dabs to masonry (measured elsewhere), generally, over 300mm															
D	wide Standard assumed 12.5mm thick plasterboard	1654	m2	£8.40	£13,893.60	26	39	51	20.675	950	1.4	1.8	3.2	27497.75	35354.25	62852
в	linings fixed with plasterboard dabs to masonry															
	(measured elsewhere), generally, not exceeding 300mm wide	356	m	£5.30	£1,886.80	26	39	51	1.335	950	1.4	1.8	3.2	1775.55	2282.85	4058.4
с	Moisture resistant or cement particle board linings assumed 12.5mm thick to timber															
D	framing, generally; over 300mm wide	218	m2	£6.40	£1,395.20	28	42	53	2.725	350	7.28	10.4	13.52	6943.3	9919	12894.7
	Moisture resistant or cement particle board linings assumed 12.5mm thick to timber															
	framing, generally, not exceeding 300mm wide	66	m	£4.25	£280.50	28	42	53	0.2475	350	7.28	10.4	13.52	630.63	900.9	1171.17
E	Allow for forming pipe casings包装 and low level boxings, comprising of approved 38 x															
	38mm timber framing at 600mm centres vertically, with vertical framing at all corners															
	and abutments and 450mm centres horizontally; lining with one layer of Gyproc															
	Soundblock board and one layer of moisture															
F	resistant board, generally; over 300mm wide Allow for forming pipe casings包装 and low	80	m2	£43.04	£3,443.20	41	68	107	1.2	950	1.4	1.8	3.2	1596	2052	3648
	level boxings, comprising of approved 38 x 38mm timber framing at 600mm centres															
	vertically, with vertical framing at all corners and abutments and 450mm centres															
	horizontally; lining with one layer of Gyproc Soundblock board and one layer of moisture															
	resistant board, generally; not exceeding			ar												
G	300mm wide Plaster; one coat skim of gypsum board finish	27	m	£23.87	£644.49	41	68	107	0.1215	950	1.4	1.8	3.2	161.595	207.765	369.36
	plaster; 3mm thick; trowelling抹平 smooth; walls, over 300mm wide	3666	m2	£5.00	£18,330.00	23	38	48	10.998	950	1.4	1.8	3.2	14627.34	18806.58	33433.92
н	Plaster; one coat skim of gypsum board finish plaster; 3mm thick; trowelling抹平 smooth;															
	walls, not exceeding 300mm wide thin angle bead	645 778	m m	£3.00 £1.65	£1,935.00 £1,283.70	23	38	48	0.5805	950	1.4	1.8	3.2	772.065	992.655	1764.72
A	Large format ceramic陶瓷的 wall tiles;	, /8	m	£1.00	L1,203./U											
	complete with approved adhesive and coloured grout; over 300mm wide	312	m2	£46.00	£14,352.00	16	27	41	1.56	2000	2.5	12	19.5	7800	37440	60840
в	Large format ceramic陶瓷的 wall tiles; complete with approved adhesive and															
с	coloured grout; not exceeding 300mm wide Stainless steel perimeter边缘 trim装饰 beads,	42	m	£13.80	£579.60	16	27	41	0.063	2000	2.5	12	19.5	315	1512	2457
D	generally Approved sanitary grade white sealant to	209	m	£9.00	£1,881.00											
U	internal joints and the like, generally; 8 x 8mm	A							0.0	1700		-				
Е	fillet Assumed to be Dulux Trade Diamond Matt	305	m	£0.92	£280.60				0.01952	1/00	8	8	8	265.472	265.472	265.472
F	Emulsion or similar, over 300 girth Assumed to be Dulux Trade Diamond Matt	3459	m2	£4.35	£15,046.65	5	8	12	1037.7		10.5	10.5	10.5	36319.5	36319.5	36319.5
А	Emulsion or similar, over 300 girth Harlech select oak lacquered涂漆, 5mm thick	283	m2	£4.35	£1,231.05	5	8	12	84.9		10.5	10.5	10.5	2971.5	2971.5	2971.5
	veneered 薄片镶面 floor or similar approved; over 300mm wide	176	m2	£130.00	£22,880.00	29	48	63	0.528	700	0.33	5.38	16	121.968	1988.448	5913.6
в	Screed construction; level or to falls only not															
с	exceeding 15 degrees from horizontal Screed construction; level or to falls only not	803	m2	£14.00	£11,242.00	30	48	63	56.21	2100	0.931	1.33	1.729	109896.171	156994.53	204092.89
	exceeding 15 degrees from horizontal; to garage; Provisional Quantity	16	m2	£14.00	£224.00	30	48	63	1.12	2100	0.931	1.33	1.729	2189.712	3128.16	4066.608
D	Screed construction; level or to falls only not															
F	exceeding 15 degrees from horizontal; landings Screed construction; perimeter isolation strip	3	m2	£14.00	£42.00	30	48	63	0.21	2100	0.931	1.33	1.729	410.571	586.53	762.489
	including mastic sealant where required	1095	m	£1.50	£1,642.50	30	48	63								
F	Screed construction; forming recess壁凹 for entrance matting	4	m2	£10.00	£40.00	30	48	63								
G H	Screed construction; construction joints Screed construction; forming holes for shower		ITEM	Included	Included											
I.	gullies 水沟 Visqueen 1000gauge厚度/直径 DPM	1	ITEM	Included	Included											
	separating membrane	803	m2	£1.00	£803.00	10	20	30	0.2409	32	100	134.18	183	770.88	1034.36678	1410.7104

к I	2000 gauge DPM Trowelling smooth, generally	483 803	m2 m2	£1.50 Included	£724.50 Included	10	20	30	0.1449	3	32	100 134.18 183 463.68 622.165824 848.5344				
L	Latex smoothing compound, level or to falls only not exceeding 15 degrees from horizontal -															
м	Provisional Quantity Latex smoothing compound, level or to falls	738	m2	£6.54	£4,826.52	18	29	40	2.214	210	00	3.157 4.51 5.863 14678.1558 20968.794 27259.432				
	only not exceeding 15 degrees from horizontal - Provisional Quantity; landings	3	m2	£6.54	£19.62	18	29	40	0.009	210	10	3.157 4.51 5.863 59.6673 85.239 110.8107				
A	Liquid damp proof membrane; trowelling smooth; vinyl and rubber floors, level or to falls only not exceeding 15 degrees from horizontal -	5		20.34	213.02	10	25	40	0.005							
в	Provisional Quantity Liquid damp proof membrane; trowelling smooth; vinyl and rubber floors, level or to falls	738	m2	£8.74	£6,450.12	10	20	30	2.214	3	32	100 134.18 183 7084.8 9506.38464 12965.184				
	only not exceeding 15 degrees from horizontal - Provisional Quantity; landings	3	m2	£8.74	£26.22	10	20	30	0.009		32	100 134.18 183 28.8 38.64384 52.704				
C D	Ceramic floor tiling; level or to falls Ceramic floor tiling; Tiled skirting - generally	104 184	m2 m	£66.00 £11.45	£6,864.00 £2,106.80	10 11	20 18	30 25 fle	0.52 exible tile v		00	2.5 12 19.5 2470 11856 19266				
E	New Oaklands 80/20/50oz or similar approved on and including PU foam underlay; over															
F	300mm wide New Oaklands 80/20/50oz or similar approved	778	m2	£44.45	£34,582.10	8	13	19				58.8 84 109.2 60964.08 84047.34 103652.94 Pt	J foam E 65.2	2 80.	.1	110
	on and including PU foam underlay; risers; not exceeding 300mm wide	96	m	£14.99	£1,439.04	7	11	16	28.8			58.8 84 109.2 2256.768 3111.264 4095.36				
G	New Oaklands 80/20/50oz or similar approved on and including PU foam underlay; treads; not					_										
н	exceeding 300mm wide New Oaklands 80/20/50oz or similar approved on and including PU foam underlay; winder	79	m	£14.99	£1,184.21	7	11	16	23.7			58.8 84 109.2 1857.132 2560.311 3370.14				
	treads; over 300mm wide average Stair nosings, generally - to all staircases	2 91	m2 m	£19.99 £19.99	£39.98 £1.819.09	7 7	11 11	16 16				58.8 84 109.2 156.72 216.06 284.4				
J	Stair nosings, generally; winder stairs generally; wood to carpet; to match wood	6	m	£19.99 £29.99	£179.94	7	11	16								
в	flooring	62	m	£17.50	£1,085.00											
c	generally; wood to tile; to match wood flooring generally; wood to wood; to match wood	8	m	£17.50	£140.00											
D	flooring generally; carpet to tile; metal in gold or silver	11 17	m m	£17.50 £9.50	£192.50 £161.50											
E	Dulux Trade water based satin or similar approved; not exceeding 300mm girth	839	m	£2.85	£2,391.15	29	48	63	251.7			10.5 10.5 10.5 2642.85 2642.85 2642.85				
F	Dulux Trade water based satin or similar approved; Paint to enhanced skirtings in	000		22.05	11,331.13	25	40	05	201.7							
G	hallways, not exceeding 300mm girth Coir entrance matwell mat: over 300mm wide	103 4	m m2	£3.00 £81.10	£309.00 £324.40	29 5	48 7	63 10	30.9			10.5 10.5 10.5 324.45 324.45 324.45 Polypropylene 130.9 187 243.1 523.6 748 972.4				
H I	Entrance matting frame; generally Rigid坚硬的 insulation boards; to achieve U Values; tight butt joints; 150mm thick, over	17	m	£24.35	£413.95	41	68	107								
A	300mm wide Skirtings; MDF, 18mm x 144mm	483 839	m2 m	£12.95 £8.06	£6,254.85 £6,762.34	50 21	85 36	120 48	72.45 2.174688			27 45 63 3697123.5 6161872.5 8626621.5 11 11 12199.99968 12199.9997 12200				
B C	Skirtings; MDF, generally; to hallways Sealant joint between bottom of skirting and	103	m	£8.57	£882.71	21	36	48								
	tiled / timber floors, nominally 6 x 6mm fillet, generally	305	m	£1.25	£381.25	5	15	25	0.01098	170	00	8 8 8 149.328 149.328 149.328				
D	Sealant joint between bottom of skirting and tiled / timber floors, nominally 6 x 6mm fillet,															
E	generally Temporary protection of finishes/floors,	943	m	£1.25	£1,178.75	5	15	25	0.033948			8 8 8 461.6928 461.6928 461.6928				
F	generally Temporary protection of finishes/floors,	1057	m2	£2.50	£2,642.50	1	1	1	2.114	92	20	45 61.67 78.34 87519.6 119940.75 152361.9				
G	generally; treads Temporary protection of finishes/floors,	79	m	£3.00	£237.00	1	1	1		92		45 61.67 78.34				
н	generally; risers Temporary protection of finishes/floors,	91	m	£3.00	£273.00	1	1	1		92		45 61.67 78.34				
1	generally; winder treads Temporary protection of finishes/floors,	2	m2	£2.50	£5.00	1	1	1	0.004			45 61.67 78.34 165.6 226.9456 288.2912				
1	generally; winder risers Cleaning covered floors; generally	6 1057	m m2	£3.00 £1.50	£18.00 £1,585.50	1	1	1		92	20	45 61.67 78.34				
K L	Cleaning covered floors; generally; treads Cleaning covered floors; generally; risers	79 91	m	£1.00 £1.00	£79.00 £91.00	1	1	1								
м	Cleaning covered floors; generally; winder treads	2	m2	£1.50	£3.00	1	1	1								
N	Cleaning covered floors; generally; winder risers	6	m	£1.00	£6.00	1	1	1								
A	Plasterboard ceiling; Lafarge standard 15mm wallboard or similar approved; generally Plasterboard ceiling; Lafarge standard 15mm	293	m2	£5.70	£1,670.10	24	40	50	4.395	95	50	1.4 1.8 3.2 5845.35 7515.45 13360.8				
В	wallboard or similar approved; generally;															
с	raking Plasterboard ceiling; pattresses; (allowed for	13	m2	£7.25	£94.25	24	40	50	0.195	95	50	1.4 1.8 3.2 259.35 333.45 592.8				
D	1nr per 5m2 of ceiling areas) - Provisional Quantities Plasterboard ceiling; flush access panels		Nr ITEM	£4.50 £500.00	£274.50 £500.00	24 24	40 40	50 50								
E	Plasterboard ceiling; flush access panels Plasterboard ceiling; Contractor to make allowance for fixing around services		ITEM	£500.00	£500.00	1	1	1								
F	Plasterboard ceiling; moisture resistant board in lieu代替 of standard board		m2	£1.35	£33.75	-	1	1								
G	Plasterboard ceiling; Lafarge standard 15mm vapour check wallboard or similar approved;	25	1112	11.55	233.75											
н	generally Plasterboard ceiling; Lafarge standard 15mm	273	m2	£7.20	£1,965.60	24	40	50	4.095	95	50	1.4 1.8 3.2 5446.35 7002.45 12448.8				
	vapour check wallboard or similar approved; generally; sloping	187	m2	£7.20	£1,346.40	24	40	50	2.805	95	50	1.4 1.8 3.2 3730.65 4796.55 8527.2				
1	Plasterboard ceiling; pattresses; (allowed for 1nr per 5m2 of ceiling areas) - Provisional				,											
L	Quantities Plasterboard ceiling; flush access panels		Nr ITEM	£4.50 £500.00	£378.00 £500.00	24 24	40 40	50 50								
ĸ	Plasterboard ceiling; Contractor to make allowance for fixing around services		ITEM	£500.00	£500.00	1	1	1								
L	Plasterboard ceiling; moisture resistant board in lieu of standard board	49	m2	£1.35	£66.15				0.735	95	50	1.4 1.8 3.2 259.35 333.45 592.8				
A	Plasterboard suspended ceiling; Assumed to be an British Gypsum Casoline MF suspended															
в	ceiling system or similar approved; generally Plasterboard suspended ceiling; Assumed to be an British Gypsum Casoline MF suspended	340	m2	£21.30	£7,242.00	17	26	37	5.1	95	50	1.4 1.8 3.2 259.35 333.45 592.8				
	ceiling system or similar approved; generally; raking	5	m2	£25.00	£125.00	17	26	37	0.075	95	50	1.4 1.8 3.2 259.35 333.45 592.8				
с	Plasterboard suspended ceiling; pattresses; (allowed for 1nr per 5m2 of ceiling areas) -	,														
D	Provisional Quantities Plasterboard suspended ceiling; flush access	69	Nr	£4.50	£310.50	17	26	37								
E	panels Plasterboard suspended ceiling; Contractor to		ITEM	£500.00	£500.00	17	26	37								
F	make allowance for fixing around services Plasterboard suspended ceiling; moisture		ITEM	£500.00	£500.00	1	1	1								
G	resistant board in lieu of standard board Plaster skim coat finish; nominally 3mm thick;		m2	£1.35	£40.50				0.45			1.4 1.8 3.2 259.35 333.45 592.8				
н	over 300mm wide Plaster skim coat finish; nominally 3mm thick;	906	m2	£5.00	£4,530.00	23	38	48	2.718			1.4 1.8 3.2 259.35 333.45 592.8				
I.	over 300mm wide; raking to soffits Plaster coving; generally; 125mm girth	205 1109	m2 m	£5.00 £3.85	£1,025.00 £4,269.65	23	38	48	0.615	95	0	1.4 1.8 3.2 259.35 333.45 592.8				
J A	Plaster coving; corners Paint to plasterboard ceilings; Dulux Pure brilliant White omyklon週節 or similar	470	Nr	£0.50	£235.00											
	brilliant White emulsion乳胶 or similar approved; over 300mm wide	1009	m2	£3.35	£3,380.15	4	7	11				10.5 10.5 10.5 10594.5 10594.5 10594.5				
В	Paint to plasterboard ceilings; Dulux Pure brilliant White emulsion乳胶 or similar approved; not exceeding 300mm wide	1109		£1.00	£1,109.00	4	7	11	332.7			10.5 10.5 10.5 3493.35 3493.35 3493.35				
с	Paint to plasterboard ceilings; Dulux Pure brilliant White emulsion乳胶 or similar		m						332./							
A B	approved; over 300mm wide generally Class C mirrors, silver backed, fixed to walls with adhesive pade: accurate to be 0.60 x	103 1	m2 ITEM	£4.35 £0.00	£448.05 £0.00	4	7	11				10.5 10.5 10.5 1081.5 1081.5 1081.5				
c	with adhesive pads; assumed to be 0.60 x 0.90m Class C mirrors, silver backed, fixed to walls	10	Nr	£60.00	£600.00	5	7	10	0.0324	250	00	12.3 16.81 25.09 996.3 1361.61 2032.29				
C D	Class C mirrors, silver backed, fixed to walls with adhesive pads; 1.20 x 1.60m PAR softwood shelving units, with wall	10	Nr	£211.20	£2,112.00	5	7	10	0.1152	250	00	12.3 16.81 25.09 3542.4 4841.28 7225.92				
5	mounted battens, full depth; allowance for area of 2.00m2 each; generally	20	Nr	£64.78	£1.295.60	10	20	30	1.04	50	50	0.72 7.4 13 411.84 4232.8 7436				
E	Portable fire extinguishers; generally Fire blankets; generally	1	ITEM	£650.00 £650.00	£650.00 £650.00	10 10 7	15 7	18 7	5.23125 0.00162	250	00	0.72 7.4 13 411.84 422.8 7435 16.5 28 42 215789.0625 366187.5 549281.25 16.5 28 42 66.825 113.4 170.1				
F G A	Kitchen installations; generally Manhattan 40mm thick worktop or similar	10	Nr	£0.00	£0.00		-		2.30202		-	20.5 20 42 00.025 115.4 170.1				
в	approved; as required to suit kitchens Manhattan 40mm thick worktop or similar	10	Nr	£0.00	£0.00				0.744	70	00	0.33 5.38 16 171.864 2801.904 8332.8				
	approved; cut outs for sinks	10	Nr	£0.00	£0.00											

с	stainless steel single bowl and drainer of 0.9mm minimum thickness; Bristan Java single															
D	flow monoblock mixer (chrome); generally generally; assumed to be 1Nr per apartment	10 10) Nr		£0.00 £0.00											
E F	generally; assumed to be 1Nr per apartment space for oven	10 10) Nr	£0.00	£0.00 £0.00											
G H	space for fridge freezer General directional signage; generally	10		£0.00	£0.00 £250.00	10	20	30 0.0000189	2700		124	155	186	6.32772	7.90965	9.49158
1	General directional signage; generally Fire signage systems, generally	1	L ITEM	£250.00	£250.00	10	20 20	30 0.0000189 30 0.0000189	2700		124 124	155	186 186	6.32772	7.90965	9.49158 9.49158
A B	Fire signage systems, generally		L ITEM		£250.00 £250.00	10 10	20	30 0.0000189			124	155 155	186	6.32772	7.90965	9.49158 9.49158
А	Above Ground Drainage Installations generally for the construction of the housing units; in															
	accordance with the design criteria provided by the employer's representative - Units 1 and															
в	2 Above Ground Drainage Installations generally	1	L ITEM	Included	Included											
5	for the construction of the housing units; in															
	accordance with the design criteria provided by the employer's representative - Units 3 and															
с	4 Above Ground Drainage Installations generally	1	I ITEM	Included	Included											
	for the construction of the housing units; in accordance with the design criteria provided															
D	by the employer's representative - Units 5 to 9 Above Ground Drainage Installations generally	1	L ITEM	Included	Included											
D	for the construction of the housing units; in															
	accordance with the design criteria provided by the employer's representative - Unit 10	:	L ITEM	Included	Included											
E	attendance on the installation of the above ground drainage	:	L ITEM	Included	Included											
F	special attendance on the installation of the above ground drainage		L ITEM	Included	Included											
А	Mechanical Installations; in accordance with the design criteria provided by the employer's															
в	representative - Units 1 and 2	:	L ITEM	£99,590.00	£99,590.00	1	1	1								
в	Mechanical Installations; in accordance with the design criteria provided by the employer's															
с	representative - Units 3 and 4 Mechanical Installations; in accordance with	1	L ITEM	Included	Included											
	the design criteria provided by the employer's representative - Units 5 to 9	:	L ITEM	Included	Included											
D	Mechanical Installations; in accordance with the design criteria provided by the employer's															
F	representative - Unit 10 attendance on the Mechanical Installation	1	L ITEM	Included	Included											
E	contractor	:	L ITEM	Included	Included											
F	special attendance on the Mechanical Installation contractor	:	L ITEM	Included	Included											
А	Electrical Installations; in accordance with the design criteria provided by the employer's															
в	representative - Units 1 and 2 Electrical Installations; in accordance with the	1	L ITEM	£74,724.24	£74,724.24	20	30	43 Used electric	al circuit							
-	design criteria provided by the employer's			parts 1 - 1	Includ 1											
с	representative - Units 3 and 4 Electrical Installations; in accordance with the	1	L ITEM	Included	Included											
	design criteria provided by the employer's representative - Units 5 to 9	:	L ITEM	Included	Included											
D	Electrical Installations; in accordance with the design criteria provided by the employer's															
E	representative - Unit 10 Electrical Installations; lightning protection	:	ITEM	Included	Included											
E	installation in accordance with the design															
	criteria provided by the employer's representative	:	L ITEM	Included	Included											
F	attendance on the Electrical Installation contractor	:	L ITEM	Included	Included											
G	special attendance on the Electrical Installation contractor		L ITEM	Included	Included											
А	Lift Installations; access lift; three floors served,															
	ground, first and second floor; opening on one															
в	side; including all front enclosure Lift Installations; fire fighting lift if required	-	L Nr L ITEM		£21,385.00 Declined	19	26	34								
с	allow for testing on completion and provide test certificate		L ITEM	Included	Included											
D E	allow for commissioning on completion provide number of copies as detailed in the		ITEM		Included											
E	Employers Requirements	:	L ITEM	Included	Included											
F	Main Contractors Attendances / Works; Provision and installation of lifting beam fixed															
G	to structure as required Main Contractors Attendances / Works;	1	L Nr	Declined	Declined											
	Marking positions of and cutting or forming holes mortices and chases in the structure		LITEM	Declined	Declined											
н	Lighting to lift shaft Ventilation to top of shaft, provision of suitable		L Nr		Declined											
	external louvre or vent, complete with ducting															
1	as may be required Installation and fixing in of Halfen or similar		L Nr		Declined											
к	slot channels to accept lift framework Installation or secondary steelwork / timber to	1	ITEM	Declined	Declined											
	allow for installation of lift framework to upper levels		L ITEM	Declined	Declined											
L	Painting within passenger lift shaft with sealer and one coat white masonry paint as required		1 m2		£216.00	5	8	11								
А	Painting copper pipework; not exceeding	-							0000					10.00	10/00	10102
в	300mm girth - Provisional Quantity Fire stopping works; generally; at locations of	160			£424.00	28	46	58 0.0288	8600		42	42	42	10402.56	10402.56	10402.56
с	penetrations through internal walls Fire stopping works; generally; within cavities		L ITEM		Included											
D	of external walls Fire stopping works; generally; penetrations in	:	ITEM	Included	Included											
F	cavities to ceiling Air Sealing; provision of sealant and the like to	:	ITEM	Included	Included											
	all locations to achieve air sealing	:	L ITEM	Included	Included											
F	Builders work in connection with services; all BWIC for the electrical installations as defined															
	by the performance specification for the electrical works	:	L ITEM	£10,000.00	£10,000.00	20	30	43								
G	Builders work in connection with services; all BWIC for the mechanical installations as															
	defined by the performance specification for			Inclusion.	Include -											
н	the mechanical works	1	LIIEM	Included	Included											
	Builders work in connection with services; all BWIC for the above ground drainage and															
	rainwater pipes as defined by the performance specification for the mechanical works	,	L ITEM	Included	Included											
А	Builders work in connection with services; all BWIC for the lightning protection installations															
	as defined by the performance specification for															
в	the mechanical works Builders work in connection with services;	1	L ITEM	Included	Included											
	provision of lightning protection rod pits and housing; Provisional Quantity	ę) Nr	Included	Included											
А	Excavating Risk; soft spots; including filling all soft spots with approved granular fill material,		-													
	compacting and proof rolling - to be priced as															
в	rate only per cubic metre Excavating Risk; Extra over excavation	() m3	£0.00	£0.00											
	irrespective of depth for excavating; next existing services - to be priced as rate only per															
с	cubic metre Excavating Risk; Extra over excavation	() m	£0.00	£0.00											
-	irrespective of depth for excavating; around															
	existing services crossing excavations - to be priced as rate only per cubic metre	() m3	£0.00	£0.00											
D	Excavating Risk; archeological digging on site; complete including the risk of time loss and all															
E	elements pertaining to the archeological dig Excavating Risk; Extra over excavation	1	ITEM	£0.00	£0.00											
	irrespective of depth for breaking out and removal off site all spoils; rock - to be priced as															
	rate only per cubic metre	() m3	£0.00	£0.00											

F	Excavating Risk; Extra over excavation irrespective of depth for breaking out and																
	removal off site all spoils; concrete - to be priced as rate only per cubic metre	0	m3	£0.00	£0.00												
G	Excavating Risk; Extra over excavation irrespective of depth for breaking out and																
	removal off site all spoils; reinforced concrete -																
н	to be priced as rate only per cubic metre Excavating Risk; Extra over excavation	0	m3	£0.00	£0.00												
	irrespective of depth for breaking out and removal off site all spoils; brickwork blockwork																
	or stonework - to be priced as rate only per																
1	cubic metre Excavating Risk; Extra over excavation	0	m3	£0.00	£0.00												
	irrespective of depth for breaking out and removal off site all spoils; contaminated																
	material - to be priced as rate only per cubic																
J	metre Surface water; including the treatment of the	0	m3	£0.00	£0.00												
	water to remove all sediment; pollutants and the like before leaving the site perimeters; off																
	site	1	ITEM	£199.84	£199.84	1	1	1									
к	Surface water; including the treatment of the water to remove all sediment; pollutants and																
	the like before leaving the site perimeters; Excavated material: soft spot material - to be																
	priced as rate only per cubic metre of inert	0	m3	£0.00	£0.00												
L	Surface water; including the treatment of the water to remove all sediment; pollutants and																
	the like before leaving the site perimeters; Excavated material; extra over off site disposal																
	for the disposal of contaminated material;																
А	Contractor to develop Excavating, Trenches; over 300mm wide,	0	m3	£0.00	£0.00												
в	1.00m maximum depth Excavating, Pits, tree pits 12 nr, 1.00m	119	m3	£12.96	£1,542.24	500	750	1000		2050	soll	0.15	0.45	0.73	36592.5	109777.5	178083.5
	maximum depth	12 48	m3 m2	£16.20 £6.48	£194.40 £311.04	500 500	750 750	1000 1000		2050 2240	soil sand	0.15	0.45	0.73 0.15	3690 5376	11070 8709.12	17958 16128
C D	Excavating pits Excavating trenches	226	m2 m2	£3.24	£732.24	500	750	1000		2240	sand	0.05	0.081	0.15	25312	41005.44	75936
E	Earthwork support, To faces of excavation; 1.00m maximum depth; distance between																
F	opposing faces not exceeding 2.00m	274	m2	£3.24	£887.76	500	750	1000		2240	sand	0.05	0.081	0.15	30688	49714.56	92064
,	Excavated material; off site; it has been																
	assumed all excavated material to be taken off site; to be treated as inert hazardous material	131	m3	£35.65	£4,670.15	1	1	1		2050	soll	0.15	0.45	0.73	40282.5	120847.5	196041.5
G	Filling to excavations; over 250mm average thick	12	m3	£36.73	£440.76	100	300	500		2050	soil	0.15	0.45	0.73	3690	11070	17958
н	Imported topsoil. Filling to make up levels; not																
	exceeding 250mm average thick Imported topsoil. over 250mm average thick	78 71	m3 m3	£36.73 £36.73	£2,864.94 £2,607.83	100 100	300 300	500 500		2050 2050	soil	0.15	0.45 0.45	0.73 0.73	23985 21832.5	71955 65497.5	116727 106251.5
J K	Compacting ground; generally Compacting bottoms of excavations; generally	12 148	m2 m2	£0.76 £0.76	£9.12 £112.48	500 500	750 750	1000 1000									
L	Blinding concrete; not exceeding 150mm thick	7	m3	£149.07	£1,043.49	100	150	200		1300	in situ concrete	0.525	0.75	0.975	4777.5	6825	8872.5
A B	Foundations; generally Formwork for in situ concrete, Sides of ground	61	m3	£182.56	£11,136.16	64	108	178		2300		0.525	0.75	0.975	73657.5	105225	136792.5
с	beams and edges of beds, 250 to 500mm high Formwork for in situ concrete, Sides of ground	202	m	£23.77	£4,801.54	47	70	110	2.525	480	timber, 50mm depth	0.72	7.11	21.3	872.64	8617.32	25815.6
C	beams and edges of beds, 250 to 500mm high;																
D	curved on plan Steel fabric reinforcement to B.S.4483,	54	m	£25.93	£1,400.22	47	70	110	4.05	480	timber, 100mm dept	0.72	7.11	21.3	1399.68	13821.84	41407.2
E	generally, B785 Dense aggregate blockwork; nominally 7.3	136	m2	£14.04	£1,909.44	46	70	108									
	N/mm2 ion cement mortar; assumed to be																
F	215mm thick Natural stone rubble walling, nominally	20	m2	£45.58	£911.60	52	72	101	4.3	2200	cement mortar	0.525	0.75	0.975	4966.5	7095	9223.5
G	350mm thick Cappings to stone walls; generally	173 89	m2 m	£385.04 £98.04	£66,611.92 £8,725.56	43 43	60 60	79 79	60.55 0.623	1900 1900		0.7	0.85	1.01 1.01	80531.5 828.59	97788.25 1006.145	116195.45 1195.537
Ĥ	Cappings to stone walls; generally; curved on																
1	plan	27	m	£108.04	£2,917.08	43	60	79	0.189	1900		0.7	0.85	1.01	251.37	305.235	362.691
	External handrails; Assumed to be polyester powder coated galvanised mild steel handrails;																
	fixed to masonry walls as required, raking	6	m	£176.24	£1,057.44	15	20	25									
J A	External handrails; Extra over for, ends Pre cast concrete kerbs側石, edgings and	8	Nr	£40.22	£321.76	15	20	25									
	channels to B.S340; bedding and flush jointing in cement mortar (1:3); plain concrete (1:3:6)																
	foundations and haunching, kerbs, HB2	63	m	£33.49	£2,109.87	60	80	100	2.88225	850 http	os://travisperkins.scene7.com/is/content/travisperkin:	1.2	2.18	3.8	2939.895	5340.80925	9309.6675
В	Pre cast concrete kerbs侧石, edgings and channels to B.S340; bedding and flush jointing																
	in cement mortar (1:3); plain concrete (1:3:6) foundations and haunching, kerbs, HB2; curved																
	on plan; radius over 12.00m	5	m	£37.81	£189.05	60	80	100	0.22875	850 http	os://travisperkins.scene7.com/is/content/travisperkin:	1.2	2.18	3.8	233.325	423.87375	738.8625
с	Pre cast concrete kerbs侧石, edgings and channels to B.S340; bedding and flush jointing																
	in cement mortar (1:3); plain concrete (1:3:6) foundations and haunching, kerbs, BN:																
	conservation format to match pavings	139	m	£38.89	£5,405.71	60	80	100	6.35925	850 http	os://travisperkins.scene7.com/is/content/travisperkin:	1.2	2.18	3.8	6486.435	11783.6903	20540.378
D	Pre cast concrete kerbs侧石, edgings and channels to B.S340; bedding and flush jointing																
	in cement mortar (1:3); plain concrete (1:3:6) foundations and haunching, kerbs, BN;																
	conservation format to match pavings; curved															762.97275	
E	on plan; radius not exceeding 12.00m Pre cast concrete kerbs侧石, edgings and	9	m	£48.61	£437.49	60	80	100	0.41175	850 nttp	os://travisperkins.scene7.com/is/content/travisperkin/	1.2	2.18	3.8	419.985	/62.9/2/5	1329.9525
	channels to B.S340; bedding and flush jointing in cement mortar (1:3); plain concrete (1:3:6)																
	foundations and haunching, kerbs, BN;																
	conservation format to match pavings; curved on plan; radius over 12.00m	33	m	£51.85	£1,711.05	60	80	100	1.50975	850 http	os://travisperkins.scene7.com/is/content/travisperkin/	1.2	2.18	3.8	1539.945	2797.56675	4876.4925
F	Pre cast concrete kerbs侧石, edgings and																
	channels to B.S340; bedding and flush jointing																
	in cement mortar (1:3); plain concrete (1:3:6) foundations and haunching, path edgings	201	m	£20.52	£4,124.52	60	80	100	9.19575	850 http	os://travisperkins.scene7.com/is/content/travisperkin/	1.2	2.18	3.8	9379.665	17039.7248	29702.273
G	Pre cast concrete kerbs侧石, edgings and channels to B.S340; bedding and flush jointing																
	in cement mortar (1:3); plain concrete (1:3:6) foundations and haunching, path edgings;																
	curved on plan	7	m	£22.69	£158.83	60	80	100	0.32025	850 http	s://travisperkins.scene7.com/is/content/travisperkin	1.2	2.18	3.8	326.655	593.42325	1034.4075
н	Pre cast concrete kerbs侧石, edgings and channels to B.S340; bedding and flush jointing																
	in cement mortar (1:3); plain concrete (1:3:6) foundations and haunching, extra over for,																
	drop kerbs; HB2 to BN	2	Nr	£32.41	£64.82	60	80	100	0.086925	850 http	os://travisperkins.scene7.com/is/content/travisperkin:	1.2	2.18	3.8	88.6635	161.072025	280.76775
1	Granular material, filling to make up levels, not exceeding 250mm average thick	52	m3	£42.13	£2,190.76	100	300	500		2240	sand	0.05	0.081	0.15	5824	9434.88	17472
1	Granular material, filling to make up levels, over 250mm average thick	290	m3		£12,217.70	100	300	500		2240	sand	0.05	0.081	0.15	32480	52617.6	97440
к	Granular material, filling to make up levels, not																
L	exceeding 250mm average thick Compacting filling, generally	207 2002	m3 m2	£36.73 £0.76	£7,603.11 £1,521.52	100 100	300 300	500 500		2240	sand	0.05	0.081	0.15	23184	37558.08	69552
м	Reinforced concrete external slabs, beds, not exceeding 150mm thick	6	m3	£178.24	£1,069.44	20	35	45		2300		0.525	0.75	0.975	7245	10350	13455
Ν	Reinforced concrete external slabs, edges of beds, not exceeding 250mm high					47	70		0.000								
0		53	m	£23.77	£1,259.81	4/	/0	110	0.6625	2300		0.525	u.75	0.975	799.96875	1142.8125	1403.0503
	Steel fabric reinforcement to B.S4483,				£519.48												
A		37	m2	£14.04													
A	Steel fabric reinforcement to B.S4483, reference A252 Isolation joints; comprising of 25mm thick bitumen impregnated灌注 woodfibre board;	37	m2	£14.04													
	Steel fabric reinforcement to B.S4483, reference A252 Isolation joints; comprising of 25mm thick bitumen impregnated雅註 woodfibre board; with 25 x 25mm sealant to top, to suit 150mm thick slab	37 53	m2 m	£14.04 £12.96	£686.88	50	75	100	7.95	180		13.8	23	32.2	19747.8	32913	46078.2
A	Steel fabric reinforcement to B.S4483, reference A252 Isolation joints; comprising of 25mm thick bitumen impregnated灌注 woodfibre board; with 25 x 25mm sealant to top, to suit 150mm					50	75	100	7.95	180		13.8	23	32.2	19747.8	32913	46078.2
	Steef fabric reinforcement to B.S. 4483, reference A25 Isolation joints; comprising of 25mm thick bitumen impregnate引着注 woodfibre board; with 25 x 32mm sealant to top, to suit 150mm thick slab Assumed to be brush and spade finish, generally Assumed to be 1000 gauge厚度	53	m	£12.96	£686.88 £239.76	50	75	100	7.95	180		13.8	23	32.2	19747.8	32913	46078.2
B C	Steef Enbir ceinforcement to B.S. 4483, reference A25 Isolation joints; comprising of 25mm thick bitumen impregnate引達主 woodfibre board; with 25 x 25mm sealant to top, to suit 150mm thick slab Assumed to be brush and spade finish, generally Assumed to be 1000 gauge厚度 polythene聚之第 sheeting on and including 25mm of Sand bilding, generally	53	m	£12.96		50	75	100	7.95	180		13.8	23	32.2	19747.8	32913	46078.2
в	Steef fabric reinforcement to 0.5.4483, reference A23 Isolation joints; comprising of 25mm thick bitumen impregnated 22 woodfibre board; with 25 x 25mm sealant to top, to suit 150mm thick slab Assumed to be brush and spade finish, generally Assumed to be 1000 gauge / <i>B</i> between the seal of the seal of the seal only themest 27 , 80 seeting on and including	53 37	m m2	£12.96 £6.48 £4.32	£239.76	50	75 23	100	7.95 49.68			13.8	23		19747.8		46078.2 431485.7
B C	Steef fabric reinforcement to 0.5.4483, reference A25 Isolation joints; comprising of 25mm thick bitumen impregnated 28 woodfibre board; with 25 x 25mm sealant to top, to suit 150mm thick slab Assumed to be brush and spade finish, generally Assumed to be 1000 gauge / <i>B</i> boychmee / <i>B</i> Sheeting on and including 25mm of sand bilinding, generally Tarmac road surface, Binder course open bin, level or to falls; 60mm thick Gravel margins, level or to falls; nominally	53 37 37 828	m m2 m2 m2	£12.96 £6.48 £4.32 £15.77	£239.76 £159.84 £13,057.56	14	23	32	49.68	1700	quidina	2.751	3.93	5.109	232338.456	331912.08	431485.7
B C D	Steef fabric reinforcement to D.S.4483, reference A25 Isolation joints; comprising of 25mm thick bitumen impregnated 28; woodfibre board; with 25 x 25mm sealant to top, to suit 150mm thick slab Assumed to be brush and spade finish, generally Assumed to be 1000 gauge / <i>B</i> by the / <i>B</i> stheting on and including 25mm of sand bilinding, generally Tarmac road surface, Binder course open bin, level or to falls; 60mm thick Gravel margins, level or to falls; nominally 75mm thick Marshalls Tegulur Block Paving Harvest or	53 37 37	m m2 m2	£12.96 £6.48 £4.32	£239.76 £159.84					1700	sandstone						
B C D	Steef fabric reinforcement to D.S.4483, reference A25 Isolation joints; comprising of 25mm thick bitumen impregnated 21 & woodfibre board; with 25 x 25mm sealant to top, to suit 150mm thick slab Assumed to be thrush and spade finish, generally Assumed to be 1000 gauge // <i>B</i> gauge // Assumed to be 1000 gauge // <i>B</i>	53 37 37 828	m m2 m2 m2	£12.96 £6.48 £4.32 £15.77 £16.20	£239.76 £159.84 £13,057.56	14	23	32	49.68	1700 2150	sandstone	2.751	3.93	5.109	232338.456	331912.08	431485.7 2096.25
B C D	Steef fabric reinforcement to B.S. 4483, reference A25 Isolation joints; comprising of 25mm thick bitumen impregnated 建 woodfile to bard; with 25 x 25mm sealant to top, to suit 150mm thick slab Assumed to be brush and spade finish, generally bothment 25 m of and bitoling, generally Tarmar crad surfacing, Binder course open bin, level or to fails; form thick Gravel margins, level or to fails; nominally Tarmar crad surfacing, Binder course open bin, level or to fails; form thick Gravel margins, level or to fails; nominally Tarmar starb to the fails; nominally Tarmar starb to the fails; nominally Tarmar starb tradies tandard 200 x 000 x 80mm	53 37 37 828 13	m m2 m2 m2 m2	£12.96 £6.48 £4.32 £15.77 £16.20 £59.41	£239.76 £159.84 £13,057.56 £210.60	14 14	23 23	32 32	49.68 0.975	1700 2150	sandstone	2.751	3.93	5.109	232338.456 2096.25	331912.08 2096.25	431485.7 2096.25

н	Marshalls Tegular Block Paving Harvest or similar approved standard 200 x 100 x 80mm															
	block pavings; level or to falls	85	m2	£59.41	£5,049.85	22	34	46 6.8 192	20		0.63	3	6	8225.28	39168	78336
А	Comprising of Charcon or similar cropped finish granite blocks 100 x 100 x 100mm;															
	bedding and pointing in Ultracrete flow point															
	rapid setting mortar to concrete bed level or to falls	5	m2	£64.81	£324.05	5	10	15 0.5 288	80		11	11	11	15840	15840	15840
в	Assumed to be Marshalls Saxon or similar															
	approved standard 450 x 450 x 50mm block pavings; on and including 30mm thick sand															
	laying bed; level or to falls; to roads	28	m2	£48.61	£1,361.08	22	34	46 1.4 192	20		0.63	3	6	1693.44	8064	16128
с	Assumed to be Marshalls Saxon or similar approved standard 450 x 450 x 50mm block															
	pavings; on and including 30mm thick sand															
	laying bed; level or to falls; to pavements and access routes	91	m2	£48.61	£4,423.51	22	34	46 4.55 192	20		0.63	3	6	5503.68	26208	52416
D	Assumed to be Marshalls Saxon or similar															
	approved standard 450 x 450 x 50mm block pavings; on and including 30mm thick sand															
	laying bed; level or to falls; to private															
E	pavements and access routes Paving slabs, extra over for, forming steps; set	64	m2	£48.61	£3,111.04	22	34	46 3.2 192	20		0.63	3	6	3870.72	18432	36864
	of two risers; nominally 900mm wide	2	Nr	£124.23	£248.46	22	34	46								
F	Paving slabs, extra over for, forming steps; set of five risers; nominally 900mm wide	1	Nr	£297.07	£297.07	22	34	46								
G	Paving slabs, extra over for, forming steps; set															
н	of eight risers; nominally 900mm wide Cultivating, surface of ground, nominally	1	Nr	£621.14	£621.14	22	34	46								
	100mm thick to seeded areas	518	m2	N/A	N/A											
1	Cultivating, general surfaces; weed killer and fertiliser, generally	518	m2	N/A	N/A											
1	Seeding, generally; amenity area grass seed	518	m2	N/A	N/A											
А	Provision of maintenance of all soft landscaped areas; for a period of twelve months from															
	Practical Completion or final planting works															
	whichever is the latter; complete with all regular trimming, cutting and the like,															
в	generally Cultivating, surface of filling, topsoil, nominally	1	ITEM	N/A	N/A											
в	250mm deep - infill planting	159	m2	N/A	N/A											
с	Cultivating, weed killer and fertiliser, generally	159	m2	N/A	N/A											
D	Shrub and hedge planting	159	m2 m2	N/A	N/A N/A											
E	Trees planting Provision of maintenance of all soft landscaped	12	Nr	N/A	N/A											
F	areas; for a period of twelve months from															
	Practical Completion or final planting works															
	whichever is the latter; complete with all regular trimming, cutting and the like,															
	generally	1	ITEM	N/A	N/A											
G	Softwood close boarded fencing, comprising of softwood feather edge boards 100 x 25mm;															
	three 75 x 50mm rails and 100 x 100mm posts															
	at 2.40m centres; timber gravel boards; 1200mm high	32	m	£29.36	£939.52	11	19	31								
н	Softwood close boarded fencing, comprising of															
	softwood feather edge boards 100 x 25mm; three 75 x 50mm rails and 100 x 100mm posts															
	at 2.40m centres; timber gravel boards;															
1	1800mm high Softwood close boarded fencing, comprising of	17	m	£34.72	£590.24	11	19	31								
	softwood feather edge boards 100 x 25mm;															
	three 75 x 50mm rails and 100 x 100mm posts at 2.40m centres; timber gravel boards;															
	2000mm high, boundary fence	43	m	£38.96	£1,675.28	11	19	31								
1	Close boarded Fencing, single leaf gates, complete with additional posts and															
	ironmongery, 1800mm high	5	Nr	£197.49	£987.45	17	27	40 steel fencing								
A	Set of approved cast iron gates; including															
	posts, foundations, ironmongery and the like; assumed to be 1200mm high; nominally															
	1800mm wide	1	Nr	£2,000.00	£2,000.00	17	27	40 steel fencing								
В	Set of approved cast iron gates; including posts, foundations, ironmongery and the like;															
	assumed to be 1200mm high; gate nominally															
	1200mm wide, with two sets of fencing to match nominally 300mm long each	1	Nr	£1,200.00	£1,200.00	17	27	40								
с	external seat, assumed to be of timber															
	construction on galvanised steel frame; generally	1	Nr	£662.04	£662.04	10	15	20 personal estimation	on							
А	All works identified within the appended															
	Drainage Standard Bill; which includes for all attendances, site surveys and investigations,															
	generally	1	ITEM	£216.05	£216.05	1	1	1								
В	Possible repairs to the existing drainage lines including revamping existing manholes to suit,															
	generally		ITEM	£216.05	£216.05	1	1	1								
C D	rock concrete	0	m3 m3	£0.00 £0.00	£0.00 £0.00											
E	reinforced concrete	0	m3	£0.00	£0.00											
FG	brickwork, blockwork or stonework excavating soft spots; disposal of surplus	0	m3	£0.00	£0.00											
0	material and filling with approved fill to															
	formation level of trench - to be priced as rate only per cubic metre	0	m3	£0.00	£0.00											
н	next existing service - to be priced as rate only															
	per metre around existing service crossing excavation - to	0	m3	£0.00	£0.00											
	be priced as rate only per crossing	0	m3	£0.00	£0.00											
A	Excavating trenches for drainage pipes; complete with the disposal of surplus															
	materials; for pipes; not exceeding 200mm															
	nominal diameter, average depth 500 to 750mm	114	m	£32 41	£3,694.74	41	63	84 14.25 205	50	soil	0.15	0.45	0.73	4381.875	13145.625	21325.125
в	Excavating trenches for drainage pipes;				.,											
	complete with the disposal of surplus materials; beds and surrounds, to suit 100mm															
	diameter pipe	114	m	£25.93	£2,956.02	41	63	82 0.57 205	50	soil	0.15	0.45	0.73	175.275	525.825	853.005
с	Below ground drainage pipe, approved PVC / Clay pipes, 100mm nominal size	114	m	£11.88	£1.354.32	35	53	70 0.1145472	37	pvc	47.25	67.5	87.75 20	0.2571424	286.081632	371,90612
D	Below ground drainage pipe, bends, 100mm	38	Nr	£30.25	£1,149.50	35	53	70 0.1145472 5								
E	Below ground drainage pipe, rocker pipes, 100mm: to manholes	19	Nr	£30.25	£574.75	35	53	70								
F	Below ground drainage pipe, rest bends,															
G	100mm; complete with concrete base Below ground drainage pipe, connection to soil	19	Nr	£34.57	£656.83	35	53	70								
0	pipes	19	Nr	£37.81	£718.39	35	53	70								
н	Marker tape, non degradable; red with black lettering, laid in trench 450mm above pipe	114	m	£1.08	£123.12	1	1	1								
А	Remove existing drainage installations, cap off	114		11.08	1123.12	-	1	1								
в	and seal existing pipework	1	ITEM	£59.41	£59.41	1	1	1								
в	Remove existing drainage installations, remove manholes; assumed to be masonry															
	construction, assumed to be not exceeding 2.00m deep	1	Nr	£448.30	£448.30	1		1								
с	Excavating trenches for drainage pipes;	1	iNF	±446.3U	1446.3U	1	1	1								
	average depth 750 to 1000mm - outside of site	~*		····	£004	500		1000 5 0000	50	coll	0.15	0.45	0.73	EEC 74077	4670 10 000	7576 0040
D	boundary Excavating trenches for drainage pipes;	25	m	£34.57	£864.25	500	750	1000 5.0625 205				0.45			4670.15625	
	average depth 1000 to 1250mm	18	m	£38.89	£700.02	500	750	1000 4.55625 205	50	soil	0.15	0.45	0.73 14	01.046875	4203.14063	6818.4281
E	Excavating trenches for drainage pipes; average depth 1250 to 1500mm	24	m	£42.13	£1,011.12	500	750	1000 7.56 205	50	soil	0.15	0.45	0.73	2324.7	6974.1	11313.54
F	Excavating trenches for drainage pipes;															
G	average depth 1500 to 1750mm Excavating trenches for drainage pipes;	17	m	£47.53	£808.01	500	750	1000 6.215625 205	20	soil	0.15	0.45	U.73 19	11.304688	5733.91406	9301.6828
	average depth 1750 to 2000mm	19	m	£51.85	£985.15	500	750	1000 8.015625 205	50	soil	0.15	0.45	0.73 24	64.804688	7394.41406	11995.383
н	Excavating trenches for drainage pipes; beds and surrounds, to suit 225mm diameter pipe	103	m	£11.88	£1,223.64	500	750	1000 1.15875 224	40	sand	0.05 0	0.081	0.15	129.78	210.2436	389.34
1	UltraRib Twinwall plastic pipes , 225mm				,											
J	nominal size Below ground drainage pipe, bends, 225mm	103 10	m Nr	£17.28 £30.25	£1,779.84 £302.50	35 35	53 53	70 0.2328624 3 70	37	pvc	47.25	67.5	87.75 40	07.1016908	581.573844	756.046
ĸ	Below ground drainage pipe, rocker pipes,															
L	225mm; to manholes Below ground drainage pipe, junction 100 x	16	Nr	£30.25	£484.00	35	53	70								
	225 x 225mm	1	Nr	£37.81	£37.81	35	53	70								
м	Below ground drainage pipe, junction 150 x 225 x 225mm	1	Nr	£37.81	£37.81	35	53	70								

N	Marker tape, non degradable; red with black lettering, laid in trench 450mm above pipe	103	m	£1.08	£111.24	1	1	1									
A	Concrete manhole 1200mm diameter																
	manhole; depth not exceeding 1250mm;			64 530 54	64 530 54	50	50	50	0 7005	050			2.10	2.0	720.62	1200 1445	2201.005
в	assumed D400 recessed cover Concrete manhole 1200mm diameter	1	Nr	£1,528.54	£1,528.54	50	50	50	0.7065	850		1.2	2.18	3.8	720.63	1309.1445	2281.995
	manhole; depth not exceeding 1500mm;																
	assumed D400 recessed cover	2	Nr	£1,701.38	£3,402.76	50	50	50	1.6956	850		1.2	2.18	3.8	1729.512	3141.9468	5476.788
с	Concrete manhole 1200mm diameter manhole; depth not exceeding 1750mm;																
	assumed D400 recessed cover	2	Nr	£1,824.53	£3,649.06	50	50	50	1.9782	850		1.2	2.18	3.8	2017.764	3665.6046	6389.586
D	Concrete manhole 1200mm diameter																
	manhole; depth not exceeding 2000mm; assumed D400 recessed cover	1		£1.993.05	C1 002 05	50	50	50	1.1304	850		1.2	2.18	3.8	4453.000	2094.6312	2004 402
Е	assumed D400 recessed cover works to existing manhole; remove exit pipes	1	Nr	£1,993.05	£1,993.05	50	50	50	1.1304	850		1.2	2.18	3.8	1153.008	2094.6312	3651.192
	and install new 225mm pipe; manhole																
	construction unknown; assumed to be																
	masonry, depth to invert not exceeding																
F	1000mm works to existing manhole; remove exit pipes	1	Nr	£1,420.52	£1,420.52	50	50	50									
	and install new 225mm pipe; manhole																
	construction unknown; assumed to be																
	masonry, depth to invert not exceeding																
А	2000mm	1	Nr	£1,636.57	£1,636.57	50	50	50									
	works to existing pipework, at location of																
	existing manhole, connect existing entry																
	pipework to new pipework for manhole to be																
	abandoned and removed; pipe nominally 2.00m to invert, existing 225mm diameter pipe	1	Nr	£837.19	£837.19	35	53	70									
А	Excavating trenches for drainage pipes;	1	TWI I	1037.19	1037.19	33		70									
	average depth 500 to 750mm	4	m	£32.41	£129.64	500	750	1000	0.5	2050	soil	0.15	0.45	0.73	153.75	461.25	748.25
В	Excavating trenches for drainage pipes;																
c	average depth 750 to 1000mm Excavating trenches for drainage pipes;	29	m	£34.57	£1,002.53	500	750	1000	5.075	2050	soil	0.15	0.45	0.73	1560.5625	4681.6875	7594.7375
C	average depth 1000 to 1250mm	28	m	£38.89	£1,088.92	500	750	1000	6.3	2050	soil	0.15	0.45	0.73	1937.25	5811.75	9427.95
D	Excavating trenches for drainage pipes; beds																
	an surrounds, to suit 100mm diameter pipe	28	m	£11.88	£332.64	500	750	1000	0.14	2240	sand	0.05	0.081	0.15	15.68	25.4016	47.04
E	Excavating trenches for drainage pipes; beds an surrounds, to suit 100mm diameter pipe	34	m	£25.93	£881.62	500	750	1000	0.17	2240	sand	47.25	67.5	87.75	17992.8	25704	33415.2
F	PVC / Clay pipes 100mm nominal size	62	m	£11.88	£736.56	35	53		0.0622976		pvc	47.25	67.5		108.9117792		
G	Below ground drainage pipe, bends, 100mm	11	Nr	£30.25	£332.75	35	53	70									
н	Below ground drainage pipe, rocker pipes,				·····												
	100mm; to manholes Below ground drainage pipe, external yard	16	Nr	£30.25	£484.00	35	53	70									
•	gully, complete with trap, grating and cover,																
	bed and surround in concrete	1	Nr	£237.65	£237.65	35	53	70									
1	Marker tape, non degradable; red with black																
r	lettering, laid in trench 450mm above pipe manhole not evceeding 750mm deen	62 3	m Nr	£1.08 £394.29	£66.96 £1,182.87	1 50	1	1 50									
K L	manhole not exceeding 750mm deep manhole not exceeding 1000mm deep	3	Nr Nr	£394.29 £480.71	£1,182.87 £2,403.55	50 50	50 50	50 50									
A	CCTV inspection to all pipelines, generally		ITEM	£810.18	£810.18	1	1	1									
в	Testing of manholes and pipelines, generally		ITEM	£378.08	£378.08	1	1	1									
с	Cleaning of pipelines, as required	1	ITEM	£324.07	£324.07	1	1	1									
D	Operating and maintenance manuals, as required	1	ITEM	£270.06	£270.06	1	1	1									
E	Record drawings, as required		ITEM	£194.44	£194.44	1	1	1									
A	All works identified within the appended																
	Drainage Standard Bill; generally	1	ITEM	£216.05	£216.05	1	1	1									
в	Possible repairs to the existing drainage lines, generally	1	ITEM	£216.05	£216.05	1	1	1									
А	ACO channels or equal other approved with	1	TIEN	1210.05	1210.05	1	1	1									
	ductile iron grating to load class D400;																
	complete including excavation, disposal and																
	concrete bed and surround, generally; laid straight	35	m	£156.64	£5.482.40	50	60	70									
в	Extra over slotted drain system for: ends	35	m Nr	£156.64 £27.01	£5,482.40 £702.26	50	60	70	personal es	imation							
c	Extra over slotted drain system for: outlet	20		227.01	2702.20	50											
	connection 100mm diameter	13	Nr	£41.05	£533.65	50	60	70									
D	In situ concrete ST4 foundation to receive																
	pennant / granite setts 200 x 100 x 100mm bedded and pointed in approved mortar;																
	generally; laid straight	49	m	£73.46	£3,599,54	50	60	70									
E	Excavating trenches for drainage pipes; For																
	pipes; not exceeding 200mm nominal																
	diameter, average depth 750 to 1000mm Excavating trenches for drainage pipes; For	229	m	£34.57	£7,916.53	500	750	1000	40.075	2050	soil	0.15	0.45	0.73	12323.0625	36969.1875	59972.238
r	pipes; not exceeding 200mm nominal																
	diameter, average depth 1000 to 1250mm	23	m	£38.89	£894.47	500	750	1000	5.175	2050	soil	0.15	0.45	0.73	1591.3125	4773.9375	7744.3875
G	Excavating trenches for drainage pipes; For																
	pipes; not exceeding 200mm nominal	68	m	£42.13	£2,864.84	500	750	1000	18.7	2050	soil	0.15	0.45	0.73	5750.25	17250.75	27984.55
н	diameter, average depth 1250 to 1500mm Excavating trenches for drainage pipes; For	00	m	£42.13	12,004.04	500	/50	1000	18.7	2050	SOIL	0.15	0.45	0.75	5750.25	1/250.75	27984.55
	pipes; 225mm nominal diameter, average																
	depth 1250 to 1500mm	21	m	£51.85	£1,088.85	500	750	1000	6.496875	2050	soil	0.15	0.45	0.73	1997.789063	5993.36719	9722.5734
1	Excavating trenches for drainage pipes; For pipes; 225mm nominal diameter, average																
	depth 1500 to 1750mm	68	m	£56.17	£3,819.56	500	750	1000	24.8625	2050	soil	0.15	0.45	0.73	7645.21875	22935 6563	37206 731
J	Excavating trenches for drainage pipes; For	00		250.27	23,013.30	500	750	1000	24.0025	2050	5011	0.15	0.45	0.75	/045.210/5	22333.0303	57200.752
	pipes; 300mm nominal diameter, average																
	depth 1250 to 1500mm	4	m	£57.25	£229.00	500	750	1000	1.65	2050	soil	0.15	0.45	0.73	507.375	1522.125	2469.225
к	Excavating trenches for drainage pipes; For pipes; 300mm nominal diameter, average																
	depth 1500 to 1750mm	12	m	£62.65	£751.80	500	750	100	5.85	2050	soil	0.15	0.45	0.73	1798.875	5396.625	8754.525
L	Excavating trenches for drainage pipes; Beds																
м	and surrounds, to suit 100mm diameter pipe Excavating trenches for drainage pipes: Beds	7	m	£11.88	£83.16	500	750	1000	0.035	2240	sand	0.05	0.081	0.15	3.92	6.3504	11.76
м	Excavating trenches for drainage pipes; Beds and surrounds, to suit 150mm diameter pipe	83	m	£14.04	£1.165.32	500	750	1000	0.6225	2240	sand	0.05	0.081	0.15	69.72	112.9464	209.16
N	Excavating trenches for drainage pipes; Beds		a		,203.32	500	100	1000				0.00		0.13			200.10
	and surrounds, to suit 225mm diameter pipe	89	m	£16.20	£1,441.80	500	750	1000	1.00125	2240	sand	0.05	0.081	0.15	112.14	181.6668	336.42
0	Excavating trenches for drainage pipes; Beds																
А	and surrounds, to suit 300mm diameter pipe Storm drainage, beds and surrounds, to suit	16	m	£20.52	£328.32	500	750	1000	0.24	2240	sand	0.05	0.081	0.15	26.88	43.5456	80.64
	100mm diameter pipe	194	m	£25.93	£5,030.42	500	750	1000									
В	Storm drainage, beds and surrounds, to suit																
с	150mm diameter pipe Below ground drainage pipe, PVC / Clay pipes,	34	m	£28.09	£955.06	500	750	1000									
L .	100mm nominal size	202	m	£11.88	£2,399.76	35	53	70	0.2029696	37	pvc	47.25	67.5	87.75	354.8416032	506.916576	658.99155
D	Below ground drainage pipe, PVC / Clay pipes,																
	150mm nominal size	117	m	£14.04	£1,642.68	35	53	70	0.1763424	37	pvc	47.25	67.5	87.75	308.2906008	440.415144	572.53969
E	Below ground drainage pipe, PVC / Clay pipes, 225mm nominal size	89	m	£17.28	£1.537.92	35	53	70	0.2012112	37	DAC.	47.25	67.5	87 75	351.7674804	502 524072	653 28246
F	225mm nominal size Below ground drainage pipe, PVC / Clay pipes,	9.7	m	217.28	1,537.92	35	53	70	0.2012112	3/	har	47.25	07.5	07.75		302.324972	JJJ.2824b
	300mm nominal size	16	m	£25.93	£414.88	35	53		0.0482304	37	рус	47.25	67.5	87.75	84.3187968	120.455424	156.59205
G	Below ground drainage pipe, bends, 100mm	130	Nr	£27.01	£3,511.30	35	53	70									
н	Below ground drainage pipe, bends, 150mm Below ground drainage pipe, bends, 225mm	65 24	Nr Nr	£30.25 £32.41	£1,966.25 £777.84	35 35	53 53	70 70									
1	Below ground drainage pipe, bends, 225mm Below ground drainage pipe, bends, 300mm	24	Nr Nr	£32.41 £41.05	£777.84 £123.15	35 35	53 53	70									
ĸ	Below ground drainage pipe, rocker pipes,																
	100mm; to manholes	27	Nr	£27.01	£729.27	35	53	70									
L	Below ground drainage pipe, rocker pipes, 150mm; to manholes	18	Nr	£30.25	£544.50	35	53	70									
м	150mm; to manholes Below ground drainage pipe, rocker pipes,	18	Nr	£30.25	1.544.50	35	53	/0									
	225mm; to manholes	14	Nr	£32.41	£453.74	35	53	70									
N	Below ground drainage pipe, rocker pipes,																
0	300mm; to manholes	6	Nr	£38.89	£233.34	35	53	70									
0	Below ground drainage pipe, junctions, 100 x 100 x 100mm	14	Nr	£37.81	£529.34	35	53	70									
Р	100 x 100mm Below ground drainage pipe, junctions, 100 x	14	141	231.81	2323.34	22	23	70									
	150 x 150mm	2	Nr	£37.81	£75.62	35	53	70									
Q	Below ground drainage pipe, junctions, 100 x																
R	225 x 225mm Below ground drainage pipe, junctions, 100 x	12	Nr	£41.05	£492.60	35	53	70									
	selow ground drainage pipe, junctions, 100 x 300 x 300mm	1	Nr	£49.69	£49.69	35	53	70									
s	Below ground drainage pipe, junctions, 150 x																
-	150 x 150mm	7	Nr	£37.81	£264.67	35	53	70									
т	Below ground drainage pipe, junctions, 150 x 225 x 225mm	5	Nr	£41.05	£205.25	35	53	70									
U	225 x 225mm Below ground drainage pipe, external yard	2	141	241.05	2203.25	22	23	70									
	gully, complete with trap, grating and cover,																
v	bed and surround in concrete; 150mm outlet	5	Nr	£237.65	£1,188.25	35	53	70									
v	Below ground drainage pipe, rodding eye, complete with frame and cover, bed and																
	surround in concrete; 100mm outlet	2	Nr	£118.83	£237.66	35	53	70									
w	Below ground drainage pipe, connection to			c 40	61 300	35											
	rainwater pipes	37	Nr	£48.61	£1,798.57	35	53	70									

х	Below ground drainage pipe, rest bend, complete with concrete bed and surround;																
Y	100mm Pre cast concrete road gully; to suit 150mm	37	Nr	£31.33	£1,159.21	35	53	70									
А	diameter outlet Marker tape, non degradable; red with black	10	Nr	£253.86	£2,538.60	500	750	1000									
в	lettering; laid in trench 450mm above pipe Concrete manhole; 1200mm diameter	62	m	£1.08	£66.96	1	1	1									
	manhole; depth not exceeding 1250mm; assumed D400 recessed cover	1	Nr	£1,528.54	£1,528.54	50	50	50	0.7065								
c	Concrete manhole; 1200mm diameter manhole; depth not exceeding 1500mm; assumed D400 recessed cover	2	Nr	£1,701.38	£3.402.76	50	50	50	1.6956								
D	Concrete manhole; 1200mm diameter manhole; depth not exceeding 1750mm;			£1.824.53					1.9782								
E	assumed D400 recessed cover Concrete manhole; 1200mm diameter manhole; depth not exceeding 2000mm;	2	Nr	£1,824.53	£3,649.06	50	50	50	1.9782								
F	assumed D400 cover Athlon precast concrete headwall; 150mm diameter pipe outlet; depth to invert not	2	Nr	£1,993.05	£3,986.10	50	50	50	2.2608								
G	exceeding 1.50m Athlon precast concrete headwall; 300mm	1	Nr	£324.07	£324.07												
	diameter pipe outlet; depth to invert not exceeding 1.75m	1	Nr	£378.08	£378.08												
н	manhole not exceeding 1000mm deep manhole not exceeding 1250mm deep	10 3	Nr Nr	£480.71 £556.32	£4,807.10 £1,668.96	50 50	50 50	50 50									
J A	manhole not exceeding 1500mm deep manhole not exceeding 1750mm deep	1		£658.95	£658.95	50	50	50									
A	3.00 Nr CCTV inspection to all pipelines, generally	0	ITEM	£0.00 £810.18	£0.00 £810.18	1	1	1									
В	Testing of manholes and pipelines, generally	1	ITEM	£378.08	£378.08	1	1	1									
C D	Cleaning of pipelines, as required Operating and maintenance manuals, as		ITEM	£324.07	£324.07	1	1										
E	required Record drawings, as required		ITEM	£270.06 £199.84	£270.06 £199.84	1	1	1									
A B	rock concrete	0		£0.00 £0.00	£0.00 £0.00												
C D	reinforced concrete brickwork, blockwork or stonework	0	m3	£0.00 £0.00	£0.00 £0.00												
E	excavating soft spots; disposal of surplus material and filling with approved fill to	0		20.00	20.00												
	formation level of trench - to be priced as rate																
F	only per cubic metre next existing service - to be priced as rate only	0		£0.00	£0.00												
G	per metre around existing service crossing excavation - to	0		£0.00	£0.00												
A	be priced as rate only per crossing to the site area and surrounding	0	Nr ITEM	£0.00 £0.00	£0.00 £0.00												
в	generally Excavating trenches for Water, services not		ITEM	£0.00	£0.00												
	exceeding 200mm; depth not exceeding			cao ao	64 544 51	500	300	1000		2050		0	0.15	0.77	0017		42200 -
D	1250mm - Provisional Quantity Excavating trenches for Water, extra over for excavation in highways, including all works to	116	m	£38.89	£4,511.24	500	750	1000	29	2050	soil	0.15	0.45	0.73	8917.5	26752.5	43398.5
	breakout existing surfaces, make good and reinstate on completion of works, temporary																
E	fencing, diversions and the like Excavating trenches for Gas, services not	12	m	£156.64	£1,879.68	500	750	1000									
-	exceeding 200mm; depth not exceeding 1250mm - Provisional Quantity	136	m	£38.89	£5.289.04	500	750	1000	24	2050	soil	0.15	0.45	0.73	10455	31365	50881
F	Excavating trenches for Gas, extra over for	136	m	£38.89	£5,289.04	500	/50	1000	34	2050	SOIL	0.15	0.45	0.73	10455	31365	50881
	excavation in highways, including all works to breakout existing surfaces, make good and																
	reinstate on completion of works, temporary fencing, diversions and the like	7	m	£156.64	£1,096.48	500	750	1000									
G	Surface water; including the treatment of the water to remove all sediment; pollutants and																
	the like before leaving the site perimeters, generally		ITEM	£199.84	£199.84	1	1	1									
н	Bed and surround; to water pipes, to suit one	1	TIEN	£199.84	£199.84	1	1	1									
	pipes nominal size not exceeding 100mm diameter - Provisional Quantity	116	m	£12.96	£1,503.36	500	750	1000	1.16	2050	soil	0.15	0.45	0.73	356.7	1070.1	1735.94
A	Bed and surround; to gas pipes, to suit one pipe nominal size not exceeding 100mm																
в	diameter - Provisional Quantity MDPE or Puriton ducts for Water supplies,	136	m	£12.96	£1,762.56	500	750	1000	1.36	2050	soll	0.15	0.45	0.73	418.2	1254.6	2035.24
	32mm diameter; or similar MDPE or Puriton ducts for Gas supplies, 63mm	116	m	£8.64	£1,002.24	18	24	34	0.1147356	940		58.17	83.1	108.03	6273.719661	8962.45666	11651.194
c	diameter; or similar	136	m	£8.64	£1,175.04	18	24	34	0.1345176	940		58.17	83.1	108.03	7355.395464	10507.7078	13660.02
D	Excavate pit for connection of water pipes; generally - Provisional Quantity	7	Nr	£51.85	£362.95	500	750	1000									
E	Excavate pit for connection of gas pipes; generally	7	Nr	£51.85	£362.95	500	750	1000									
F G	Meters, gas - Provisional Quantity Meters, water - Provisional Quantity	10 10		£0.00 £0.00	£0.00 £0.00												
н	Site isolation valve and utility governor, gas - Provisional Quantity	1		£0.00	£0.00												
1	Identification tapes - ' WATER PIPE BELOW',		N.														
1	generally - Provisional Quantity Identification tapes - ' GAS PIPE BELOW',																
A		116	m	£1.08	£125.28	1	1	1									
	generally - Provisional Quantity Excavating trenches for BT, services not	116 136		£1.08	£146.88	1	1	1 1									
	generally - Provisional Quantity Excavating trenches for BT, services not exceeding 200mm; depth not exceeding																
в	generally - Provisional Quantity Excavating trenches for BT, services not exceeding 200mm; depth not exceeding 1250mm - Provisional Quantity; assumed to be two ducts								37.25	2050	soil	0.15	0.45	0.73	11454.375	34363.125	55744.625
В	generally - Provisional Quantity Excavating trenches for BT, services not exceeding 200mm; depth not exceeding 1250mm - Provisional Quantity; assumed to be two ducts Excavating trenches for BT, attendance on the relocation of telegraph pole	136	m	£1.08	£146.88	1	1	1	37.25	2050	soil	0.15	0.45	0.73	11454.375	34363.125	55744.625
B C	generallyProvisional Quantity Excavating trenches for BT, services not exceeding 200mm; depth not exceeding 1250mm - Provisional Quantity; assumed to be two ducts Excavating trenches for BT, attendance on the Excavating trenches for data, services not exceeding 200mm; depth not exceeding	136 149 1	m M	£1.08 £38.89 £297.07	£146.88 £5,794.61 £297.07	1 500 500	1 750 750	1 1000 1000									
	generally - Provisional Quantity Exavating trenches for BT, services not exceeding 200mm; depth not exceeding 1250mm - Provisional Quantity; assumed to be two ducts Excavating trenches for BT, attendance on the relocation of telegraph pole Excavating trenches for data, services not exceeding 200mm; depth not exceeding 1250mm - Provisional Quantity Excavating trenches for power supples,	136 149	m	£1.08 £38.89	£146.88 £5,794.61	1 500	1 750	1	37.25 37.25		soil	0.15	0.45	0.73		34363.125 34363.125	
с	generally - Provisional Quantity Excavating trendens for BT, services not exceeding 200mm, depth not exceeding 1250mm - Provisional Quantity; assumed to be two ducts Excavating trenders for BT, attendance on the relocation of telegraph pole Excavating trenders for data, services not exceeding 200mm, depth not exceeding 1250mm - Provisional Quantity	136 149 1	m M	£1.08 £38.89 £297.07	£146.88 £5,794.61 £297.07	1 500 500	1 750 750	1 1000 1000	37.25								
с	generally - Provisional Quantity Excavating trendens for BT, services not exceeding 200mm, depth not exceeding 1250mm - Provisional Quantity; assumed to be two ducts Excavating trenches for BT, attendance on the relocation of telegraph pole Excavating trenches for data, services not exceeding 200mm, depth not exceeding 1250mm - Provisional Quantity Excavating trenches for power supplies, services not exceeding 200mm, depth not exceeding 1250mm - Provisional Quantity Excavating trenches for power supplies,	136 149 1 149	m Nr m	£1.08 £38.89 £297.07 £38.89	£146.88 £5,794.61 £297.07 £5,794.61	1 500 500	1 750 750 750	1 1000 1000	37.25	2050	soil	0.15	0.45	0.73	11454.375	34363.125	55744.625
C D	generally - Provisional Quantity Excavating trendens for BT, services not exceeding 200mm, depth not exceeding 1250mm - Provisional Quantity; assumed to be two ducts Excavating trenches for BT, attendance on the relocation of telegraph pole Excavating trenches for data, services not exceeding 200mm, depth not exceeding 1250mm - Provisional Quantity Excavating trenches for power supplies, services not exceeding 1250mm - Provisional Quantity exceeding 1250mm - Provisional Quantity -	136 149 1 149 256	m Nr m	£1.08 £38.89 £297.07 £38.89 £38.89	£146.88 £5,794.61 £297.07 £5,794.61 £9,955.84	1 500 500 500	1 750 750 750	1 1000 1000 1000	37.25	2050 2050	soil soil	0.15	0.45	0.73	11454.375 19680	34363.125 59040	55744.625 95776
C D	generally - Provisional Quantity Excavating trendens for BT, services not exceeding 200mm, depth not exceeding 1250mm - Provisional Quantity; assumed to be two ducts Excavating trenches for BT, attendance on the relocation of telegraph pole Excavating trenches for data, services not exceeding 200mm, depth not exceeding 1250mm - Provisional Quantity Excavating trenches for power supplies, services not exceeding 1250mm - Provisional Quantity exceeding 1250mm - Provisional Quantity - connections to buildings Excavating trenches for power supplies, services not exceeding 3200mm; depth not exceeding 1250mm - Provisional Quantity - connections to buildings Excavating trenches for power supplies,	136 149 1 149	m Nr m	£1.08 £38.89 £297.07 £38.89	£146.88 £5,794.61 £297.07 £5,794.61	1 500 500	1 750 750 750	1 1000 1000	37.25	2050	soil	0.15	0.45	0.73	11454.375	34363.125	55744.625
C D E F	generally - Provisional Quantity Excavating trendens for BT, services not exceeding 200mm, depth not exceeding 1250mm - Provisional Quantity; assumed to be two ducts Excavating trenches for BT, attendance on the relocation of telegraph pole Excavating trenches for data, services not exceeding 200mm, depth not exceeding 1250mm - Provisional Quantity Excavating trenches for power supplies, services not exceeding 200mm; depth not exceeding 1250mm - Provisional Quantity - connections to buildings Excavating trenches for power supplies, services not exceeding 200mm; depth not exceeding 1250mm - Provisional Quantity - connections to buildings Excavating trenches for power supplies, services not exceeding 200mm; depth not exceeding 1250mm - Provisional Quantity -	136 149 1 149 256	m Nr m	£1.08 £38.89 £297.07 £38.89 £38.89	£146.88 £5,794.61 £297.07 £5,794.61 £9,955.84	1 500 500 500	1 750 750 750	1 1000 1000 1000	37.25 64 12	2050 2050	soil soil	0.15	0.45	0.73	11454.375 19680	34363.125 59040	55744.625 95776
C D E	generally - Provisional Quantity Exavating trendens for BT, services not exceeding 200mm; depth not exceeding 1250mm - Provisional Quantity; assumed to be two ducts Exavating trenches for BT, attendance on the relocation of telegraph pole Exavating trenches for data, services not exceeding 200mm; depth not exceeding 1250mm - Provisional Quantity Exavating trenches for power supplies, services not exceeding 200mm; depth not exceeding 1250mm - Provisional Quantity - connections to buildings Exavating trenches for power supplies, services not exceeding 200mm; depth not exceeding 1250mm - Provisional Quantity - connections to buildings Exavating trenches for power supplies, services not exceeding 200mm; depth not exceeding 1250mm - Provisional Quantity Exavating trenches for power supplies, services not exceeding 200mm; depth not exceeding 1250mm - Provisional Quantity Exavating trenches for power supplies, services not exceeding 200mm; depth not exceeding 1250mm - Provisional Quantity Exavating trenches for power supplies, services not exceeding 200mm; depth not exceeding 1250mm - Provisional Quantity Exavating trenches for power supplies, services not exceeding 200mm; depth not exceeding 1250mm - Provisional Quantity	136 149 1 149 256 48	m Nr m m	£1.08 £38.89 £297.07 £38.89 £38.89 £38.89	£146.88 £5,794.61 £297.07 £5,794.61 £9,955.84 £1,866.72	1 500 500 500 500	1 750 750 750 750	1 1000 1000 1000 1000	37.25 64 12	2050 2050 2050	soil soil soil	0.15	0.45 0.45 0.45	0.73 0.73 0.73	11454.375 19680 3690 15990	34363.125 59040 11070 47970	55744.625 95776 17958 77818
C D F G	generally - Provisional Quantity Ecuavaing trenches for BT, services not exceeding 200mm, depth not exceeding 1250mm - Provisional Quantity assumed to be two ducts Ecuavaing trenches for BT, attendance on the relocation of telegraph pole Ecuavaing trenches for data, services not exceeding 200mm, depth not exceeding 1250mm - Provisional Quantity Ecuavating trenches for gover supplies, services not exceeding 200mm, depth not exceeding 1250mm - Provisional Quantity - connections to Buildings Ecuavating trenches for gover supplies, services not exceeding 200mm, depth not exceeding 1250mm - Provisional Quantity - connections to Buildings Ecuavating trenches for streng Lighting, services not exceeding 200mm, depth not exceeding 1250mm - Provisional Quantity Ecuavating trenches for streng Lighting, services not exceeding 200mm, depth not exceeding 1250mm - not details	136 149 1 149 256 48 208 89	m Nr m m m	£1.08 £38.89 £297.07 £38.89 £38.89 £38.89 £38.89 £38.89 £38.89	£146.88 £5,794.61 £297.07 £5,794.61 £9,955.84 £1,866.72 £8,089.12 £3,461.21	1 500 500 500 500 500 500	1 750 750 750 750 750 750	1 1000 1000 1000 1000 1000	37.25 64 12	2050 2050 2050 2050	soil soil soil	0.15	0.45 0.45 0.45	0.73 0.73 0.73	11454.375 19680 3690 15990	34363.125 59040 11070	55744.625 95776 17958 77818
C D E F	generally - Provisional Quantity Eczavating trenches for BT, services not exceeding 200mm; depth not exceeding 1250mm - Provisional Quantity assumed to be two ducts Eczavating trenches for BT, attendance on the relocation of telegraph pole Eczavating trenches for data, services not exceeding 200mm; depth not exceeding 1250mm - Provisional Quantity Eczavatitg trenches for gover supplies, services not exceeding 200mm; depth not ecceeding 1250mm - Provisional Quantity - Eczavatitg trenches for gover supplies, services not exceeding 200mm; depth not ecceeding 1250mm - Provisional Quantity - connections to Buildings Eczavating trenches for strett [https:, services not exceeding 200mm, depth not exceeding 1250mm - Provisional Quantity Eczavating trenches for strett [https:, services not exceeding 1250mm - Roysional Quantity Disposal, surface water, generally Bela and surroux to teatistica tables, to suit	136 149 1 149 256 48 208 89	m Nr m m	£1.08 £38.89 £297.07 £38.89 £38.89 £38.89 £38.89	£146.88 £5,794.61 £297.07 £5,794.61 £9,955.84 £1,866.72 £8,089.12	1 500 500 500 500 500	1 750 750 750 750 750	1 1000 1000 1000 1000 1000	37.25 64 12 52	2050 2050 2050 2050	soil soil soil	0.15 0.15 0.15 0.15	0.45 0.45 0.45 0.45	0.73 0.73 0.73 0.73	11454.375 19680 3690 15990	34363.125 59040 11070 47970	55744.625 95776 17958 77818
C D F G H A	generally -Provisional Quantity Eczavating trenches for BT, services not exceeding 200mm; depth not exceeding 1250mm - Provisional Quantity assumed to be two ducts Eczavating trenches for BT, attendance on the relocation of telegraph pole Eczavating trenches for data, services not exceeding 200mm; depth not exceeding 1250mm - Provisional Quantity Eczavating trenches for power supplies, services not exceeding 200mm; depth not exceeding 1250mm - Provisional Quantity Eczavating trenches for power supplies, services not exceeding 200mm; depth not exceeding 1250mm - Provisional Quantity Eczavating trenches for power supplies, services not exceeding 200mm; depth not exceeding 1250mm - Provisional Quantity Eczavating trenches for power supplies, Eczavating trenches for street lighting, services not exceeding 200mm; depth not exceeding 1250mm - not exceeding 200mm; depth not exceeding 1250mm - Provisional Quantity Eczavating trenches for street lighting, services not exceeding 200mm; depth not exceeding 1250mm - Index to the street lighting, services not exceeding 1250mm - Provisional Quantity Eczavating trenches for street lighting, services not exceeding 200mm; depth not exceeding 1250mm - Index for street lighting, services not exceeding 1250mm - Provisional Quantity Eczavating trenches for street lighting, services not exceeding 1250mm - Revisional Quantity Eczavating trenches for street lighting, services not exceeding 1250mm; for electrical cables, to suit single duct nominal size not exceeding 200mm	136 149 1 149 256 48 208 89	m Nr m m m	£1.08 £38.89 £297.07 £38.89 £38.89 £38.89 £38.89 £38.89 £38.89	£146.88 £5,794.61 £297.07 £5,794.61 £9,955.84 £1,866.72 £8,089.12 £3,461.21	1 500 500 500 500 500 500	1 750 750 750 750 750 750	1 1000 1000 1000 1000 1000	37.25 64 12 52	2050 2050 2050 2050 2050	soil soil soil	0.15 0.15 0.15 0.15	0.45 0.45 0.45 0.45	0.73 0.73 0.73 0.73	11454.375 19680 3690 15990	34363.125 59040 11070 47970 20525.625	55744.625 95776 17958 77818
C D F G H	generally - Provisional Quantity Eczavating trenches for BT, services not exceeding 200mm; depth not exceeding 1250mm - Provisional Quantity assumed to be two ducts Eczavating trenches for BT, attendance on the relocation of telegraph pole Eczavating trenches for data, services not exceeding 200mm; depth not exceeding 1250mm - Provisional Quantity Eczavating trenches for power supplies, services not exceeding 200mm; depth not exceeding 1250mm - Provisional Quantity Eczavating trenches for power supplies, services not exceeding 200mm; depth not exceeding 1250mm - Provisional Quantity Eczavating trenches for power supplies, services not exceeding 200mm; depth not exceeding 1250mm - Provisional Quantity Eczavating trenches for power supplies, services not exceeding 200mm; depth not exceeding 1250mm - Provisional Quantity Eczavating trenches for street lighting, services not exceeding 200mm; depth not exceeding 1250mm - not exceeding 200mm; depth not exceeding 1250mm - not exceeding 200mm; depth not exceeding 200mm; depth not exceeding 200mm; depth not exceeding 1250mm - not exceeding 200mm; depth not exceeding 200mm; depth not exceeding 200mm; depth not exceeding 200mm; depth not exceeding 200mm; depth not exceeding 200m; depth not exceeding 200m; depth not exceeding 200m; depth not exceeding 200m; depth not exceeding 200m; depth not exceeding 200m; depth not excee	136 149 1 149 256 48 208 89 1 304	m Nr m m ITEM	£1.08 £38.89 £297.07 £38.89 £38.89 £38.89 £38.89 £38.89 £138.89 £138.89	£146.88 £5,794.61 £297.07 £5,794.61 £9,955.84 £1,866.72 £8,089.12 £3,461.21 £199.84 £3,611.52	1 500 500 500 500 500 1 500	1 750 750 750 750 750 750 750 1 750	1 1000 1000 1000 1000 1000 1000	37.25 64 12 52 22.25 12.16	2050 2050 2050 2050 2050 2050	soil soil soil soil soil	0.15 0.15 0.15 0.15 0.15 0.15	0.45 0.45 0.45 0.45 0.45 0.45	0.73 0.73 0.73 0.73 0.73 0.73	11454.375 19680 3690 15990 6841.875 3739.2	34363.125 59040 11070 47970 20525.625 11217.6	55744.625 95776 17958 77818 33297.125 18197.44
C D F G H A	generally -Provisional Quantity Ecxavating trenches for BT, services not exceeding 200mm, depth not exceeding 1250mm -Provisional Quantity assumed to be two ducts Ecxavating trenches for BT, attendance on the relocation of telegraph pole Ecxavating trenches for BT, attendance on the relocation of telegraph pole Ecxavating trenches for data, services not exceeding 200mm, depth not exceeding 1250mm -Provisional Quantity Ecxavating trenches for power supplies, services not exceeding 200mm, depth not exceeding 1250mm -Provisional Quantity- connections to buildings Ecxavating trenches for power supplies, services not exceeding 200mm, depth not exceeding 1250mm -Provisional Quantity- connections to buildings Ecxavating trenches for power supplies, services not exceeding 200mm, depth not exceeding 1250mm -Provisional Quantity- connections to buildings Ecxavating trenches for spower supplies, services not exceeding 200mm, depth not exceeding 1250mm -Provisional Quantity- exceeding 1250mm - Rote spower supplies, services not exceeding 200mm, depth not exceeding 1250mm - Rote spower supplies, services not exceeding 200mm, depth not exceeding 1250mm - Rote spower supplies, services not exceeding 200mm, depth not exceeding 1250mm - Rote spower supplies, services not exceeding 200mm, depth not exceeding 1250mm - Rote spower spower spower spower spower not exceeding 200mm, depth not exceeding 200mm, depth not exceeding 1250mm - Rote spower s	136 149 1 149 256 48 208 89 1	m Nr m m m	£1.08 £38.89 £297.07 £38.89 £38.89 £38.89 £38.89 £38.89 £38.89 £199.84	£146.88 £5,794.61 £297.07 £5,794.61 £9,955.84 £1,866.72 £8,089.12 £3,461.21 £199.84	1 500 500 500 500 500 500 1	1 750 750 750 750 750 750 750 1	1 1000 1000 1000 1000 1000 1000 1	37.25 64 12 52 22.25	2050 2050 2050 2050 2050 2050	sol sol sol sol	0.15 0.15 0.15 0.15 0.15	0.45 0.45 0.45 0.45 0.45	0.73 0.73 0.73 0.73 0.73	11454.375 19680 3690 15990 6841.875	34363.125 59040 11070 47970 20525.625 11217.6	55744.625 95776 17958 77818 33297.125
C D F G H A B	generally - Provisional Quantity Excavating trendens for BT, services not exceeding 200mm; depth not exceeding 1250mm - Provisional Quantity; assumed to be two ducts Excavating trenches for BT, attendance on the relocation of telegraph pole Excavating trenches for BT, attendance on the relocation of telegraph pole Excavating trenches for data, services not exceeding 200mm; depth not exceeding 1250mm - Provisional Quantity Excavating trenches for power supplies, services not exceeding 200mm; depth not exceeding 1250mm - Provisional Quantity - connections to buildings Excavating trenches for power supplies, services not exceeding 200mm; depth not exceeding 1250mm - Provisional Quantity - connections to buildings Excavating trenches for power supplies, services not exceeding 200mm; depth not exceeding 1250mm - Provisional Quantity Excavating trenches for power supplies, services not exceeding 200mm; depth not exceeding 1250mm - Provisional Quantity Excavating trenches for power supplies, services not exceeding 200mm; depth not exceeding 1250mm - Provisional Quantity Excavating trenches for power supplies, services not exceeding 200mm; depth not exceeding 1250mm - Provisional Quantity Excavating trenches for power supplies, services not exceeding 200mm; depth not exceeding 1250mm - Provisional Quantity Excavating trenches for power supplies, services not exceeding 200mm; depth not exceeding 1250mm - Provisional Quantity Excavating trenches for power supplies, services not exceeding 200mm; depth not exceeding 1250mm - Provisional Quantity - Excavating trenches for power supplies, services not exceeding 200mm; depth not exceeding 1250mm - Provisional Quantity - Bed and surround; to Betricia Lables, to suit services not exceeding 200mm; depth not exceeding 1250mm - Provisional Quantity - Bed and surround; to BT ducts, to suit single duct nominal size not exceeding 200mm; diameter	136 149 1 149 256 48 208 89 1 304	m Nr m m ITEM	£1.08 £38.89 £297.07 £38.89 £38.89 £38.89 £38.89 £138.89 £139.84 £11.88 £11.88	£146.88 £5,794.61 £297.07 £5,794.61 £9,955.84 £1,866.72 £8,089.12 £3,461.21 £199.84 £3,611.52	1 500 500 500 500 500 1 500	1 750 750 750 750 750 750 750 1 750	1 1000 1000 1000 1000 1000 1000	37.25 64 12 52 22.25 12.16	2050 2050 2050 2050 2050 2050 2050	soil soil soil soil soil	0.15 0.15 0.15 0.15 0.15 0.15	0.45 0.45 0.45 0.45 0.45 0.45	0.73 0.73 0.73 0.73 0.73 0.73	11454.375 19680 3690 15990 6841.875 3739.2	34363.125 59040 11070 47970 20525.625 11217.6 10996.2	55744.625 95776 17958 77818 33297.125 18197.44
C D F G H A B	generally - Provisional Quantity Excavating trenches for BT, services not exceeding 200mm; depth not exceeding 1250mm - Provisional Quantity assumed to be two ducts Excavating trenches for BT, attendance on the relocation of telegraph pole Excavating trenches for BT, attendance on the relocation of telegraph pole Excavating trenches for BT, attendance on the relocation of telegraph pole Excavating trenches for pomers uservices not exceeding 200mm; depth not exceeding 1250mm - Provisional Quantity Excavating trenches for pomer supplies, services not exceeding 200mm; depth not exceeding 1250mm - Provisional Quantity Excavating trenches for pomer supplies, services not exceeding 200mm; depth not exceeding 1250mm - Provisional Quantity Excavating trenches for strett lighting, services not exceeding 1250mm - Browsional Quantity 1250mm - Index for strett lighting, services not exceeding 1250mm - Browsional Quantity Excavating trenches for strett lighting, services not exceeding 1250mm - Browsional Quantity 1250mm - Index 10 to ducts, to suit single duct nominal size not exceeding 200mm deal and surround; to To ducts, to suit single duct nominal size not exceeding 200mm deal not surround; to communications ducts, suit single duct, to nominal size not exceeding 200mm diameter	136 149 1 149 256 48 208 89 1 304 298	m Nr m m ITEM m	£1.08 £38.89 £297.07 £38.89 £38.89 £38.89 £38.89 £199.84 £11.88 £11.88	£146,88 £5,794,61 £297,07 £5,794,61 £9,955,84 £1,866,72 £8,089,12 £3,461,21 £199,84 £3,611,52 £3,540,24	1 500 500 500 500 500 1 500 500	1 750 750 750 750 750 750 1 750 750	1 1000 1000 1000 1000 1000 1000 1000	37.25 64 12 52 22.25 12.16 11.92	2050 2050 2050 2050 2050 2050 2050	soli soli soli soli soli	0.15 0.15 0.15 0.15 0.15 0.15 0.15	0.45 0.45 0.45 0.45 0.45 0.45 0.45	0.73 0.73 0.73 0.73 0.73 0.73 0.73	11454.375 19680 3690 15990 6841.875 3739.2 3665.4	34363.125 59040 11070 47970 20525.625 11217.6 10996.2	55744.625 95776 17958 77818 33297.125 18197.44 17838.28
C D F G H A B C D	generally - Provisional Quantity Eczavaing trenches for BT, services not exceeding 200mm, depth not exceeding 1250mm - Provisional Quantity assumed to be Ixouvaing trenches for BT, attendance on the relocation of telegraph pole Eczavaing trenches for BT, attendance on the relocation of telegraph pole 1250mm - Provisional Quantity 1250mm - Provisional Quantity Eczavaing trenches for BT, attendance on exceeding 1250mm - Provisional Quantity Eczavaing trenches for genower supplies, services not exceeding 200mm; depth not exceeding 1250mm - Provisional Quantity Eczavaing trenches for genower supplies, services not exceeding 200mm; depth not exceeding 1250mm - Provisional Quantity Eczavaing trenches for strett lighting, services not exceeding 200mm; depth not exceeding 1250mm - Index for strett lighting, services not exceeding 200mm; depth not exceeding 1250mm - Index for strett lighting, services not exceeding 200mm; of locations dusts, single duct nominal size not exceeding 200mm dearnet Bed and surround; to To dusts, to suit single Bed and surround; to to trett lighting cables, to suit single duct nominal size not exceeding 200mm diameter Edear and surround; to trett lighting cables, to suit single duct nominal size not exceeding 200mm diameter Edear and surround; to trett lighting cables, to suit single duct nominal size not exceeding 200mm diameter Edear and surround; to trett lighting cables, to suit single duct nominal size not exceeding 200mm diameter - no details	136 149 1 149 256 48 208 89 1 304 298	m Nr m m ITEM m	£1.08 £38.89 £297.07 £38.89 £38.89 £38.89 £38.89 £199.84 £11.88 £11.88	£146,88 £5,794,61 £297,07 £5,794,61 £9,955,84 £1,866,72 £8,089,12 £3,461,21 £199,84 £3,611,52 £3,540,24	1 500 500 500 500 500 1 500 500	1 750 750 750 750 750 750 1 750 750	1 1000 1000 1000 1000 1000 1000 1000	37.25 64 12 52 22.25 12.16 11.92 11.92	2050 2050 2050 2050 2050 2050 2050	soli soli soli soli soli	0.15 0.15 0.15 0.15 0.15 0.15 0.15	0.45 0.45 0.45 0.45 0.45 0.45 0.45	0.73 0.73 0.73 0.73 0.73 0.73 0.73	11454.375 19680 3690 15990 6841.875 3739.2 3665.4	34363.125 59040 11070 47970 20525.625 11217.6 10996.2	55744.625 95776 17958 77818 33297.125 18197.44 17838.28
C D F G H A B C	generally - Provisional Quantity Econvaring trenches for BT, services not exceeding 200mm, depth not exceeding 1350mm - Provisional Quantity assumed to be two ducts Econvaring trenches for BT, attendance on the relocation of telegraph pole Econvaring trenches for BT, attendance on the relocation of telegraph pole Econvaring trenches for data, services not exceeding 200mm, depth not exceeding 1250mm - Provisional Quantity Econvaring trenches for power supplies, exceeding 1250mm - Provisional Quantity Econvaring trenches for power supplies, envices not exceeding 200mm, depth not exceeding 1250mm - Provisional Quantity - Econvaring trenches for streng lighting, services not exceeding 200mm, depth not exceeding 1250mm - Index for streng lighting, services not exceeding 200mm, depth not exceeding 1250mm - Index for streng lighting, services not exceeding 200mm, depth not exceeding 200mm dameter Bed and surround; to BT ducts, to suit single duct nominal size not exceeding 200mm defameter Bed and surround; to BT ducts, to suit single 200mm diameter - Bed and surround; to BT ducts, to suit single 200mm diameter - Bed and surround; to BT ducts, to suit single 200mm diameter - 200mm diameter - 200mm diameter - on details Dust for Power supplies, su0mm diameter, or similar	136 149 1 49 256 48 208 89 1 304 298 298	m Nr m m m m m m m	£1.08 £38.89 £297.07 £38.89 £38.89 £38.89 £38.89 £199.84 £11.88 £11.88 £11.88	£146.88 £5,794.61 £297.07 £5,794.61 £9,955.84 £1,866.72 £8,089.12 £3,611.52 £3,611.52 £3,540.24 £3,540.24	1 500 500 500 500 500 500 500 500	1 750 750 750 750 750 750 750 750 750	1 1000 1000 1000 1000 1000 1000 1000 1	37.25 64 12 52 22.25 12.16 11.92 11.92	2050 2050 2050 2050 2050 2050 2050 2050	ico ico ico ico ico ico ico ico ico ico	0.15 0.15 0.15 0.15 0.15 0.15 0.15 0.15	0.45 0.45 0.45 0.45 0.45 0.45 0.45 0.45	0.73 0.73 0.73 0.73 0.73 0.73 0.73 0.73	11454.375 19680 3690 15990 6841.875 3739.2 3665.4 3665.4	34363.125 59040 11070 47970 20525.625 11217.6 10996.2 10996.2 3284.1	55744.625 95776 17958 77818 33297.125 18197.44 17838.28 17838.28 5327.54
C D F G H A B C D	generally - Provisional Quantity Eczavating trenches for BT, services not exceeding 200mm, depth not exceeding 1250mm - Provisional Quantity assumed to be two ducts Eczavating trenches for BT, attendance on the relocation of telegraph pole Eczavating trenches for BT, attendance on the relocation of telegraph pole Eczavating trenches for data, services not exceeding 200mm, depth not exceeding 1250mm - Provisional Quantity Eczavating trenches for power supplies, services not exceeding 200mm; depth not exceeding 1250mm - Provisional Quantity - connections to buildings Eczavating trenches for power supplies, services not exceeding 200mm; depth not exceeding 1250mm - Provisional Quantity - connections to buildings Eczavating trenches for power supplies, services not exceeding 200mm; depth not exceeding 1250mm - Provisional Quantity - Eczavating trenches for power supplies, services not exceeding 200mm; depth not deventing trenches for power supplies, services not exceeding 200mm; depth not exceeding 1250mm - Provisional Quantity - Eczavating trenches for power supplies, services not exceeding 200mm; depth not durantedr Disposal, surface water, generally Bed and surround; to decrical cables, to suit single duct nominal size not exceeding 200mm dameter Bed and surround; to Communications ducts, to suit single duct nominal size not exceeding 200mm dameter - Bed and surround; to Communications ducts, to suit single duct nominal size not exceeding 200mm dameter - no details 200mm dameter - no details	136 149 1 149 256 48 208 89 1 304 298 298 89	m Nr m m m m m m	£1.08 £38.89 £297.07 £38.89 £38.89 £38.89 £38.89 £198.84 £11.88 £11.88 £11.88	£146.88 £5,794.61 £97.07 £5,794.61 £9,955.84 £1,866.72 £3,461.21 £3,461.21 £3,611.52 £3,540.24 £3,540.24	1 500 500 500 500 500 500 500 500	1 750 750 750 750 750 750 750 750 750 750	1 1000 1000 1000 1000 1000 1000 1000	37.25 64 12 52 22.25 12.16 11.92 11.92 3.56	2050 2050 2050 2050 2050 2050 2050 2050	ico ico ico ico ico ico ico ico ico ico	0.15 0.15 0.15 0.15 0.15 0.15 0.15 0.15	0.45 0.45 0.45 0.45 0.45 0.45 0.45 0.45	0.73 0.73 0.73 0.73 0.73 0.73 0.73 0.73	11454.375 19680 3690 15990 6841.875 3739.2 3665.4 3665.4 1094.7	34363.125 59040 11070 47970 20525.625 11217.6 10996.2 10996.2 3284.1 37282.2499	55744.625 95776 17958 77818 33297.125 18197.44 17838.28 17838.28 17838.28 5327.54 48466.925
C D F G H A B C D	generally - Provisional Quantity Eczavating trenches for BT, services not exceeding 200mm, depth not exceeding 1250mm - Provisional Quantity assumed to be two ducts Eczavating trenches for BT, attendance on the relocation of telegraph pole Eczavating trenches for BT, attendance on the relocation of telegraph pole Eczavating trenches for data, services not exceeding 200mm, depth not exceeding 1250mm - Provisional Quantity Eczavating trenches for power supplies, services not exceeding 200mm, depth not exceeding 1250mm - Provisional Quantity - connections to buildings Eczavating trenches for power supplies, services not exceeding 200mm, depth not exceeding 1250mm - Provisional Quantity - connections to buildings Eczavating trenches for power supplies, services not exceeding 200mm, depth not exceeding 1250mm - Provisional Quantity - Eczavating trenches for power supplies, services not exceeding 200mm, depth not exceeding 1250mm, idepth not exceeding 1200pani, depth not exceeding 1200pani, depth not exceeding 1200pani, building exceeding 200mm dameter Bed and surround; to destructal cables, to ouit single duct nominal size not exceeding 200mm diameter Bed and surround; to Tommunications ducts, to suit single duct nominal size not exceeding 200mm diameter Bed and surround; to tommunications ducts, to suit single duct nominal size not exceeding 200mm diameter - no details Ducts for Power supplies, 100mm diameter, or similar	136 149 1 149 256 48 208 89 1 304 298 298 89 304 298	m Nr m m m m n m m	 £1.08 £18.89 £29.07 £38.89 £18.89 £18.89 £18.89 £18.89 £11.88 £11.88 £11.88 £6.84 	£146.88 £5,794.61 £97.07 £5,794.61 £9,955.84 £1,866.72 £8,089.12 £3,461.21 £3,611.52 £3,540.24 £3,540.24 £3,540.24	1 500 500 500 500 500 500 500 500 18 18	1 750 750 750 750 750 750 750 750 750 24 24	1 1000 1000 1000 1000 1000 1000 1000 1	37.25 64 12 52 22.25 12.16 11.92 11.92 3.56 0.47728 0.46786	2050 2050 2050 2050 2050 2050 2050 2050	ico ico ico ico ico ico ico ico ico ico	0.15 0.15 0.15 0.15 0.15 0.15 0.15 0.15	0.45 0.45 0.45 0.45 0.45 0.45 0.45 0.45	0.73 0.73 0.73 0.73 0.73 0.73 0.73 0.73	11454.375 19680 3690 6841.875 3739.2 3665.4 3665.4 1094.7 26097.57494 25582.49123	34363.125 59040 11070 47970 20525.625 11217.6 10996.2 10996.2 3284.1 37282.2499 36546.416	55744.625 95776 17958 33297.125 18197.44 17838.28 17838.28 5327.54 48466.925 47510.341
C D F G H A B C D F F	generally - Provisional Quantity Eczavating trenches for BT, services not exceeding 200mm, depth not exceeding 1250mm - Provisional Quantity, assumed to be two ducts Eczavating trenches for BT, attendance on the relocation of telegraph pole Eczavating trenches for BT, attendance on the relocation of telegraph pole Eczavating trenches for data, services not exceeding 200mm, depth not exceeding 1250mm - Provisional Quantity Eczavating trenches for power supplies, services not exceeding 200mm, depth not exceeding 1250mm - Provisional Quantity - connections to buildings Eczavating trenches for power supplies, services not exceeding 200mm, depth not exceeding 1250mm - Provisional Quantity - connections to buildings Eczavating trenches for power supplies, services not exceeding 200mm, depth not exceeding 1250mm - Provisional Quantity - Eczavating trenches for power supplies, services not exceeding 200mm, depth not exceeding 1250mm, idepth not exceeding 1200pani, depth not exceeding 1200pani, depth not exceeding 1200pani, building exceeding 200mm dameter Bed and surround; to destructia cables, to ouit single duct nominal size not exceeding 200mm diameter Bed and surround; to Tommunications ducts, to suit single duct nominal size not exceeding 200mm diameter Bed and surround; to tommunications ducts, to suit single duct nominal size not exceeding 200mm diameter - no details 200mm diameter - no details 200mm diameter - no details 200mm diameter - no details 200mm diameter, or similar 200ms diameter, or similar 200ms diameter, or similar	136 149 1 149 256 48 208 89 1 304 298 89 304 298 304 298	m Nr m m m m m m m m m	 £1.08 £18.89 £29.07 £38.89 £138.89 £138.89 £138.89 £138.89 £11.88 £11.88 £11.88 £11.88 £11.88 £11.88 £6.44 £6.44 	£146.88 £5,794.61 £297.07 £5,794.61 £99,855.84 £1,866.72 £8,089.12 £3,461.21 £3,540.24 £3,540.24 £3,540.24 £2,526.56 £2,574.72	1 500 500 500 500 500 500 500 500 18 18 18	1 750 750 750 750 750 750 750 750 750 24 24 24	1 1000 1000 1000 1000 1000 1000 1000 34 34 34	37.25 64 12 52 22.25 12.16 11.92 11.92 3.56 0.47728 0.46786	2050 2050 2050 2050 2050 2050 2050 2050	ico ico ico ico ico ico ico ico ico ico	0.15 0.15 0.15 0.15 0.15 0.15 0.15 0.15	0.45 0.45 0.45 0.45 0.45 0.45 0.45 0.45	0.73 0.73 0.73 0.73 0.73 0.73 0.73 0.73	11454.375 19680 3690 6841.875 3739.2 3665.4 3665.4 1094.7 26097.57494 25582.49123	34363.125 59040 11070 47970 20525.625 11217.6 10996.2 3284.1 37282.2499 36546.416 36546.416	55744.625 95776 17958 33297.125 18197.44 17838.28 17838.28 5327.54 48466.925 47510.341
C D F G H A B C D E F G	generally - Provisional Quantity Eczavating trenches for BT, services not exceeding 200mm, depth not exceeding 1250mm - Provisional Quantity, assumed to be two ducts Eczavating trenches for BT, attendance on the relocation of telegraph pole Eczavating trenches for BT, attendance on the relocation of telegraph pole Eczavating trenches for data, services not exceeding 200mm, depth not exceeding 1250mm - Provisional Quantity Eczavating trenches for power supplies, services not exceeding 200mm; depth not exceeding 1250mm - Provisional Quantity - connections to buildings Eczavating trenches for power supplies, services not exceeding 200mm; depth not exceeding 1250mm - Provisional Quantity - connections to buildings Eczavating trenches for power supplies, services not exceeding 200mm; depth not exceeding 1250mm - Provisional Quantity - Eczavating trenches for power supplies, services not exceeding 200mm; depth not exceeding 1250mm - Provisional Quantity Eczavating trenches for power supplies, services not exceeding 200mm; depth not exceeding 1250mm - Provisional Quantity Eczavating trenches for power supplies, sonut single dort nominal size not exceeding 200mm def and surround; to Communications ducts, to suit single duct nominal size not exceeding 200mm diameter Bed and surround; to Communications ducts, to suit single duct nominal size not exceeding 200mm diameter - no details 200mm	136 149 1 149 256 48 208 89 1 304 298 89 304 298 89 304 298 89	m Nr m m m m m m m m m	 £1.08 £18.89 £297.07 £38.89 £38.89 £38.89 £38.89 £138.89 £138.89 £11.88 £11.88	£146,88 £5,794,61 £97,07 £5,794,61 £9,955,84 £1,866,72 £8,089,12 £3,611,52 £3,540,24 £3,540,24 £3,540,24 £3,540,24 £3,540,24 £3,540,24	1 500 500 500 500 500 500 500 18 18 18 18	1 750 750 750 750 750 750 750 750 750 750	1 1000 1000 1000 1000 1000 1000 1000 34 34 34 34	37.25 64 12 52 22.25 12.16 11.92 11.92 3.56 0.47728 0.46786	2050 2050 2050 2050 2050 2050 2050 2050	ico ico ico ico ico ico ico ico ico ico	0.15 0.15 0.15 0.15 0.15 0.15 0.15 0.15	0.45 0.45 0.45 0.45 0.45 0.45 0.45 0.45	0.73 0.73 0.73 0.73 0.73 0.73 0.73 0.73	11454.375 19680 3690 6841.875 3739.2 3665.4 3665.4 1094.7 26097.57494 25582.49123	34363.125 59040 11070 47970 20525.625 11217.6 10996.2 3284.1 37282.2499 36546.416 36546.416	55744.625 95776 17958 33297.125 18197.44 17838.28 17838.28 5327.54 48466.925 47510.341
C D F G H A B C D E F G	generally - Provisional Quantity Eczavating trenches for BT, services not exceeding 200mm, depth not exceeding 1250mm - Provisional Quantity, assumed to be two ducts Eczavating trenches for BT, attendance on the relocation of telegraph pole Eczavating trenches for BT, attendance on the relocation of telegraph pole Eczavating trenches for data, services not exceeding 200mm, depth not exceeding 1250mm - Provisional Quantity Eczavating trenches for power supplies, services not exceeding 200mm; depth not exceeding 1250mm - Provisional Quantity - connections to buildings Eczavating trenches for power supplies, services not exceeding 200mm; depth not exceeding 1250mm - Provisional Quantity - connections to buildings Eczavating trenches for power supplies, services not exceeding 200mm; depth not exceeding 1250mm - Provisional Quantity - Eczavating trenches for power supplies, services not exceeding 200mm; depth not exceeding 1250mm - Provisional Quantity - Eczavating trenches for power supplies, services not exceeding 200mm; depth not exceeding 1250mm - Provisional Quantity - Eczavating trenches for power supplies, sonut single dort nominal size not exceeding 200mm def and surround; to Torent lighting, services to suit single duct nominal size not exceeding 200mm dameter Bed and surround; to Torent lighting cables, to suit single duct nominal size not exceeding 200mm diameter - no details 200mm diameter - no detai	136 149 1 149 256 48 208 89 1 304 298 89 304 298 89 304 298 89 304 298 89 22	m Nr m m m TTEM m m m m m	 £1.08 £18.89 £297.07 £38.89 £38.89 £38.89 £38.89 £138.89 £138.89 £11.88 £11.89 £11.89 £11.88 £11.88	£146,88 £5,794,61 £97,07 £5,794,61 £9,955,84 £1,866,72 £8,089,12 £3,610,21 £3,540,240,240,240,240,240,240,240,240,240,2	1 500 500 500 500 500 500 500 500 18 18 18 18 18 18	1 750 750 750 750 750 750 750 750 750 750	1 1000 1000 1000 1000 1000 1000 1000 1000 34 34 34 34 100	37.25 64 12 52 22.25 12.16 11.92 11.92 3.56 0.47728 0.46786	2050 2050 2050 2050 2050 2050 2050 2050	ico ico ico ico ico ico ico ico ico ico	0.15 0.15 0.15 0.15 0.15 0.15 0.15 0.15	0.45 0.45 0.45 0.45 0.45 0.45 0.45 0.45	0.73 0.73 0.73 0.73 0.73 0.73 0.73 0.73	11454.375 19680 3690 6841.875 3739.2 3665.4 3665.4 1094.7 26097.57494 25582.49123	34363.125 59040 11070 47970 20525.625 11217.6 10996.2 3284.1 37282.2499 36546.416 36546.416	55744.625 95776 17958 33297.125 18197.44 17838.28 17838.28 5327.54 48466.925 47510.341
C D F G H A B C D E F G	generally - Provisional Quantity Eczavating trenches for BT, services not exceeding 200mm, depth not exceeding 1250mm - Provisional Quantity; assumed to be two ducts Eczavating trenches for BT, attendance on the relocation of telegraph pole Eczavating trenches for BT, attendance on the relocation of telegraph pole Eczavating trenches for data, services not exceeding 200mm; depth not exceeding 1250mm - Provisional Quantity Eczavating trenches for power supplies, services not exceeding 200mm; depth not exceeding 1250mm - Provisional Quantity - connections to buildings Eczavating trenches for power supplies, services not exceeding 200mm; depth not exceeding 1250mm - Provisional Quantity - connections to buildings Eczavating trenches for power supplies, services not exceeding 200mm; depth not exceeding 1250mm - Provisional Quantity - Eczavating trenches for power supplies, services not exceeding 200mm; depth not exceeding 1250mm - Provisional Quantity - Eczavating trenches for power supplies, services not exceeding 200mm; depth not exceeding 1250mm - Provisional Quantity Eczavating trenches for street lighting, services not exceeding 1250mm; depth not exceeding 1250mm - not details Disposal, surface water, generally Bed and surround; to BT ducts, to suit single duct normal size not exceeding 200mm dameter Bed and surround; to Street lighting cables, to suit single duct normal size not exceeding 200mm diameter, or similar Ducts for Tavepolies, 100mm diameter, or similar Ducts for Carbet Connection of services; electrical -Provisional Quantity Excavate pit for connection dervices; electrical -Provisional Quantity Ductsvate pit for connection dervices; electrical -Provisional Quantity Ductsvate pit for connection services; electrical -Provisional Quantity Ductsvate pit for connection services; electrical -Provisional Quantity	136 149 1 149 256 48 208 89 1 304 298 89 304 298 89 304 298 89	m Nr m m m TTEM m m m m m	 £1.08 £18.89 £297.07 £38.89 £38.89 £18.89 £18.89 £18.89 £11.88 £11.89 £11.89	£146,88 £5,794,61 £97,07 £5,794,61 £9,955,84 £1,866,72 £8,089,12 £3,611,52 £3,540,24 £3,540,24 £3,540,24 £3,540,24 £3,540,24 £3,540,24	1 500 500 500 500 500 500 500 18 18 18 18	1 750 750 750 750 750 750 750 750 750 24 24 24 24 24 24 25 55	1 1000 1000 1000 1000 1000 1000 1000 1000 34 34 34 100 1000	37.25 64 12 52 22.25 12.16 11.92 11.92 3.56 0.47728 0.46786	2050 2050 2050 2050 2050 2050 2050 2050	ico ico ico ico ico ico ico ico ico ico	0.15 0.15 0.15 0.15 0.15 0.15 0.15 0.15	0.45 0.45 0.45 0.45 0.45 0.45 0.45 0.45	0.73 0.73 0.73 0.73 0.73 0.73 0.73 0.73	11454.375 19680 3690 6841.875 3739.2 3665.4 3665.4 1094.7 26097.57494 25582.49123	34363.125 59040 11070 47970 20525.625 11217.6 10996.2 3284.1 37282.2499 36546.416 36546.416	55744.625 95776 17958 33297.125 18197.44 17838.28 17838.28 5327.54 48466.925 47510.341
C D F G H A B C D E F G	generally - Provisional Quantity Econvaring trenches for BT, services not exceeding 200mm, depth not exceeding 1250mm - Provisional Quantity assumed to be two ducts Econvaring trenches for BT, attendance on the relocation of telegraph pole Econvaring trenches for BT, attendance on the relocation of telegraph pole Econvaring trenches for BT, attendance on the relocation of telegraph pole Econvaring trenches for JD, attendance on the exceeding 200mm, depth not exceeding 1250mm - Provisional Quantity Econvaring trenches for power supplies, services not acceeding 200mm, depth not exceeding 1250mm - Provisional Quantity Econvaring trenches for power supplies, services not acceeding 200mm, depth not exceeding 1250mm - Provisional Quantity - Connections to buildings Econvaring trenches for street lighting, services not exceeding 200mm, depth not exceeding 1250mm - Induction for services protection exceeding 200mm, depth not exceeding 1250mm - Inducts, to suit single deat not surround; to electrical cables, to suit single duct nominal size not exceeding 200mm diameter Bed and surround; to Edontical cables, to suit single duct nominal size not exceeding 200mm diameter Bed and surround; to Edontical cables, to suit single duct nominal size not exceeding 200mm diameter Bed and surround; to Edontical cables, to suit single duct nominal size not exceeding 200mm diameter, or bucts for 50 TS supplies, 100mm diameter, or suit single duct nominal size not exceeding 200mm diameter, or bucts for 50 TS supplies, 100mm diameter, or similar Ducts for 50 TS supplies, 100mm diameter, or similar	136 149 1 149 256 48 208 89 1 304 298 89 304 298 89 304 298 89 304 298 89 22	m Nr m m m m m m m m m Nr Nr	 £1.08 £18.89 £297.07 £38.89 £38.89 £38.89 £38.89 £138.89 £138.89 £11.88 £11.89 £11.89 £11.88 £11.88	£146,88 £5,794,61 £97,07 £5,794,61 £9,955,84 £1,866,72 £8,089,12 £3,610,21 £3,540,240,240,240,240,240,240,240,240,240,2	1 500 500 500 500 500 500 500 500 18 18 18 18 18 18	1 750 750 750 750 750 750 750 750 750 750	1 1000 1000 1000 1000 1000 1000 1000 1000 34 34 34 34 100	37.25 64 12 52 22.25 12.16 11.92 11.92 3.56 0.47728 0.46786	2050 2050 2050 2050 2050 2050 2050 2050	ico ico ico ico ico ico ico ico ico ico	0.15 0.15 0.15 0.15 0.15 0.15 0.15 0.15	0.45 0.45 0.45 0.45 0.45 0.45 0.45 0.45	0.73 0.73 0.73 0.73 0.73 0.73 0.73 0.73	11454.375 19680 3690 6841.875 3739.2 3665.4 3665.4 1094.7 26097.57494 25582.49123	34363.125 59040 11070 47970 20525.625 11217.6 10996.2 3284.1 37282.2499 36546.416 36546.416	55744.625 95776 17958 33297.125 18197.44 17838.28 17838.28 5327.54 48466.925 47510.341
C D F G H A B C D F F G H I J K L	generally - Provisional Quantity Excavating trenches for BT, services not exceeding 200mm, depth not exceeding 1250mm - Provisional Quantity assumed to be two ducts Excavating trenches for BT, attendance on the relocation of telegraph pole Excavating trenches for BT, attendance on the relocation of telegraph pole Excavating trenches for BT, attendance on the relocation of telegraph pole Excavating trenches for data, services not exceeding 1250mm - Provisional Quantity Excavating trenches for power supplies, services not exceeding 200mm; depth not exceeding 1250mm - Provisional Quantity - concerding 1250mm - Provisional Quantity - exceeding 1250mm - Provisional Quantity - concerding 1250mm - Provisional Quantity - concerding 1250mm - Provisional Quantity - exceeding 1250mm - Provisional Quantity exceeding 200mm diameter provisional Quantity to Bertral cables, to suit single duct nominal size not exceeding 200mm diameter Bed and surround; to Terral tellipting cables, to suit single duct nominal size not exceeding 200mm diameter - no details 200mm diameter - no	136 149 1 149 256 48 208 208 298 298 298 298 298 298 298 298 298 29	m Nr m m m m m m m m Nr Nr	 £1.08 £38.89 £257.07 £38.89 £38.89 £38.89 £38.89 £38.89 £38.89 £11.88 £11.88 £11.88 £54.44 £64.44 £64.44 £64.44 £64.44 £64.45 £64.45	£146.88 £5,794.61 £297.07 £5,794.61 £9,955.84 £1,866.72 £3,661.21 £3,611.52 £3,540.24 £3,540.24 £1,557.32 £2,574.72 £76.896 £1,140.70 £155.55 £31.10	1 500 500 500 500 500 500 500 500 18 18 18 18 18 18 18 500 500	1 750 750 750 750 750 750 750 750 750 24 24 24 24 24 24 25 55	1 1000 1000 1000 1000 1000 1000 1000 1000 34 34 34 100 1000	37.25 64 12 52 22.25 12.16 11.92 11.92 3.56 0.47728 0.46786	2050 2050 2050 2050 2050 2050 2050 2050	ico ico ico ico ico ico ico ico ico ico	0.15 0.15 0.15 0.15 0.15 0.15 0.15 0.15	0.45 0.45 0.45 0.45 0.45 0.45 0.45 0.45	0.73 0.73 0.73 0.73 0.73 0.73 0.73 0.73	11454.375 19680 3690 6841.875 3739.2 3665.4 3665.4 1094.7 26097.57494 25582.49123	34363.125 59040 11070 47970 20525.625 11217.6 10996.2 3284.1 37282.2499 36546.416 36546.416	55744.625 95776 17958 33297.125 18197.44 17838.28 17838.28 5327.54 48466.925 47510.341
С	generally - Provisional Quantity Excavating trenches for BT, services not exceeding 200mm; depth not exceeding 1250mm - Provisional Quantity susumed to be two ducts Excavating trenches for BT, attendance on the relocation of telegraph pole Excavating trenches for BT, attendance on the relocation of telegraph pole Excavating trenches for BT, attendance on the relocation of telegraph pole Excavating trenches for Johns and State State (State State) (State State) Excavating trenches for power supplies, services not exceeding 200mm; depth not exceeding 1250mm - Provisional Quantity Excavating trenches for power supplies, services not exceeding 200mm; depth not exceeding 1250mm - Provisional Quantity - connections of buildings Excavating trenches for power supplies, Excavating trenches for streen lighting, services not exceeding 200mm; depth not exceeding 1250mm - Provisional Quantity - Excavating trenches for streen lighting, services not exceeding 200mm; depth not exceeding 1250mm - for streen lighting, services not exceeding 200mm; depth not exceeding 1250mm - for streen lighting, services not exceeding 200mm; depth not exceeding 1250mm - for streen lighting, services not exceeding 200mm; to electrical cables, to suit single duct nominal size not exceeding 200mm diameter Bed and surround; to Berf ducts, to suit single duct nominal size not exceeding 200mm diameter - no details 200mm	136 149 1 149 256 48 208 89 1 304 298 89 304 298 89 304 298 89 22 3 3 3 1 1	m Nr m m m m m m m m m m n r Nr Nr Nr	 £1.08 £38.89 £257.07 £38.89 £38.89 £38.89 £38.89 £18.88 £11.88 £11.88 £11.88 £6.44 £6.44 £6.44 £6.44 £6.44 £6.45 £61.85 	£146.88 £5,794.61 £97.07 £5,794.61 £9,955.84 £1,866.72 £8,089.12 £3,611.52 £3,540.24 £3,540.24 £3,540.24 £1,057.32 £2,574.72 £2,574.72 £1,140.70 £1,155.55 £131.50 £311.10 £0,00	1 500 500 500 500 500 500 500 500 500 18 18 18 18 18 18 18 18 500 500 500	1 750 750 750 750 750 750 750 750 750 24 24 24 24 24 24 24 750 750 750 750	1 1000 1000 1000 1000 1000 1000 1000 34 34 34 1000 1000 1000 1000 1000 1000 1000 1000	37.25 64 12 52 22.25 12.16 11.92 11.92 3.56 0.47728 0.46786	2050 2050 2050 2050 2050 2050 2050 2050	ico ico ico ico ico ico ico ico ico ico	0.15 0.15 0.15 0.15 0.15 0.15 0.15 0.15	0.45 0.45 0.45 0.45 0.45 0.45 0.45 0.45	0.73 0.73 0.73 0.73 0.73 0.73 0.73 0.73	11454.375 19680 3690 6841.875 3739.2 3665.4 3665.4 1094.7 26097.57494 25582.49123	34363.125 59040 11070 47970 20525.625 11217.6 10996.2 3284.1 37282.2499 36546.416 36546.416	55744.625 95776 17958 33297.125 18197.44 17838.28 17838.28 5327.54 48466.925 47510.341
С	generally - Provisional Quantity Ecoavaing trenches for BT, services not exceeding 200mm, depth not exceeding 1250mm - Provisional Quantity assumed to be two ducts Ecoavaing trenches for BT, attendance on the relocation of telegraph pole Ecoavaing trenches for BT, attendance on the relocation of telegraph pole Ecoavaing trenches for BT, attendance on the relocation of telegraph pole Ecoavaing trenches for BT, attendance on the relocation of telegraph pole Ecoavaing trenches for BT, attendance on the relocation of telegraph pole Ecoavaing trenches for BT, attendance on exceeding 1250mm - Provisional Quantity Ecoavaing trenches for grower supplies, services not exceeding 200mm, depth not exceeding 1250mm - Provisional Quantity - Coavaing trenches for street lighting, services not exceeding 200mm, depth not exceeding 1250mm - Index to the services of exceeding 1250mm - Browsional Quantity Ecoavaing trenches for street lighting, services not exceeding 200mm, depth not exceeding 200mm dameter Bed and surround; to Bertraical cables, to suit single duct nominal size not exceeding 200mm dameter, or suit single duct nominal size not exceeding 200mm dameter, or suitaling Ducts for Torver supplies, 100mm dlameter, or suitaling Ducts for tree tighting supplies, 50mm dameter, or similar Ducts for tree toronection of services; communications - Provisional Quantity Ecoavate pit for comection diservices; street lighting - no details	136 149 1 149 256 48 208 208 298 298 298 298 298 298 298 298 298 29	m Nr m m m m m m m m m m r r m n r r Nr r N	 £1.08 £38.89 £257.07 £38.89 £38.89 £38.89 £38.89 £38.89 £38.89 £11.88 £11.88 £11.88 £54.44 £64.44 £64.44 £64.44 £64.44 £64.45 £64.45	£146.88 £5,794.61 £297.07 £5,794.61 £9,955.84 £1,866.72 £3,661.21 £3,611.52 £3,540.24 £3,540.24 £1,557.32 £2,574.72 £76.896 £1,140.70 £155.55 £31.10	1 500 500 500 500 500 500 500 500 18 18 18 18 18 18 18 18 18 500 500	1 750 750 750 750 750 750 750 750 24 24 24 24 24 24 25 350 750 750	1 1000 1000 1000 1000 1000 1000 1000 1000 34 34 34 100 100 100 100 100 100 100 10	37.25 64 12 52 22.25 12.16 11.92 11.92 3.56 0.47728 0.46786	2050 2050 2050 2050 2050 2050 2050 2050	ico ico ico ico ico ico ico ico ico ico	0.15 0.15 0.15 0.15 0.15 0.15 0.15 0.15	0.45 0.45 0.45 0.45 0.45 0.45 0.45 0.45	0.73 0.73 0.73 0.73 0.73 0.73 0.73 0.73	11454.375 19680 3690 6841.875 3739.2 3665.4 3665.4 1094.7 26097.57494 25582.49123	34363.125 59040 11070 47970 20525.625 11217.6 10996.2 3284.1 37282.2499 36546.416 36546.416	55744.625 95776 17958 33297.125 18197.44 17838.28 17838.28 5327.54 48466.925 47510.341

	Identification tapes - 'COMMUNICATION											
	DUCTS BELOW', generally	592	m £1	L.08 £639	9.36 1	1	1					
	Utility Company costs for the provision of new											
	gas supply, connecting from existing gas											
	supplies to meter locations adjacent buildings											
	as required	1 11	EM £0	0.00 £0	0.00							
E	Utility Company costs for the provision of new											
	water supply, connecting existing mains water											
	supply to meter locations for buildings supplies											
	as required	1 17	EM £0	0.00 £0	0.00							
F	Utility Company costs for the provision of new											
	electrical supply, connecting from existing											
	electrical supply to meter locations for											
	buildings supplies as required:	1 11		0.00 £0	0.00							
	Utility Company costs for the provision of new	1 11	EIVI EU	.00 EL	1.00							
G												
	electrical supply, works to existing substation,											
	including all diversion works and the like	1 1	EM £0	0.00 £0	0.00							
н												
	Utility Company(ies) costs for the provision of											
	new telephone/data supplies, connecting from											
	existing telephone/data supplies to connection											
	points within the buildings as required	1 11	EM £0	0.00 £0	0.00							
1	Utility Company(ies) costs for the provision of											
	new telephone/data supplies, allow for all											
	works to relocate telegraph poles and											
	associated diversion works	1 1	EM FO	0.00 £0	0.00							
1	Utility Company(ies) costs for the provision of											
	new communication/data supplies, connecting											
	from existing communication/data supplies to											
	connection points within the buildings as											
	connection points within the buildings as required	1 0		000 fr	1.00							
	required Bathrooms: toilets	1 1				20	30		706.27	2825.00	8220 77	
								https://www.screwfix.com/p/ideal-standard-della-close-coupled-toilet-dual-flush-6ltr/67				
	Bathroom shower bath	10 11	EM £150	0.00 £1,500	0.00 10	15	20	https://www.wickes.co.uk/Wickes-Standard-Bath-Front-PanelGloss-White-	978.88	1398.4	1817.92	
								https://www.wickes.co.uk/Wi				
								ckes-Single-Bowl-Kitchen-				
								Stainless-Steel-				
	Bathroom sink	10 11	EM £60	0.00 £600	0.00 15	20	25	Sink+Drainer/p/141535	450	1800	5238	
								https://www.wickes.co.uk/Wi				
								ckes-Messina-Mono-Mixer-				
								Kitchen-Sink-Tap-Brushed-				
	Bathroom tap	10 11	EM £20	0.00 £200		20	30	Nickel/p/417803	700	1000	1300	
	Bathroom mirror	10 11		0.00 £200		15	20					
	Bathroom undersink cupboards	10 17	EM £260	0.00 £2,600	0.00 10	20	30	Veneer particle board				
	formaldehyde, 0.5 stainless											
	steel each	10 17				5	7	https://www.screwfix.com/p/ideal-standard-della-soft-close-toilet-seat-urea-formaldehy	2043.35	3124	4102.65	
	Boiler	10 17	EM £500	0.00 £5,000	0.00 5	10	15	https://iopscience.iop.org/article/10.1088/1757-899X/161/1/012094	520794.00	532728.00	544662.00	
	Electrical Installations; Switches											
	and sockets, 6 lightswitches and spotlights & traditional shapes),	10 11	EM £30	0.00 £300	0.00 20	30	40		357.9446	612.25	1034.6052	
	all halogen 7	10 11	EM £14	1.00 £140	0.00 0.6	2	4.2	http://researcharchive.vuw.ac.nz/xmlui/handle/10063/6590	6434.042553	10340 6313	14263.2	
	Extractor fans (bathrooms)	10 11						http://researcharchive.vuw.ac.nz/xmlui/handle/10063/6590				
						13	18		2650.80	2650.80	2650.80	
	Kitchen cupboards	10 11				15	25	Veneer particle board	70351.23528		164152.88	
	Kitchen worktop	10 11	'EM £50	0.00 £500	0.00 5	10	15	Veneer particle board	14470.542	24117.57	33764.598	
	Kitchen sink							https://www.wickes.co.uk/Wi				
								ckes-Single-Bowl-Kitchen-				
								Stainless-Steel-				
		10 17	'EM £60	0.00 £600	0.00 15	20	25	Sink+Drainer/p/141535	450	1800	5238	
	Kitchen tap							https://www.wickes.co.uk/Wi				
								ckes-Messina-Mono-Mixer-				
								Kitchen-Sink-Tap-Brushed-				
		10 17		0.00 £200		20	30	Nickel/p/417803	700	1000	1300	
	Dishwasher		EM £160			10	13	see BOM	8671.30	33127.90	44020.20	
	Oven	10 17	EM £120	0.00 £1,200	0.00 12	15	20	see BOM	3401.2698	14949.2674	22156.458	
								https://doi.org/10.1016/j.jclepro.				
	Gas hob, 4 ring	10 11	EM £70	0.00 £700	0.00 15	17	19	2018.03.140 0959-6526	4582.43	6426.215	8270	
	Cooker bood	10 17	EM 674	0.00 £500	0.00 10	14	18	http://researcharchive.vuw.ac.nz /xmlui/handle/10063/6590	6326 50	6326.50	6326.50	
		10 11	E.M. E.DL	LOUL	10	14	10	http://researcharchive.vuw.ac.nz	0320.50	0320.50	0320.30	
	Toaster	10 17	EM £1	5.00 £150	0.00 2	4	6	http://researcharchive.vuw.ac.nz /xmlui/handle/10063/6590	339.81	890.86	1281.80	
					-		-	http://researcharchive.vuw.ac.nz				
	Kettle	10 17	EM £10	0.00 £100	0.00 3	4.4	9	/xmlui/handle/10063/6590	718.912	1567.4728	2106.8637	
								http://researcharchive.vuw.ac.nz				
	Microwave	10 17	EM £40	0.00 £400	0.00 5	8	10	/xmlui/handle/10063/6590	10489.8	18537.1538	21827.496	
				0.00 £1,000				http://researcharchive.vuw.ac.nz /xmlui/handle/10063/6590				
					0.00 10	12.5	15		52026.86	53013.43	54000	
	Fridge	10 11	EM £100					http://researcharchive.vuw.ac.nz /xmlui/handle/10063/6590	389.1965			
					100 4							
	Fridge	10 IT 10 IT			0.00 4	5.5	7	http://web.mit.edu/ebm/www/Pu	389.1965	934.025	1346.5115	
	Iron		EM £20	0.00 £200			7		26540	934.025 37600	1346.5115 46780	
	Iron Washing machine	10 IT 10 IT	TEM £20	0.00 £200	0.00 5	7.5	10	http://web.mit.edu/ebm/www/Pu blications/9_Paper.pdf	26540	37600	46780	
	Iron Washing machine Three seater sofa	10 11	TEM £20	0.00 £200	0.00 5			http://web.mit.edu/ebm/www/Pu		37600		
	Iron Washing machine	10 IT 10 IT	TEM £20	0.00 £200	0.00 5	7.5	10	http://web.mit.edu/ebm/www/Pu blications/9_Paper.pdf	26540	37600	46780	
	Iron Washing machine Three seater sofa	10 IT 10 IT	TEM £20	0.00 £200	0.00 5	7.5	10	http://web.mit.edu/ebm/wwwPu blications/9_Paper.pdf https://oecotextiles.wordpress.com/2010/01/06/embodied-energy-needed-to-make-or -	26540	37600	46780	
	Iron Washing machine Three seater sofa	10 m 10 m 10 m	TEM £25 TEM £250 TEM £400	0.00 £200 0.00 £2,500 0.00 £4,000	0.00 5 0.00 5	7.5 10	10 15	http://web.mit.edu/etem/wwwPu blications/9Paper.pdf https://ecceteatiles.wordpress.com/2010/01/06/embodied-energy-needed-to-make-or https://ec.europa.eu/docsroom/	26540 27120	37600 42786.37	46780 96933.984	
	Iron Washing machine Three seater sofa Televisions	10 m 10 m 10 m	TEM £200 TEM £400 TEM £400	0.00 £200 0.00 £2,500 0.00 £4,000	0.00 5 0.00 5	7.5 10 7	10 15 10	http://web.mit.edu/etem/wwPu bilicational/p.gaper.pdf https://oecotentiles.wordpress.com/2010/01/05/embodied-energy-needed-to-make-or https://oecotentiles.wordpress.com/2010/01/05/embodied-energy-needed-to-make-or https://oecotentile/07/listed-mentpil/ accumentary/07/listed-mentpil/ mansfationalen/tenditons/native.	26540 27120 41737.76	37600 42786.37 55860	46780 96933.984 56220	
	Iron Washing machine Three seater sola Televisions	10 m 10 m 10 m 10 m 10 m	TEM £250 TEM £250 TEM £400 TEM £300 TEM £300	0.00 £2,500 0.00 £2,500 0.00 £4,000 0.00 £3,000 0.00 £1,000	0.00 5 0.00 5 0.00 4 0.00 10	7.5 10 7 15	10 15 10 20	http://web.mit.eduketm/wwwPu bitacionam/p.pager.pdf https://eccutetale.wordpress.com/2010/01/05/embodied-energy-needed-to-make-or https://ec.umpa.eu/obcorroom/ document/of Unitablements/on document/of Unitablements/on ansatisfors/enu/enditoromake. Glass, metal steel, plastic sleeve	26540 27120 41737.76 2809.93125	37600 42786.37 55860 4014.1875	46780 96933.984 56220 5218.4438	
	Iron Washing machine Three seater sola Televisions TV stand glass Dining table and chairs	10 m 10 m 10 m	TEM £250 TEM £250 TEM £400 TEM £300 TEM £300	0.00 £2,500 0.00 £2,500 0.00 £4,000 0.00 £3,000 0.00 £3,000	0.00 5 0.00 5 0.00 4 0.00 10 0.00 5	7.5 10 7	10 15 10	http://web.mit.edu/etem/wwPu bilicational/p.gaper.pdf https://oecotentiles.wordpress.com/2010/01/05/embodied-energy-needed-to-make-or https://oecotentiles.wordpress.com/2010/01/05/embodied-energy-needed-to-make-or https://oecotentile/07/listed-mentpil/ accumentary/07/listed-mentpil/ mansfationalen/tenditons/native.	26540 27120 41737.76	37600 42786.37 55860 4014.1875	46780 96933.984 56220	
	Iron Washing machine Three seater sola Televisions	10 m 10 m 10 m 10 m 10 m 10 m	TEM £250 TEM £250 TEM £400 TEM £300 TEM £300	0.00 £2,500 0.00 £2,500 0.00 £4,000 0.00 £3,000 0.00 £3,000	0.00 5 0.00 5 0.00 4 0.00 10 0.00 5	7.5 10 7 15	10 15 10 20	http://web.mit.eduketm/wwwPu bitacionam/p.pager.pdf https://eccutetale.wordpress.com/2010/01/05/embodied-energy-needed-to-make-or https://ec.umpa.eu/obcorroom/ document/of Unitablements/on document/of Unitablements/on ansatisfors/enu/enditoromake. Glass, metal steel, plastic sleeve	26540 27120 41737.76 2809.93125	37600 42786.37 55860 4014.1875	46780 96933.984 56220 5218.4438	
	Iron Washing machine Three seater sola Televisions TV stand glass Dining table and chairs	10 m 10 m 10 m 10 m 10 m 10 m	TEM £250 TEM £250 TEM £400 TEM £300 TEM £300 TEM £300	0.00 £200 0.00 £2,500 0.00 £4,000 0.00 £3,000 0.00 £3,000	0.00 5 0.00 5 0.00 4 0.00 10 0.00 5 0.00 5	7.5 10 7 15 10	10 15 10 20 15	http://web.mit.eduketm/wwPu bilicational/p.paper.pdf https://oecotestiles.wordpress.com/2010/01/06/embodied-energy-needed-to-make-or https://oecotestiles.wordpress.com/2010/01/06/embodied-energy-needed-to-make-or https://oecotestiles.wordpress.com/2010/01/06/embodied-energy-needed-to-make-or https://oecotestiles.wordpress.com/2010/01/06/embodied-energy-needed-to-make-or https://oecotestiles.wordpress.com/2010/01/06/embodied-energy-needed-to-make-or https://oecotestiles.wordpress.com/2010/01/06/embodied-energy-needed-to-make-or https://oecotestiles.wordpress.com/2010/01/06/embodied-energy-needed-to-make-or https://oecotestiles.wordpress.com/2010/01/06/embodied-energy-needed-to-make-or https://oecotestiles.wordpress.com/2010/01/06/embodied-energy-needed-to-make-or https://oecotestiles.wordpress.com/2010/01/06/embodied-energy-needed-to-make-or https://oecotestiles.wordpress.com/2010/01/06/embodied-energy-needed-to-make-or https://oecotestiles.wordpress.com/2010/01/06/embodied-energy-needed-to-make-or https://oecotestiles.wordpress.com/2010/01/06/embodied-energy-needed-to-make-or https://oecotestiles.wordpress.com/2010/01/06/embodied-energy-needed-to-make-or https://oecotestiles.wordpress.com/2010/01/06/embodied-energy-needed-to-make-or sciencestiles.wordpress.com/2010/01/06/embodied-energy-needed-to-make-or Sciencestiles.wordpress.com/2010/01/06/embodied-energy-needed-to-make-or Sciencestiles.com/2010/06/embodied-energy-needed-to-make-or Sciencestiles.com/2010/06/embodied-energy-needed-to-make-or Sciencestiles.com/2010/06/embodied-energy-needed-to-make-or Sciencestiles.com/2010/06/embodied-energy-needed-to-make-or Sciencestiles.com/2010/06/embodied-energy-needed-to-make-or Sciencestiles.com/2010/06/embodied-energy-needed-to-make-or Sciencestiles.com/2010/06/embodied-energy-needed-to-make-or Sciencestiles.com/2010/06/embodied-energy-needed-to-make-or Sciencestiles.com/2010/06/embodied-energy-needed-to-make-or Sciencestiles.com/2010/06/embodied-energy-needed-to-make-or Sciencestiles.com/2010/06/embodied-energy-neede	26540 27120 41737.76 2809.93125	37600 42786.37 55860 4014.1875	46780 96933.984 56220 5218.4438	
	Iron Washing machine Three seater tola Televisions TV stand glass Drining table and chains Bedroom wardrocke (2)	10 m 10 m 10 m 10 m 10 m 10 m 10 m 10 m	TEM £200 TEM £250 TEM £400 TEM £300 TEM £300 TEM £300 TEM £300 TEM £300	0.00 £200 0.00 £2,500 0.00 £4,000 0.00 £3,000 0.00 £3,000 0.00 £3,000 0.00 £3,000	0.00 5 0.00 5 0.00 4 0.00 10 0.00 5 0.00 20 0.00 3	7.5 10 7 15 10 40	10 15 10 20 15 60 7.4	http://web.mit.eduketm/wwPu bilicational/p.paper.pdf https://oecotestiles.wordpress.com/2010/01/06/embodied-energy-needed-to-make-or <u>https://oecotestiles.wordpress.com/2010/01/06/embodied-energy-needed-to-make-or documentary/07/attachments/11/ ranslational/en/frenditions/native Glass, metal steel, plastic sleeve Softwood Oak http://researcharchive.vuw.ac.rc/multianded/10063/6590</u>	26540 27120 41737.76 2809.93125 737.756135 3369.6	37600 42786.37 55860 4014.1875 5478.619 4464	46780 96933.984 56220 5218.4438 13726.094 6739.2	
	Iron Washing machine Treevelors Televelons Ty stand glass Dining table and chairs Bedroom wardrober (2) Vacuum demer	10 m 10 m 10 m 10 m 10 m 10 m 10 m 10 m	TEM £200 TEM £250 TEM £400 TEM £300 TEM £300 TEM £300 TEM £300 TEM £300 TEM £50	0.00 £200 0.00 £2,500 0.00 £4,000 0.00 £3,000 0.00 £3,000 0.00 £3,000 0.00 £3,000	0.00 5 0.00 5 0.00 4 0.00 10 0.00 5 0.00 20 0.00 3 0.00 5	7.5 10 7 15 10 40 5 7.5	10 15 10 20 15 60	http://web.mit.eduketm/wwwPu bitacionam/p.paper.pdf https://eccutetale.wordpress.com/2010/01/05/embodied-energy-needed-to-make-or https://ec.umopa.eu/opcorrow/ documenter/functionaments. manafacrus-on-tensitionaments. Glass, metal steel, plastic sleeve Softwood Oak	26540 27120 41737.76 2809.93125 737.756135 3369.6 4568.319731	37600 42786.37 55860 4014.1875 5478.619 4464 27168.877	46780 96933.984 56220 5218.4438 13726.094 6739.2	
Water	Iron Washing machine Three seater sola Televisions TV stand glass Drining table and chains Bedicon wardrober (2) Vacuum cleaner Curtains	10 m 10 m 10 m 10 m 10 m 10 m 10 m 10 m	TEM £20 TEM £250 TEM £400 TEM £300 TEM £300 TEM £300 TEM £30 TEM £50 TEM £50	0.00 £200 0.00 £2,500 0.00 £4,000 0.00 £3,000 0.00 £3,000 0.00 £3,000 0.00 £500 0.00 £4,000	0.00 5 0.00 5 0.00 10 0.00 20 0.00 20 0.00 3 0.00 5 0.00 5	7.5 10 7 15 10 40 5	10 15 10 20 15 60 7.4 10	http://web.mit.eduketm/wwwPu bibicationa/P_pager.pdf https://ec.utorga.eu/goarcesic.com/2010/01/06/embodied-energy-needed-to-make-or https://ec.utorga.eu/goarcom/ documenter/10/2ittachmenter/in manualizational on/intercommunication documenter/intercommunication Glass, metal steel, plastic sleeve Softwood Oak http://researcharchive.vuw.ac.nz/mhulhandief000536590 Fabric cotton, stallines steel	26540 27120 41737.76 2809.93125 737.756135 3369.6 4568.319731 22631.38084	37600 42786.37 55860 4014.1875 5478.619 4464 27168.877 29313.5466	46780 96933.984 56220 5218.4438 13726.094 6739.2 49576.138 43170.166	m3 water = 1.9GBP
	Iron Washing machine Three seater tola Televisions TV stand glass Drining table and chains Bedroom wardrobes (2) Vacuum cleaner Curtains Double bed + mattress	10 m 10 m 10 m 10 m 10 m 10 m 10 m 10 m	TEM £20 TEM £25,7 TEM £26,7 TEM £300 TEM £50 TEM £400 TEM £400	0.00 £200 0.00 £2,500 0.00 £3,000 0.00 £3,000 0.00 £3,000 0.00 £3,000 0.00 £3,000 0.00 £3,000 0.00 £4,000 0.00 £4,000	0.00 5 0.00 5 0.00 5 0.00 10 0.00 5 0.00 5 0.00 5 0.00 5 0.00 5 0.00 5	7.5 10 15 10 40 5 7.5 10	10 15 10 20 15 60 7.4 10 15	http://web.mit.eduketm/wwwPu bitaciona/9_pager.pdf https://ec.utopa.eu/docramon/ documenter/10/2ittachments/Ln ansiations/on/en/ters/docramon/ documenter/10/2ittachments/Ln ansiations/on/ters/docramon/ Glass, metal steel, plastic sleeve Softwood Oak http://researcharchive.vuw.ac.nz/zmhu/handler/0063/6590 Fabric cotton, stainless steel see BOM own house measurement	26540 27120 41737.76 2809.93125 737.756135 3369.6 4568.319731 22631.38084 442105.2632	37600 42786.37 55860 4014.1875 5478.619 4464 27168.877 29313.5466 442105.263	46780 96933.984 56220 5218.4438 13726.094 6739.2 49576.138 43170.166 442105.26 1 r	m3 water = 1.9GBP
Water Electricity	Iron Washing machine Three seater tola Televisions TV stand glass Drining table and chains Bedroom wardrobes (2) Vacuum cleaner Curtains Double bed + mattress	10 m 10 m 10 m 10 m 10 m 10 m 10 m 10 m	TEM £20 TEM £25,7 TEM £26,7 TEM £300 TEM £50 TEM £400 TEM £400	0.00 £200 0.00 £2,500 0.00 £4,000 0.00 £3,000 0.00 £3,000 0.00 £3,000 0.00 £500 0.00 £500	0.00 5 0.00 5 0.00 5 0.00 10 0.00 5 0.00 5 0.00 5 0.00 5 0.00 5 0.00 5	7.5 10 15 10 40 5 7.5 10	10 15 10 20 15 60 7.4 10 15	http://web.mic.aduketm/wwPu bilicational/p.paper.pdf https://oecotestiles.wordpress.com/2010/01/05/embodied-energy-needed-to-make-or https://oecotestiles.wordpress.com/2010/01/05/embodied-energy-needed-to-make-or https://oecotestiles.wordpress.com/2010/01/05/embodied-energy-needed-to-make-or https://oecotestiles.com/2010/01/05/embodied-energy-needed-to-make-or Glass, metal steel, plastic sleeve Softwood Oak http://researcharchive.vuw.ac.rc.muhahandle/10063/6590 Fabric cotton, stainless steel see BOM	26540 27120 41737.76 2809.93125 737.756135 3369.6 4568.319731 22631.38084	37600 42786.37 55860 4014.1875 5478.619 4464 27168.877 29313.5466	46780 96933.984 56220 5218.4438 13726.094 6739.2 49576.138 43170.166	m3 water = 1.9GBP

	Description	Qty	Unit	Rate	£p	<u>Lifespan</u> Iow m	nean hi	igh 1	/olume/are	Density kg/m3 Note reference from ICE if not specified	Weight (kg) EC (kgCO2e	/kg) central	high	Embodied carl		high
A	Subcontractor personnel transport and materials transport	1	ITEM	£70,500.00	£70,500.00	1	1	1								
D E	Excavating To reduce levels no details - Provisional Quantity Disposal Excavated material off site; it has been assumed all excavated material to be	279	m3	£3.24	£903.96	500	750	1000		2050	0.02	4 0.024	0.024	13726.8	13726.8	13726.8
F	taken off site; inert non hazardous - Provisional Quantity Disposal Excavated material on site; in	140	m3	£35.65	£4,991.00	1	1	1		2050	0.02		0.024	6888	6888	6888
G	stock piles suitable for reuse Selected excavated materia Filling to make up levels; compacting in layers over	140	m3	£6.48	£907.20	1	1	1		2050	0.02		0.024	6888	6888	6888
н	250mm average thick Surface Treatments Compacting ground generally	140 2678	m3 m2	£8.64 £0.76	£1,209.60 £2.035.28	1	1	1	535.6	2050	0.02		0.024	6888 26351.52	6888 26351.52	6888 26351.52
1	Surface water; including the treatment of the water to remove all sediment; pollutants and the like before leaving the site perimeters, off site		ITEM	£199.84	£199.84	1	1	1	535.0	1050			0.024	10331.31	10001.01	10001.01
A	Excavating Ground beams; from formation level, not exceeding 1.00m deep Pits pad foundations 1 pr: from formation	348	m3	£6.48	£2,255.04	100	150	200		2300	0.11	5 0.13	0.14	92046	104052	112056
c	level 1.00m maximum depth Working space allowance; complete with backfilling with approved well compacted material; including all design, maintenance	2	m3	£12.96	£25.92	100	150	200		2300	0.11	5 0.13	0.14	529	598	644
D	and removal as required pits Working space allowance; complete with backfilling with approved well compacted	4	m2	£6.48	£25.92	1	1	1		2050	0.02	4 0.024	0.024			
E	material; including all design, maintenance and removal as required trenches Earthwork support To faces of excavation; including all additional backfilling with well compacted granular material, making good as required, designed; supplied and	980	m2	£4.32	£4,233.60	1	1	1		2050	0.02	4 0.024	0.024		48216	
F	Installed, maintained and removed by specialist Sub Contractor 1.00m maximum depth; distance between opposing faces Earthwork support To faces of excavation; including all additional backfilling with well compacted granular material, making good	980	m2	£3.24	£3,175.20	100	300	500	980	2240	0.005	1 0.0051	0.0051	11195.52	11195.52	11195.52
G	as required, designed, supplied and installed, maintained and removed by specialist Sub Contractor 1.00m maximum depth; distance between opposing faces Disposal Excavated material off site; it has	4	m2	£5.40	£21.60	100	300	500	4	2240	0.005	1 0.0051	0.0051	45.696	45.696	45.696
u	been assumed all excavated material to be taken off site; to be treated as inert hazardous material	350	m3	£35.65	£12,477.50	1	1	1		2050	0.02	4 0.024	0.024	17220	17220	17220
н	Surface Treatments Compacting ground generally Compacting bottoms of excavations	668 433	m2 m2	£0.76 £0.76	£507.68 £329.08	1	1	1	133.6 86.6	2050 2050	0.02		0.024	6573.12 4260.72	6573.12 4260.72	6573.12 4260.72
T	Bored cast-in-place piles to site generally; in various locations; deemed to include the transport to site and from site of all plant, materials and equipment required for the piling operations; all plant movements on site; all setting out; concrete, reinforcement and formwork; all ancillary piling operations required to satisfy the															
c	piling design; designed and installed by specialist Sub Contractor generally 300mm Cutting off tops of piles; Heights to be developed by contractor as to construction methods on site 300mm diameter piles;	117	Nr	£834.44	£97,629.48	500	750	1000	396.7704	2300	0.11	5 0.13	0.14	104945.771	118634.35	127760.069
D	cutting length to be developed by contractor; below top of pilemat Disposal Surplus excavated material; based	117	Nr	£19.44	£2,274.48	1	1	1	2.479815	2300	0.11	5 0.13	0.14	655.911068	741.464685	798.50043
G	on piles to be 12.00m deep; material taken to be inert non hazardous disposal off site Piling mat; designed to suit the piling rig(s) for the project; provide, lay and level (note	99	m3	£35.65	£3,529.35	1	1	1		2050	0.02	4 0.024	0.024	4870.8	4870.8	4870.8
	area measured allows for the full site area;) contractor to to note: the gliemat is the same site as the building footprint; no allowance has been made for any additional joienat beyond the building footprint; Contractor to note: Make allowance for accusation for the gliemat, removal of soil and import of suitable pliemat material: Too of concrete foundations is formation level for exervation based on marked up drawing.															
A	taken to be nominally 600mm thick; assumed to be constructed using imported approved well compacted granular material; compaction to engineers Disposal of piling mat on completion of the piling operations; it is assumed that the	1117	m2	£34.57	£38,614.69	1	1	1	670.2	2240	0.005	1 0.0051	0.0051	7656.3648	7656.3648	7656.3648
в	pilemat is to be removed completely; and making allowance for compacting and preparing for new works generally General attendances on the piling Sub	1117	m2	£22.69	£25,344.73	1	1	1								
с	Contractor as required Special attendances on the piling Sub Contractor as required		ITEM	£297.07 £297.07	£297.07 £297.07	1	1	1								
D	Plain concrete grade Gen 1 Blinding concrete not exceeding 150mm thick	11	m3	£149.07	£1,639.77	100	150	200		1760	0.08	2 0.094	0.104	1587.52	1819.84	2013.44
E	Filling to hollow walls not exceeding 150mm thick	27	m3	£149.07	£4,024.89	100	150	200		1040	0.08		0.104	2302.56	2639.52	2920.32
F	Plain concrete grade Gen 3 Mass fill concrete generally Reinforced concrete grade FND2z	2	m3	£156.64	£313.28	100	150	200		1900	0.0	7 0.096	0.123	266	364.8	467.4
н	Foundations generally Isolated foundations generally	228 1	m3 m3	£182.56 £182.56	£41,623.68 £182.56	100 100	150 150	200 200		2300 1760	0.08		0.14 0.104	42476.4 144.32	58208.4 165.44	73416 183.04
ĸ	E20 FORMWORK FOR IN SITU CONCRETE Formwork, basic finish Sides of ground beams and edges of beds not exceeding E20 FORMWORK FOR IN SITU CONCRETE	8	m	£23.77	£190.16	47	70	110	0.1	480	0.7	2 0.72	0.72	34.56	34.56	34.56
A	Formwork, Sides of ground beams and edges of beds basic finish 500 to 1000mm Claymaster board; 50mm thick to sides of	1202	m	£30.25	£36,360.50	47	70	110	90.15	480	0.7	2 0.72	0.72	31155.84	31155.84	31155.84
в	foundations, 500 to 1000mm high Cordek Cellcore HXB 18/24 heave protection to underside of foundations	134 79	m m2	£20.52 £16.20	£2,749.68 £1,279.80	64 500	108 750	178 1000	5.025 52.14	21.5	3.2		3.29	355.443375	355.443375	
c	E30 REINFORCEMENT FOR IN SITU CONCRETE High tensile steel deformed square bar reinforcement to B.S.4449 E30 REINFORCEMENT FOR IN SITU	3.83		£1,593.36	£6,102.57	47	60		iteel bar?		0.4		2.77	1723.5	5362	10609.1
E	CONCRETE High tensile steel deformed square bar reinforcement to B.S.4449 E30 REINFORCEMENT FOR IN SITU	0.55	т	£1,636.57	£900.11	47	60	100			0.4	5 1.4	2.77	247.5	770	1523.5
F	CONCRETE High tensile steel deformed square bar reinforcement to B.S.4449 E30 REINFORCEMENT FOR IN SITU	3.28	т	£1,712.18	£5,615.95	47	60	100			0.4	5 1.4	2.77	1476	4592	9085.6
G	CONCRETE High tensile steel deformed square bar reinforcement to B.S.4449 E30 REINFORCEMENT FOR IN SITU CONCRETE High tensile steel deformed	4.95	т	£1,795.36	£8,887.03	47	60	100			0.4	5 1.4	2.77	2227.5	6930	13711.5
н	square bar reinforcement to B.S.4449 E41 WORKED FINISHES/CUTTING TO IN	4.66		£1,847.21	£8,608.00	47	60	100			0.4		2.77	2097	6524	12908.2
L	SITU CONCRETE, Power floating, generally RMC pre cast concrete beam and dense aggregate block floor; including all grouting joints, straps, infills and the like, designed, manufactured and installed by specialist	3	m2	£10.80	£32.40	1	1	1	0.6	2100	0.7	4 0.74	0.74	932.4	932.4	932.4
к	Sub Contractor; laid on blockwork sleeper walls, nominally 150mm thick RMC pre cast concrete beam and dense aggregate block floor; including all grouting joints, straps, infills and the like, designed, manufactured and installed by specialed.	671	m2	£69.00	£46,299.00	47	72	100	100.65	2200	0.22	4 0.224	0.224	49600.32	49600.32	49600.32
L	Sub Contractor; laid on blockwork sleeper walk, holes for services and drainage RMC pre cast concrete beam and dense aggregate block floor; including all grouting joints, straps, infills and the like, designed, manufactured and installed by specialist	52	Nr	£5.00	£260.00	500	750	1000		2200						
м	Sub Contractor; laid on blockwork sleeper walk, provision of additional supports for RMC pre cast concrete beam and dense aggregate block floor; including all grouting joints, straps, infills and the like, designed, manufactured and installed by specialist	6	Nr	£100.00	£600.00	500	750	1000								
A	Sub Contractor; laid on blockwork sleeper walls, provision of additional supports for Dense aggregate blockwork; 7.3N/mm2 nominally 100mm thick; in cement mortar;	1		£100.00	£100.00	500	750	1000								
в	stretcher担架 bond; laid flat, 100mm thick Dense aggregate blockwork; 7.3N/mm2 nominally 100mm thick; in cement mortar; stretcher担架 bond; laid flat, 215mm thick;	415		£22.80	£9,462.00	52	72	101	41.5	2200	0.074		0.1391	6838.37	9769.1	
с	assumed to be 100mm blocks laid flat Dense aggregate blockwork; 7.3N/mm2 nominally 100mm thick; in cement mortar; stretcher担架 bond; laid flat, 215mm thick;	76	m2	£45.58	£3,464.08	52	72	101	16.34	2200	0.074	9 0.107	0.1391	2692.5052	3846.436	5000.3668
D	assumed to be 100mm blocks laid flat; in Dense aggregate blockwork; 7.3N/mm2 nominally 100mm thick; in cement mortar; stretche:祖梁 bond; laid flat, Extra over blockwork to course	2		£45.58	£91.16	52	72	101	0.43	2200	0.074	9 0.107	0.1391	70.8554	101.222	131.5886
E	100mm thick Dense aggregate blockwork; 7.3N/mm2 nominally 100mm thick; in cement mortar; stretcher祖史 bood; laid flat, Extra over blockwork for cutting blockwork to course 215mm thick	619	m	£5.00	£3,095.00 £1,130.00	52	72	101								
	215mm thick	113	m	£10.00	,	32	12	101								

F	Engineering bricks; manufacturer and														
F	product reference to be agreed; 7.5N/mm2 compressive strength; half lap														
G	stretcher bond; flush joints; walls, half Forming cavities in hollow walls; complete with Ancon stainless steel HRT4 safety ties at the rate of five per square metre,	62	m2 £72.20	£4,476.40	70	93	131	6.355	1920	0.24	0.24	0.24	2928.384	2928.384	2928.384
н	125mm wide Forming cavities in hollow walls; complete with Ancon stainless steel HRT4 safety ties at the rate of five per square metre; and	220	m2 £3.60	£792.00	50	75	100	27.5	7850	6.15	6.15	6.15	1327631.25	1327631.25	1327631.25
I	rigid insulation board; Celotex CG5000 50mm thick, 100mm wide Forming cavities in hollow walls; complete with Ancon stainless steel HRT4 safety ties at the rate of five per square metre; and	19	m2 £11.54	£219.26	50	75	100	1.9	7850	6.15	6.15	6.15	91727.25	91727.25	91727.25
J	rigid insulation board; Celotex CG5000 75mm thick, 125mm wide Visqueen Zedex Housing grade damp proof	55	m2 £16.04	£882.20	50	75	100	6.875	7850	6.15	6.15	6.15	331907.813	331907.813	331907.813
A	course; bedding in cement mortar, not exceeding 225mm wide Telescopic vents 通风口, Glidevale Limited ZLAB airbrick 空心疫 with ZLPS	87	m2 £16.45	£1,431.15	50	75	100	19.575							
	periscope潜望镇; colour Anthracite; building in as work proceeds, generally	223	Nr £16.50	£3,679.50				0.335615	840	0.24	0.24	0.24	67.659984	67.659984	67.659984
в	Frame, Pre cast concrete padstones, building in as work proceeds, 440 x 215 x Frame, Pre cast concrete padstones,	18	Nr £60.00	£1,080.00	50	75	100	0.17028	1900	0.18	0.18	0.18	58.23576	58.23576	58.23576
D	building in as work proceeds, 600 x 215 x Frame, Pre cast concrete padstones,	5	Nr £77.50	£387.50	50	75	100	0.0645	1900	0.18	0.18	0.18	22.059	22.059	22.059
E	building in as work proceeds, 900 x 215 x Frame, Pre cast concrete padstones, building in as work proceeds, 440 / 440 x	3	Nr £130.00	£390.00	50	75	100	0.05805	1900	0.18	0.18	0.18	19.8531	19.8531	19.8531
F	building in as work proceeds, 440 / 440 x 215 x 100mm L shaped G10 STRUCTURAL STEEL FRAMING, All steelwork is to be designed, manufactured, supplied and erected by specialist Sub	3	Nr £135.00	£405.00	50	75	100	0.05676	1900	0.18	0.18	0.18	19.41192	19.41192	19.41192
	Contractor; including, but not limited to, all surface transmits, factory applied finishes; localised repairs and the like as required following installation; making good following installation; in accordance with specifications prepared by Craddys and the National Steelwork Specifications. Supply and erect all steelwork required for the Cosmbe Stute, Stoke Gabriel Housing														
G H	project; including all galvanising as may be Columns, weight not exceeding 40kg/m G10 STRUCTURAL STEEL FRAMING,	1 ľ 0.77	TEM £35,137.64 T Included	£35,137.64 Included	50 47	75 70	100 110			0.47	1.46	2.89	361.9	37843.2 1124.2	2225.3
1	Columns, weight not exceeding 40kg/m; square hollow section G10 STRUCTURAL STEEL FRAMING, Columns, weight not exceeding 40kg/m;	0.19	T Included	Included	47 47	70 70	110 110			0.47	1.46	2.89	89.3 192.7	277.4	549.1 1184.9
1	G10 STRUCTURAL STEEL FRAMING, Columns, weight not exceeding 40kg/m;														
А	galvanised; square hollow section G10 STRUCTURAL STEEL FRAMING, Beams, weight not exceeding 40kg/m	0.75 6.21	T Included	Included	47	70	110			0.47	1.46	2.89	352.5 2918.7	1095 9066.6	2167.5
в	G10 STRUCTURAL STEEL FRAMING, Beams, weight not exceeding 40kg/m; square	6.21	i included	Included	47	70	110			0.47	1.46	2.89	2918.7	9066.6	1/946.9
с	hollow section G10 STRUCTURAL STEEL FRAMING, Beams,	0.06	T Included	Included	47	70	110			0.47	1.46	2.89	28.2	87.6	173.4
D	weight not exceeding 40kg/m; galvanised G10 STRUCTURAL STEEL FRAMING, Beams, weight not exceeding 40kg/m; galvanised;	1.51	T Included	Included	47	70	110			0.47	1.46	2.89	709.7	2204.6	4363.9
E	rectangular hollow section G10 STRUCTURAL STEEL FRAMING, Beams,	0.44	T Included	Included	47	70	110			0.47	1.46	2.89	206.8	642.4	1271.6
G	weight 40 to 100kg/m Fittings, generally; assessed at 17.5% of all	0.7	T Included	Included	47	70	110			0.47	1.46	2.89	329	1022	2023
н	steelwork Framing and erection, all works required to erect steel framework on site	1.92 12.96	T Included	Included	47	70 73	110 113			0.47	1.46	2.89	902.4	2803.2 18921.6	5548.8 37454.4
1	Allow for all works necessary to eliminate cold bridging within the design of the steel frame; by use of proprietary fittings and														
1	equipment, generally - no details Isolated structural and secondary steelwork additional framing and supports to external and internal walls		TEM Included	Included	83	83	83								
к	isolated structural and secondary steelwork additional framing and supports to roof structure, including all cleader rails														
L	and the like Isolated structural and secondary steelwork additional framing and supports	1 1		Included											
м	to curtain walling, removable panels and additional framing and supports to mechanical and electrical installations additional framing and supports to	1 1	TEM Included	Included											
N	mechanical and electrical installations additional framing and supports to mechanical and electrical installations	1 1		Included											
0	windposts, WP3, nominally 2.40m long Prepare, touch up primer and apply two coats of approved bitumen based paint (RIW or similar) to steelwork, general surfaces, generally over 300mm -	2	Nr £415.00 m2 £16.20	£830.00 £81.00	50	75	100 St	eel beam		0.87	0.87	0.87 (kgCO2/Sqm)	4.35	4.35	4.35
A	Prepare, touch up primer and apply two coats of approved exterior grade gloss paint to steelwork, general surfaces, generally over 300mm - provisional		m2 £10.00	£350.00	49	73	113			0.87	0.87	0.87 (kgCO2/Sqm)	30.45	30.45	30.45
В	Nulfire or similar approved intumescent膨胀的 paint finish to exposed surfaces; to achieve one hour fire rating; general surfaces of structural metalwork,														
A	over 300mm gitth 間 忙 - Provisional Quantity - measured to all surfaces of all RMC or similar approved hollow core pre cast concrete floor planks 厚木板; including all grouting ^B x? of ends of hollows, all grouting joints, straps, infills	239	m2 £8.00	£1,912.00						0.44	0.44	0.44 (kgCO2/Sqm)	105.16	105.16	105.16
в	and the like, designed, manufactured and installed by specialist Sub Contractor; laid on blockwork walls, nominally 150mm RMC or similar approved hollow core acoustic rated pre cast concrete floor planks; including all growting of ends of	48	m2 £69.00	£3,312.00	47	72	108	7.2	1040	0.18	0.18	0.18	1347.84	1347.84	1347.84
c	hollows, all grouting joints, straps, infills and the like, designed, manufactured and installed by specialist Sub Contractor; laid on blockwork walls, nominally 150mm TJI floor joists. Designed floor joists, to suit	407	m2 £69.00	£28,083.00	42	72	108	61.05	1040	0.18	0.18	0.18	11428.56	11428.56	11428.56
	span, locations and loadings for the domestic properties, including the design, manufacture, supply and installation, complete with all joist hangers, fixings, supports, bracing: 支撑, blockings and the														
D	like as required to complete installation, to suit upper floor area of 50.49m2; unit 1 TII floor joists. Designed floor joists, to suit span, locations and loadings for the domestic properties, including the design,	1 1	TEM £2,253.00	£2,253.00	35	60	95 1	.3080949	650	0.65	0.65	0.65	552.670104	552.670104	552.670104
	manufacture, supply and installation, complete with all joist hangers, fixings, supports, bracing: 支推, blockings and the like as required to complete installation, to suit upper floor area of 56.18m2: unit 2	1 (TEM £2.343.00	£2.343.00	35	60	95 1	.2013021	650	0.65	0.65	0.65	507.550156	507.550156	507.550156
E	Til floor joists. Designed floor joists, to suit span, locations and loadings for the domestic properties, including the design, manufacture, supply and installation, complete with all joist hangers, fixings, supports, bracings X , blockings and the														
F	Supports, Intellige Xie, Docenge and the like as required to complete installation, to suit upper floor area of 54.39m2; unit 3 11! floor joists. Designed floor joists, to suit span, locations and loadings for the domestic properties, including the design, manufacture, supply and installation,	1 r	TEM £2,178.00	£2,178.00	35	60	95 1	.1653937	650	0.65	0.65	0.65	492.37882	492.37882	492.37882
G	complete with all joist hangers, fixings, supports, bracing: 支援, blockings and the like as required to complete installation, to suit upper floor area of 54.39m2; unit 4 TJi floor joists. Designed floor joists, to suit span, locations and loadings for the domestic properties, including the design,	1 1	TEM £2,178.00	£2,178.00	35	60	95 1	.1653937	650	0.65	0.65	0.65	492.37882	492.37882	492.37882
н	manufacture, supply and installation, complete with all joist hangers, fixing, supports, bracings 支援, blockings and the like as required to complete installation, to suit upper floor area of 54.41m2; unit 10 TJI floor joists. Designed floor joists, to suit span, locations and loadings for the domestic properties, including the design.	1 1	TEM £3,052.00	£3,052.00	35	60	95 1	.1653937	650	0.65	0.65	0.65	492.37882	492.37882	492.37882
I	commands property including the bangly, manufacture, supply and installation, complete with all joist hangers, fixings, supports, bracings 5 (R), blockings and the like as required to complete installation, trimmers or additional joists to suit unit 1, Til floor joists. Designed floor joists, to suit span, locations and loadings for the	2	Nr £12.00	£24.00	35	60	95 0	1933773	650	0.65	0.65	0.65	81.7019143	81.7019143	81.7019143
	spar, locations and tradings for the domestic properties, including the design, manufacture, supply and installation, complete with all joist hangers, fixings, supports, bracings 5 (R), blockings and the like as required to complete installation, trimmers or additional joists to suit unit 3,	2	Nr £15.00	£30.00	35	60	95 0	.5148438	650	0.65	0.65	0.65	217.521495	217.521495	217.521495

ı	TJI floor joists. Designed floor joists, to suit span, locations and loadings for the domestic properties, including the design,																
	manufacture, supply and installation, complete with all joist hangers, fixings, supports, bracings 支撑, blockings and the																
к	like as required to complete installation, trimmers or additional joists to suit unit 4, Sawn 银开的 softwood, for exterior use;	2	Nr	£15.00	£30.00	35	60	95 0	0.6702918	65	0	0.65	0.65	0.65	283.198275	283.198275	283.198275
L	preservative treated; grade C24, 50 x 150mm joists Sawn 银开的 softwood, for exterior use;	98	m	£4.90	£480.20	42	71	109	0.735	63	0	0.59	0.59	0.59	273.1995	273.1995	273.1995
-	preservative treated; grade C24, 50 x 150mm joists; fixed to steel frame with and including bolts	41	m	£5.35	£219.35	42	71	109	0.3075	63	0	0.59	0.59	0.59	114.29775	114.29775	114.29775
A	Fixings; galvanised mild steel, Straps; to suit upper floors; plugged and screwed to masonry walls; nailed to joists nominally 1750mm long, 50 x 3mm; bent once	129	Nr	£9.00	£1,161.00	35	60	95 (0.0338625	780	0	1.54	1.54	1.54	406.75635	406.75635	406.75635
В	Fixings; galvanised mild steel, Joist hangers, external quality, nailed, to suit 150 x 50mm joists	160	Nr	£2.40	£384.00	35	60	95	0.9152	780	0	1.54	1.54	1.54	10993.3824	10993 3824	10993 3824
с	Floor boarding, Chipboard to B.S. 5669 part 2; tongued and grooved flooring panels, all joints secret screwed to joists	100		11.40	2304.00		00		0.5151	700		1.54	1.54	1.54	10555.3024	10555-5024	10555-5024
D	and glued, all joints offset; floors, over Balcony flooring Assumed to be hardwood ribbed decking boards; screw fixed to timber joists; 125 x 19mm section; with	270	m2	£8.03	£2,168.10	32	51	69	81	65	0	0.86	0.86	0.86	45279	45279	45279
E	nominal Smm gap between boards; complete with anti slip finish; preservative Rockwool or similar approved cavity fire boardure and matter of unceres flearer.	23	m2	£94.30	£2,168.90	42	71	109	6.9	70	0	0.87	0.87	0.87	4202.1	4202.1	4202.1
A	breaks; at perimeter of upper floors; nominally 200 x 300mm section, horizontal Sawn softwood, preservative 防腐剂 treated; grade C24; pitched roof members,	327	m	£20.75	£6,785.25	50	75	100	19.62	10	0	1.12	1.12	1.12	2197.44	2197.44	2197.44
в	150 x 50mm, C24 timber joists at 400mm centres; to porches Sawn softwood, preservative 訪廣剂 treated; grade C24; pitched roof members,	41	m	£4.90	£200.90	49	82	114	0.3075	63	0	0.59	0.59	0.59	114.29775	114.29775	114.29775
с	150 x 50mm, C24 timber joists at 400mm centres; to dormers Sawn softwood, preservative 防腐剂	65	m	£5.10	£331.50	49	82	114	0.4875	63	0	0.59	0.59	0.59	181.20375	181.20375	181.20375
D	treated; grade C24; pitched roof members, 175 x 50mm, C24 timber joists at 400mm centres; to unit 5 to 9 Sawn softwood, preservative 防腐剂	913	m	£5.88	£5,368.44	49	82	114	7.98875	63	0	0.59	0.59	0.59	2969.41838	2969.41838	2969.41838
F	treated; grade C24; pitched roof members, 250 x 25mm, C24 timber ridges 带钢单向皱纹; to unit 5 to 9 Sawn softwood, preservative treated;	15	m	£6.38	£95.70	49	82	114	0.09375	63	0	0.59	0.59	0.59	34.846875	34.846875	34.846875
E	grade C24; dormer 屋顶采光窗 wall construction, 100 x 50mm, C24 timber joists at 400mm centres	267	m	£4.37	£1,166.79	49	82	114	1.335	63	0	0.59	0.59	0.59	496.2195	496.2195	496.2195
F	Sawn softwood, preservative treated; bolted 用螺栓固定 to timber beams; plates, 100 x 50mm	30	m	£5.37	£161.10	23	37	53	0.15	63	0	0.59	0.59	0.59	55.755	55.755	55.755
G H	Sawn softwood, preservative treated; bolted to steel beams; plates, 100 x 50mm Sawn softwood, preservative treated:	183	m	£5.37	£982.71	23	37	53	0.915	63		0.59	0.59	0.59	340.1055	340.1055	340.1055
н	bolted to masonry with resin anchors at 300mm centres; plates, 100 x 50mm	10	m	£5.37	£53.70	23	37	53	0.05	63	0	0.59	0.59	0.59	18.585	18.585	18.585
	Sawn softwood, preservative treated; bedded in mortar; plates, 100 x 50mm Sawn softwood, preservative treated;	287	m	£4.82	£1,383.34	23	37	53	1.435	63	0	0.59	0.59	0.59	533.3895	533.3895	533.3895
к	bedded in mortar; plates, 100 x 50mm; to Sawn softwood, preservative treated; framing to eaves 屋檐 and verges ,	60	m	£4.37	£262.20	23	37	53	0.3	63	0	0.59	0.59	0.59	111.51	111.51	111.51
L	nominally 50 x 50mm Sawn softwood, preservative treated;	1235	m	£3.04	£3,754.40	23	37	53	3.0875	63	0	0.59	0.59	0.59	1147.62375	1147.62375	1147.62375
м	framing to eaves 屋檐 and verges , nominally 50 x 50mm; plugged and Roof trusses, designed, manufactured,	378	m	£3.04	£1,149.12	23	37	53	0.945	63	0	0.59	0.59	0.59	351.2565	351.2565	351.2565
	supplied and installed by specialist Sub Contractor, complete with all bracings 紧固装置, fixings, central walkway boards; openings for access hatches 舱口 and the like as required to complete installation.																
N	total roof area - on plan; garage units for 7 Roof trusses, designed, manufactured, supplied and installed by specialist Sub Contractor, complete with all bracings	90	m2	£35.00	£3,150.00	23	37	53									
A	紧固装置, fixings, central walkway boards; openings for access hatches 熱口 and the like as required to complete installation. total roof area - on plan; timber store Roof trusses, designed, manufactured,	8	m2	£35.00	£280.00	23	37	53									
	supplied and installed by specialist Sub Contractor, complete with all bracings 紧固装置, fixings, central walkway boards; openings for access hatches 舱口 and the like as required to complete installation.																
В	tata as required compreterinstation. total roof area - on plan; car port 简易年序 Roof trusses, designed, manufactured, supplied and installed by specialist Sub Contractor, complete with all bracings 紧固铁置, fixings, central walkway boards;	56	m2	£35.00	£1,960.00	30	60	80									
c	openings for access hatches 舱口 and the like as required to complete installation. total roof area - on plan; units 1 and 2, including 4 dormers Roof trusses, designed, manufactured,	168	m2	£34.76	£5,839.68	30	60	80									
L	supplied and installed by specialist Sub Contractor, complete with all bracings 紧固装置, fixings, central walkway boards; openings for access hatches 舱口 and the																
D	like as required to complete installation. total roof area - on plan; units 3 and 4, including central shallow pitched valley Roof trusses, designed, manufactured, supplied and installed by specialits Sub	157	m2	£26.25	£4,121.25	30	60	80									
	Contractor, complete with all bracings 紧固装置, fixings, central walkway boards; openings for access hatches 舱口 and the																
E	like as required to complete installation. total roof area - on plan; unit 10 Assumed to be 12mm plywood; nailed to	104	m2	£27.83	£2,894.32	30	60	80									
F	trusses nominally 300mm wide Straps; assumed to be galvanised mild steel; fixed to timber and masonry,	158	m	£10.00	£1,580.00	23	36	49	0.5688	70	0	1.1	1.1	1.1	437.976	437.976	437.976
G	assumed to be 1700 x 50 x 3mm, bent Straps; assumed to be galvanised mild	50	Nr	£9.20	£460.00	24	34	42	0.01275	780		1.54	1.54	1.54	153.153	153.153	153.153
н	steel; fixed to timber and masonry Joist hangers 小果挂铁, shoes, brackets and the like, as required to complete	228	Nr	£8.38 £500.00	£1,910.64 £500.00	24 24	34 34	42 42	0.04104	780	0	1.54	1.54	1.54	492.97248	492.97248	492.97248
1	Natural slate roofing (no details); complete with approved battens (38 x 25mm) fixed to and including approved felt 毛毡/																
1	breather membrane and the like to complete installation, pitch 斜度 25 Natural slate roofing (no details); complete with approved battens (38 x 25mm) fixed	68	m2	£45.00	£3,060.00	17	26	36	1.7	160	0	0.007	0.035	0.063	19.04	95.2	171.36
к	to and including approved felt 毛毡/ breather membrane and the like to complete installation, pitch 35 degrees Natural slate roofing (no details); complete	914	m2	£35.00	£31,990.00	17	26	36	22.85	160	0	0.007	0.035	0.063	255.92	1279.6	2303.28
	with approved battens (38 x 25mm) fixed to and including approved felt 毛毡/ breather membrane and the like to complete installation, Abutments邻接;																
L	complete with all additional battens, including over sized or cut slates to suit, Natural slate roofing (no details); complete with approved battens (38 x 25mm) fixed to and including approved felt 毛毡/	71	m	£12.00	£852.00	17	26	36	0.06745	160	0	0.007	0.035	0.063	0.75544	3.7772	6.79896
	breather membrane and the like to complete installation, Abutments邻接; complete with all additional battens,																
м	including over sized or cut slates to suit, Natural slate roofing (no details); complete with approved battens (38 x 25mm) fixed to and including approved felt 毛毡/ breather membrane and the like to	10	m	£8.00	£80.00	17	26	36	0.0095	160	0	0.007	0.035	0.063	0.1064	0.532	0.9576
N	complete installation, Abutments邻接; complete with all additional battens, including over sized or cut slates to suit, Natural slate roofing (no details); complete	23	m	£8.00	£184.00	17	26	36	0.02185	160	0	0.007	0.035	0.063	0.24472	1.2236	2.20248
	with approved battens (38 x 25mm) fixed to and including approved felt 毛毡/ breather membrane and the like to complete installation, Exves; complete with tilting fillet, ventilation, dressing felt /																
0	breather membrane into gutter, including approved slip course of slates Natural slate roofing (no details); complete	318	m	£13.00	£4,134.00	17	26	36	64.395	160	0	0.007	0.035	0.063	721.224	3606.12	6491.016
	with approved battens (38 x 25mm) fixed to and including approved felt 毛毡/ breather membrane and the like to complete installation, Verges; complete with undercloak 粘土砂质, dressed tiles																
	and mortar as required; including oversized slates to suit generally Roof Ridges; dry ridge 🕸 system with all	60	m	£23.00	£1,380.00	17	26	36		160	0	0.007	0.035	0.063			
	fixings, ventilation and the like, including additional battens, generally	103	m	£31.00	£3,193.00	17	26	36		160	0	0.007	0.035	0.063			
В	Roof Hips; dry ridge system with all fixings, ventilation and the like, including additional battens, generally	185	m	£45.00	£8,325.00	17	26	36		160	0	0.007	0.035	0.063			

ć	Roof Valleys; cutting to both sides of valley															
c	(liner measured elsewhere) complete with all additional battens, generally	54	m	£34.00	£1.836.00	17	26	36		1600	0.007	0.035	0.063			
D	Roof Holes, generally Roof Hip irons, generally		ITEM Nr	£100.00 £7.00	£100.00 £252.00	17	26 26	36 36	0.081	1600 7870	0.007	0.035	0.063	1294 0641	1294.0641	1294.0641
F	Code 4 lead flashings; Flashings to abutments; complete with dressing into					-										
	masonry as required; finishing with one coat of patination oil, stepped flashing to															
	pitched abutment from roof tiles to masonry; dressing up face of masonry and															
G	over slates; girth nominally 350mm Code 4 lead flashings; Flashings to	15	m	£53.00	£795.00	32	60	82	0.00945	11340	1.67	1.67	1.67	178.96221	178.96221	178.96221
	abutments; complete with dressing into masonry as required; finishing with one															
	coat of patination oil, horizontal flashing to abutment from roof tiles to masonry;															
н	dressing up face of masonry and over Code 4 lead flashings; Flashings to	7	m	£33.00	£231.00	32	60	82	0.00378	11340	1.67	1.67	1.67	71.584884	71.584884	71.584884
	abutments; complete with dressing into masonry as required; finishing with one															
	coat of patination oil, horizontal flashing to flat roof skirting to masonry; dressing up															
1	face of masonry and over skirting; girth Code 4 lead flashings; Flashings to	42	m	£33.00	£1,386.00	32	60	82	0.02268	11340	1.67	1.67	1.67	429.509304	429.509304	429.509304
	abutments; complete with dressing into masonry as required; finishing with one															
	coat of patination oil, soakers to flashing to pitched abutment from roof tiles to															
	masonry; dressing under and over slates and up face of masonry; nominally soakers	61	Nr	£5.00	£305.00	32	60	82	0.013176	11340	1.67	1.67	1.67	249.524453	249.524453	249.524453
1	Code 5 lead flashings. Flashings to valleys; complete with dressing onto timber															
	battens and over plywood; finishing with one coat of patination oil, valley lining;															
	nominally 450mm girth; bent five times; fixed to battens; in lengths not exceeding	54	m	£69.00	£3,726.00	32	60	82	0.054432	11340	1.67	1.67	1.67	1030.82233	1030.82233	1030.82233
A	Bill 6 Roof, secret gutter valley lining; nominally 450mm girth; bent five times;															
	fixed to battens; in lengths not exceeding 1.50m, with 150mm lap	64	m	£69.00	£4,416.00	32	60	82	0.064512	11340	1.67	1.67	1.67	1221.71535	1221.71535	1221.71535
В	Assumed to be Sarnafil or similar approved single ply 板层 warm roof covering;															
	complete with all required vapour barriers, insulation, breather membranes, fleeces															
	抓绒, fixings, trims, seals and the like; laid on pre cast concrete planks; designed,															
	manufactured and installed by specialist Sub Contractor, pitch not exceeding 4 Assumed to be Sarnafil or similar approved	44	m2	£81.00	£3,564.00	17	30	43	0.0528	1380	3.1	3.1	3.1	225.8784	225.8784	225.8784
L	single ply 板层 warm roof covering; complete with all required vapour barriers,															
	insulation, breather membranes, fleeces 抓绒, fixings, trims, seals and the like; laid															
	gives, roungs, trims, seals and the like; laid on pre cast concrete planks; designed, manufactured and installed by specialist															
	Sub Contractor, pitch 5 degrees; with	32	m2	(81.00	53 503 00	17	30	43	0.0384	1380			3.1	164.2752	164 2752	164 2752
D	standing seam effect rolls at 600mm Roof covering Skirtings 基板; complete with all required insulation and the like;	32	mz	£81.00	£2,592.00	1/	30	43	0.0384	1380	3.1	3.1	3.1	164.2752	164.2752	164.2752
	dressing up face of walls / parapets 扶手															
	and the like; make good as required; including all cappings, trims, formers, not	42	m	£30.00	£1,260.00	17	30	43	0.1512	1380	3.1	3.1	3.1	646.8336	646.8336	646.8336
E	Roof covering Flashings; complete with all required insulation and the like; dressing															
	up roof trusses behind slates; make good as required; including all cappings, trims,															
F	formers, 400 to 600mm girth Roof covering Eaves; complete with all	44	m	£30.00	£1,320.00	17	30	43	0.0396	1380	3.1	3.1	3.1	169.4088	169.4088	169.4088
	required insulation and the like; dressing over and into gutter; make good as															
	required; including all cappings, trims, formers, 200 to 400mm girth	9	m	£30.00	£270.00	17	30	43	0.00648	1380	3.1	3.1	3.1	27.72144	27.72144	27.72144
G	Roof covering Approved paving slabs, on and including pedestals 基座 as required															
	to provide working terrace to flat roof, no details, pitch not exceeding 4 degrees	34	m2	£40.00	£1,360.00	50	75	100	2.04	1380	3.1	3.1	3.1	8727.12	8727.12	8727.12
A	Softwood fascias; fixed to timber framing (measured elsewhere); complete with all															
	trims, supports and the like to complete installation; assumed to be 22mm thick,															
в	fascia, nominally 250mm deep Softwood fascias; fixed to timber framing	318	m	£8.15	£2,591.70	5	10	15	1.749	630	0.59	0.59	0.59	650.1033	650.1033	650.1033
	(measured elsewhere); complete with all trims, supports and the like to complete															
	installation; assumed to be 22mm thick, verge fascia, nominally 250mm deep	60	m	£9.15	£549.00	5	10	15	0.33	630	0.59	0.59	0.59	122.661	122.661	122.661
с	Softwood soffits; fixed to timber framing (measured elsewhere); complete with all															
	trims装饰, ventilators通风口, supports and the like to complete installation, soffit,															
	nominally 250mm wide; assumed to be 15mm thick	378	m	£9.15	£3,458.70	5	10	15	1.4175	630	0.59	0.59	0.59	526.88475	526.88475	526.88475
D	Dormer window framing WBP plywood; fixed to timber frame (measured															
	elsewhere); vertical, nominally 18mm thick, to dormer faces and cheeks; over	40	m2	£25.64	£1,025.60	41	68	107	0.72	700	1.1	1.1	1.1	554.4	554.4	554.4
E	Dormer window framing WBP plywood; fixed to timber frame (measured															
	elsewhere); vertical, nominally 18mm thick, to dormer faces and cheeks; not	25	m	£11.29	£282.25	41	68	107	0.135	700	1.1	1.1	1.1	103.95	103.95	103.95
F	Cementious 水泥 render board, on and including approved battens to provide															
	ventilation gap fixed to plywood substrate, to dormer faces and cheeks; over 300mm	40	m2	£20.69	£827.60				0.4	1860	0.74	0.74	0.74	550.56	550.56	550.56
G	Cementious 水泥 render board, on and including approved battens to provide															
	ventilation gap fixed to plywood substrate, to dormer faces and cheeks; not exceeding															
н	300mm wide Painting fascias and soffits; Assumed to be	25	m	£12.17	£304.25				0.075	1860	0.74	0.74	0.74	103.23	103.23	103.23
	Dulux Trade Exterior Gloss, prime, prepare, apply two undercoats and two finish coats;															
1	general surfaces, over 300mm girth Roof insulation; Assumed to be Rockwool	189	m2	£12.50	£2,362.50	6	6	6			0.87	0.87	0.87 (kgCO2/Sqm	164.43	164.43	164.43
	or similar approved mineral fibre insulation quilt, nominally 400mm thick overall,															
	horizontal, between joists nominally 150mm thick	429	m2	£2.10	£900.90	50	75	100	64.35	100	1.12	1.12	1.12	7207.2	7207.2	7207.2
1	Roof insulation; Assumed to be Rockwool or similar approved mineral fibre insulation															
	quilt, nominally 400mm thick overall, horizontal, over joists nominally 100mm	429	m2	£1.80	£772.20	50	75	100	42.9	100	1.12	1.12	1.12	4804.8	4804.8	4804.8
к	Roof insulation; Assumed to be Rockwool or similar approved mineral fibre insulation															
	quilt, nominally 400mm thick overall, horizontal, over joists nominally 150mm	429	m2	£2.10	£900.90	50	75	100	64.35	100	1.12	1.12	1.12	7207.2	7207.2	7207.2
A	Roof insulation; Assumed to be Rockwool or similar approved mineral fibre insulation															
	quilt, nominally 400mm thick overall, vertical, between studs nominally 100mm	40	m2	£4.00	£160.00	50	75	100	4	100	1.12	1.12	1.12	448	448	448
В	Roof insulation, Assumed to be Kingspan or similar approved rigid insulation boards,															
	nominally 175mm thick overall, pitched, between joists nominally 75mm thick	287	m2	£23.00	£6,601.00	17	22	31	21.525	30	3.29	3.29	3.29	2124.5175	2124.5175	2124.5175
с	Roof insulation, Assumed to be Kingspan or similar approved rigid insulation boards,															
	nominally 175mm thick overall, pitched, between joists nominally 100mm thick	287	m2	£25.00	£7,175.00	17	22	31	28.7	30	3.29	3.29	3.29	2832.69	2832.69	2832.69
D	Gravity rainwater drainage system; Black uPVC rainwater pipes; complete with all															
	elbows, connections, brackets, fixings and the like as required, nominally 75mm	233	m	£6.91	£1,610.03	18	26	35	0.256067	1430	3.23	3.23	3.23	1182.74787	1182.74787	1182.74787
E	Gravity rainwater drainage system; Black uPVC rainwater pipes; complete with all															
	elbows, connections, brackets, fixings and the like as required, connection to below															
F	ground drainage Gravity rainwater drainage system; Black	41	Nr	£12.25	£502.25	18	26	35								
	uPVC rainwater pipes; complete with all elbows, connections, brackets, fixings and															
G	the like as required, off set bends, 250mm Black uPVC rainwater gutters; complete	41	Nr	£9.10	£373.10	18	26	35								
	with all elbows, connections, brackets, fixings and the like as required, half round,															
н	nominally 100mm diameter Black uPVC rainwater gutters; complete	318	m	£8.13	£2,585.34	18	26	35	0.474297	1430	3.23	3.23	3.23	2190.73041	2190.73041	2190.73041
	with all elbows, connections, brackets, fixings and the like as required, ends	46	Nr	£5.10	£234.60	18	26	35								
I	Black uPVC rainwater gutters; complete with all elbows, connections, brackets,															
J	fixings and the like as required, running Black uPVC rainwater gutters; complete	41	Nr	£7.15	£293.15	18	26	35								
	with all elbows, connections, brackets, fixings and the like as required, bends	29	Nr	£7.15	£207.35	18	26	35								
к А	Testing and commissioning, as required Softwood framed staircases; with MDF		ITEM	£600.00	£600.00	1	1	1								
	treads and plywood risers; treads nominally 900mm wide; floor to floor															
	height of 2775mm; ground to first floor; comprising of five treads, quarter landing,															
в	one tread, quarter landing and five treads; Softwood framed staircases; with MDF	1	Nr	£2,818.00	£2,818.00	32	62	76		630	0.59	0.59	0.59			
	treads and plywood risers; treads nominally 900mm wide; floor to floor															
	height of 2775mm; ground to first floor; comprising of thirteen treads; balustrade	1	Nr	£2,660.00	£2,660.00	32	62	76		630	0.59	0.59	0.59			

c	Softwood framed staircases; with MDF treads and plywood risers; treads														
	nominally 900mm wide; floor to floor height of 2775mm; ground to first floor;														
D	comprising of thirteen treads; balustrade Softwood framed staircases; with MDF treads and plywood risers; treads	1	Nr	£2,709.00	£2,709.00	32	62	76		63	30	0.59	0.59	0.59	
	nominally 900mm wide; floor to floor														
	height of 2775mm; ground to first floor; comprising of thirteen treads; balustrade	1	Nr	£2,709.00	£2,709.00	32	62	76		63	30	0.59	0.59	0.59	
E	Softwood framed staircases; with MDF treads and plywood risers; treads														
	nominally 900mm wide; floor to floor height of 2775mm; ground to first floor;														
	comprising of three winder treads, six straight treads and three winder treads;	1	Nr	£3,676.00	£3,676.00	32	62	76		63	30	0.59	0.59	0.59	
F	Complete installation of precast concrete stair and landings; designed to approved														
	British Standards and Engineers requirements; stairs to units 5 to 9;														
	comprising of three flights of two, six and five treads with two guarter landings with														
	one corner splayed; 950mm wide treads; 2650m overall rise; ground to first floor					42							0.174	0.188	
A	Complete installation of precast concrete	1	Nr	£5,340.00	£5,340.00	42	73	95	stairs structu	re: concrete		0.155	0.1/4	0.188	
	stair and landings; designed to approved British Standards and Engineers														
	requirements; stairs to units 5 to 9; comprising of three flights of two, six and														
	five treads with two quarter landings with one corner splayed; 950mm wide treads;														
в	2625m overall rise; first to second floor Balustrading扶手; Assumed to be polyester	1	Nr	Included	Included										
	聚酯纤维 powder coated mild steel framed with vertical pilasters; complete														
с	with handrail to match; raking Balustrading扶手; Assumed to be polyester	10	m	£436.55	£4,365.50	15	20	25							
	聚酯纤维 powder coated mild steel framed with vertical pilasters; complete														
D	with handrail to match; horizontal Balustrading扶手; Assumed to be polyester	4	m	£476.47	£1,905.88	15	20	25							
D	聚酯纤维 powder coated mild steel														
	framed with vertical pilasters; complete with handrail to match; ends	4	Nr	£40.22	£160.88	15	20	25							
E	Balustrading扶手; Assumed to be polyester 聚酯纤维 powder coated mild steel														
	framed with vertical pilasters; complete with handrail to match; connection to	2	Nr	£40.22	£80.44	15	20	25							
F	Balustrading扶手; Assumed to be polyester 聚酯纤维 powder coated mild steel														
	framed with vertical pilasters; complete with handrail to match; bends	6	Nr	£40.22	£241.32	15	20	25							
G	Balustrading扶手; Assumed to be polyester 聚酯纤维 powder coated mild steel														
	senser as powder coated mild steel framed with vertical pilasters; complete with handrail to match; ramps 斜坡	14	Nr	£80.44	£1,126.16	15	20	25							
н	Assumed to be polyester powder coated														
I.	handrails on brackets to masonry walls; Assumed to be polyester powder coated	8	m	£173.32	£1,386.56	15	20	25							
	handrails on brackets to masonry walls; horizontal	8	m	£173.32	£1,386.56	15	20	25							
ı	Assumed to be polyester powder coated handrails on brackets to masonry walls;	2	Nr	£40.22	£80.44	15	20	25							
к	Assumed to be polyester powder coated handrails on brackets to masonry walls;	8	Nr	£40.22	£321.76	15	20	25							
L	Assumed to be polyester powder coated handrails on brackets to masonry walls;	10	Nr	£80.44	£804.40	15	20	25							
м	Painting stair strings 模梯梁 Assumed to be ICI Dulux Trade Satinwood or similar	10		100.44	2004.40	10	20	1.5							
	approved; touch up primer, undercoat and	5	m2	£15.00	£75.00	6	6	6				0.87	0.87	0.87	4.35 4.35 4.35
N	two coats of finish paint, over 300mm girth Painting staircases and balustrades.	5	mz	£15.00	£75.00	6	6	ь				0.87	0.87	0.87	4.35 4.35 4.35
	Prepare, touch up primer and apply one undercoat and one gloss finishing coat of														
A	oil paint; general surfaces; strings, over Painting staircases and balustrades.	9	m2	£15.00	£135.00	6	6	6				0.87	0.87	0.87	7.83 7.83 7.83
	Prepare, touch up primer and apply one undercoat and one gloss finishing coat of														
в	oil paint; not exceeding 300mm girth Prepare, touch up primer and apply one	27	m	£4.00	£108.00							0.87	0.87	0.87	
	undercoat and one gloss finishing coat of oil paint; balustrades; measured both														
с	sides, over 300 girth Cover panels to stair strings. Assumed to	66	m2	£15.00	£990.00	6	6	6				0.87	0.87	0.87	57.42 57.42 57.42
C C	be MDF; factory primed; mechanically														
	fixed to pre cast concrete stair strings, nominally 19mm thick; 350mm high; all	12	m	£20.17	£242.04	21	36	48	0.0798	57	75	0.74	0.74	0.74	33.9549 33.9549 33.9549
A	Dense aggregate blockwork; 7.3N/mm2 nominally 100mm thick; in cement mortar;														
в	stretcher bond, 100mm thick Dense aggregate blockwork; 7.3N/mm2	2228	m2	£22.80	£50,798.40	52	72	101	222.8	220	00	0.0749	0.107	0.1391	36712.984 52447.12 68181.256
	nominally 100mm thick; in cement mortar; stretcher bond, 100mm thick, fair faced														
с	one side Dense aggregate blockwork; 7.3N/mm2	94	m2	£24.30	£2,284.20	52	72	101	9.4	220	00	0.7749	1.107	1.4391	16024.932 22892.76 29760.588
	nominally 100mm thick; in cement mortar; stretcher bond, 100mm thick, fair faced														
p	both sides Dense aggregate blockwork; 7.3N/mm2	40	m2	£26.30	£1,052.00	52	72	101	4	220	00	1.4749	2.107	2.7391	12979.12 18541.6 24104.08
D	nominally 100mm thick; in cement mortar;														
	stretcher bond, 215mm thick; two skins of 100mm blockwork tied together with ties														
	at the rate of five per square metre and central joint fully filled with mortar; fair														
E	faced one side Dense aggregate blockwork; 7.3N/mm2	6	m2	£56.11	£336.66	52	72	101	1.2	220	00	2.1749	3.107	4.0391	5741.736 8202.48 10663.224
	nominally 100mm thick; in cement mortar; stretcher bond, 100mm thick, in piers,														
5	overall 215mm thick; fair faced to three Dense aggregate blockwork; 7.3N/mm2	5	m2	£50.11	£250.55	52	72	101	1.075	220	00	2.8749	4.107	5.3391	6799.1385 9713.055 12626.9715
	nominally 100mm thick; in cement mortar; stretcher bond, 100mm thick, in piers,														
	overall 215mm thick; fair faced to four	4	m2	£51.11	£204.44	52	72	101	0.86	220	00	3.5749	5.107	6.6391	6763.7108 9662.444 12561.1772
G	Dense aggregate blockwork; 7.3N/mm2 nominally 100mm thick; in cement mortar;														
	stretcher bond, 100mm thick, in piers, overall 335mm thick; fair faced to three	2	m2	£77.91	£155.82	52	72	101	0.67	220	00	4.2749	6.107	7.9391	6301.2026 9001.718 11702.2334
н	Dense aggregate blockwork; 7.3N/mm2 nominally 100mm thick; in cement mortar;														
	stretcher bond, 100mm thick, in piers, overall 440mm thick; fair faced to three	1	m2	£104.21	£104.21	52	72	101				4.9749	7.107	9.2391	
1	Dense aggregate blockwork; 7.3N/mm2 nominally 100mm thick; in cement mortar;														
	stretcher bond, cutting blockwork to course 100mm thick	501	m	£5.00	£2.505.00	52	72	101		220	00	5.6749	8.107	10.5391	
1	Dense aggregate blockwork; 7.3N/mm2 nominally 100mm thick; in cement mortar;														
	stretcher bond, cutting blockwork to course 100mm thick; raking	21	m	£10.00	£210.00	52	72	101							
к	Engineering bricks; manufacturer and product reference to be agreed;						-								
	7.5N/mm2 compressive strength; half lap stretcher bond; flush joints; walls, half	50	-1	(70.82	64 170 20	70			6.0477	200		0.24	0.24	0.24	2002 6 2002 6 2002 6
L	Natural stone walling; Assumed to be limestone or similar walling to match	59	m2	£70.82	£4,178.38	70	93	131	6.0475	200		0.24	0.24	0.24	2902.8 2902.8 2902.8
	boundary walls; in cement mortar;														
	complete with facing to suit wall thickness, including trimming and the like of stone;														
	random courses; brushed finish, nominally 100mm thick	22	m2	£143.35	£3,153.70	43	60	79	2.2	218	80	0.079	0.079	0.079	378.884 378.884 378.884
A	Stonework; Assumed to be cast stone to match adjacent邻近的 environment;														
	bedding in mortar; building in as work proceeds; nominally 425mm wide; 55mm														
	deep; splayed top edge with two throats to underside; coppings, generally	26	m	£97.00	£2,522.00	43	60	79	0.60775	47	70	0.0749	0.107	0.1391	21.3946233 30.5637475 39.7328718
в	Stonework; Assumed to be cast stone to match adjacent environment; bedding in														
	mortar; building in as work proceeds; nominally 125mm thick; 215mm deep;														
	splayed bottom edge with throating; lintels, to suit opening 1248mm wide	2	Nr	£270.00	£540.00	43	60	79	0.06708	47	70	0.0749	0.107	0.1391	2.36141724 3.3734532 4.38548916
c	Stonework; Assumed to be cast stone to match adjacent environment; bedding in	2		2270.00			~	/3	2.00708	4/		0.0/42			
	match adjacent environment; bedding in mortar; building in as work proceeds; nominally 150mm thick; 215mm deep;														
	splayed top edge and stools to both ends														
	with throating to underside; sills, to suit opening 685mm wide	9	Nr	£95.00	£855.00	43	60	79	0.1988213	47	70	0.0749	0.107	0.1391	6.99910446 9.99872066 12.9983369
D	Stonework; Assumed to be cast stone to match adjacent environment; bedding in														
	mortar; building in as work proceeds; nominally 150mm thick; 215mm deep;														
	splayed top edge and stools to both ends with throating to underside; sills, to suit														
E	opening 1135mm wide Stonework; Assumed to be cast stone to	6	Nr	£138.00	£828.00	43	60	79	0.2196225	47	70	0.0749	0.107	0.1391	7.73137087 11.0448155 14.3582602
-	match adjacent environment; bedding in mortar; building in as work proceeds;														
	nominally 150mm thick; 215mm deep; splayed top edge and stools to both ends														
	splayed top edge and stools to both ends with throating to underside; sills, to suit opening 1248mm wide	19		£150.00	£2 8F0 00	43	60		0.764712		70	0.0749	0.107	0.1391	26.9201565 38.4573665 49.9945764
F	opening 1248mm wide Stonework; Assumed to be cast stone to match adjacent environment; bedding in	19	r4F	- 130.00	UUUUU	43	30	79	0.704712	47		0.0/49	0.10/	0.1391	49.9945/64
	match adjacent environment; bedding in mortar; building in as work proceeds; nominally 150mm thick; 215mm deep;														
	splayed top edge and stools to both ends														
	with throating to underside; sills, to suit opening 1360mm wide	2	Nr	£157.50	£315.00	43	60	79	0.08772	47	70	0.0749	0.107	0.1391	3.08800716 4.4114388 5.73487044

G	Stonework; Assumed to be cast stone to																
G	match adjacent environment; bedding in mortar; building in as work proceeds;																
	nominally 150mm thick; 215mm deep; splayed top edge and stools to both ends with throating to underside; sills, to suit																
	opening 1698mm wide	1	Nr	£205.00	£205.00	43	60	79	0.0547605	470		0.0749	0.107	0.1391	1.92773388	2.75390555	3.58007721
н	Stonework; Assumed to be cast stone to match adjacent environment; bedding in																
	mortar; building in as work proceeds; nominally 150mm thick; 215mm deep; splayed top edge and stools to both ends																
	with throating to underside; sills, to suit opening 1810mm wide	4	Nr	£212.00	£848.00	43	60	79	0.23349	470		0.0749	0.107	0.1391	8.21954847	11.7422121	15.2648757
1	Stonework; Assumed to be cast stone to match adjacent environment; bedding in																
	mortar; building in as work proceeds; nominally 150mm thick; 215mm deep;																
	splayed top edge and stools to both ends with throating to underside; sills, to suit opening 2710mm wide	1	Nr	£310.00	£310.00	43	60	79	0.087075	470		0.0749	0.107	0.1391	2.06520122	4.37900175	5 60270229
1	Forming cavities in hollow walls; complete with Ancon stainless steel HRT4 safety ties			2310.00	1310.00	45	00	,,,	0.007075	470		0.0745	0.207	0.1351	5.0050115	4.37300173	5.05270220
	at the rate of five per square metre; and approved cavity wall insulation 75mm																
к	thick, 125mm wide Cavity trays; Visqueen Zedex Housing grade	1187	m2	£14.06	£16,689.22	52	72	101	148.375	8000		6.15	6.15	6.15	7300050	7300050	7300050
	damp proof course; bedding in cement mortar, over 225mm wide	311	m2	£16.45	£5,115.95	52	72	101	69.975	1650							
L	Cavity closers; Assumed to be Kingspan or similar approved Thermabate cavity closer system, complete with all required																
	insulation, brackets and the like; suitable for use in party walls, 100mm wide, vertical	248	m	£8.15	£2,021.20	50	75	100	0.7936	1380		3.16	3.16	3.16	3460 73088	3460.73088	3460 73088
А	Cavity closers; Assumed to be Kingspan or similar approved Thermabate cavity closer																
	system, complete with all required insulation, brackets and the like; suitable																
в	for use in party walls, 100mm wide, Weepholes 排水孔, Rytons Rytweep or	150	m	£8.15	£1,222.50	50	75	100	0.48	1380		3.16	3.16	3.16	2093.184	2093.184	2093.184
c	similar approved; building in as work proceeds, generally IG Lintels, building in as work proceeds;	611	Nr	£1.78	£1,087.58	52	72	101	0.0407293								
c	reference L1/S or similar; to suit structural opening of; to suit structural opening																
D	572mm wide; in cavity wall IG Lintels, building in as work proceeds;	6	Nr	£23.17	£139.02	50	75	100	0.0004832	7800 https://iglintels	s.com/product/l1s-100/	0.47	1.46	2.89	1.77150505	5.50297313	10.8928715
	reference L1/S or similar; to suit structural opening of; to suit structural opening																
E	685mm wide; in cavity wall IG Lintels, building in as work proceeds;	16	Nr	£25.39	£406.24	50	75	100	0.0015432	7800		0.47	1.46	2.89	5.65725389	17.5735972	34.7860931
	reference L1/S or similar; to suit structural opening of; to suit structural opening 910mm wide: in cavity wall	1	Nr	£32.63	£32.63	50	75	100	0.0001281	7800		0.47	1.46	2.89	0 46071 775	1.45912166	2 00026120
F	IG Lintels, building in as work proceeds; reference L1/S or similar; to suit structural	1	NI	232.03	132.03	50	/3	100	0.0001281	7800		0.47	1.40	2.05	0.40571725	1.43912100	2.86820136
	opening of; to suit structural opening 1022mm wide; in cavity wall	6	Nr	£33.63	£201.78	50	75	100	0.0008634	7800		0.47	1.46	2.89	3.16517161	9.83223521	19.4624382
G	IG Lintels, building in as work proceeds; reference L1/S or similar; to suit structural																
	opening of; to suit structural opening 1135mm wide; in cavity wall	10	Nr	£36.06	£360.60	50	75	100	0.0159808	7800		0.47	1.46	2.89	58.5856128	181.98935	360.239194
н	IG Lintels, building in as work proceeds; reference L1/S or similar; to suit structural opening of: to suit structural opening																
	opening or; to suit structural opening 1248mm wide; in cavity wall IG Lintels, building in as work proceeds;	28	Nr	£41.92	£1,173.76	50	75	100	0.0049201	7800		0.47	1.46	2.89	18.0371423	56.0302719	110.909237
	reference L1/S or similar; to suit structural opening of; to suit structural opening																
L	1360mm wide; in cavity wall IG Lintels, building in as work proceeds;	5	Nr	£45.32	£226.60	50	75	100	0.001156	7800		0.47	1.46	2.89	4.237896	13.164528	26.058552
	reference L1/S or similar; to suit structural opening of; to suit structural opening																
к	1585mm wide; in cavity wall IG Lintels, building in as work proceeds;	2	Nr	£58.17	£116.34	50	75	100	0.0005389	7800		0.47	1.46	2.89	1.9756074	6.1369932	12.1478838
	reference L1/S or similar; to suit structural opening of; to suit structural opening 1698mm wide; in cavity wall	2	Nr	£60.18	£120.36	50	75	100	0.0007267	7800		0.47	1.46	2.89	2 6642425	8.27616067	16 2922622
L	IG Lintels, building in as work proceeds; reference L1/S or similar; to suit structural	-		200.20	110.50	50	,,	100	0.0007207	1000		0.47	1.40	2.05	1.0041433	0.17010007	10.3011031
	opening of; to suit structural opening 1810mm wide; in cavity wall	7	Nr	£84.37	£590.59	50	75	100	0.0027114	7800		0.47	1.46	2.89	9.93991908	30.8771954	61.119928
м	IG Lintels, building in as work proceeds; reference L1/HD or similar; to suit																
	structural opening of; to suit structural opening 2373mm wide; in cavity wall IG Lintels, building in as work proceeds;	2	Nr	£111.14	£222.28	50	75	100	0.0014238	7800		0.47	1.46	2.89	5.2196508	16.2142344	32.0952996
N	reference L1/HD or similar; to suit structural opening of; to suit structural																
0	opening 2485mm wide; in 215mm thick IG Lintels, building in as work proceeds;	5	Nr	£145.06	£725.30	50	75	100	0.0052334	7800		0.47	1.46	2.89	19.1856811	59.5980731	117.971528
	reference L1/HD or similar; to suit structural opening of; to suit structural																
A	opening 2598mm wide; in cavity wall IG Lintels, building in as work proceeds;	1	Nr	£150.06	£150.06	50	75	100	0.0010943	7800		0.47	1.46	2.89	4.01162168	12.4616333	24.6672057
	reference L1/HD or similar; to suit structural opening of; to suit structural opening 2710mm wide; in cavity wall	1	Nr				~									12.9988554	
в	IG Lintels, building in as work proceeds; reference L1/HD or similar; to suit	1	NF	£150.06	£150.06	50	75	100	0.0011415	7800		0.47	1.46	2.89	4.18456303	12.9988554	25.730611
	structural opening of; to suit structural opening 2935mm wide; in cavity wall	6	Nr	£155.47	£932.82	50	75	100	0.0078294	7800		0.47	1.46	2.89	28.7026024	89.1612755	176.49047
с	Sawn softwood; to timber store; Sawn softwood; preservative treated, assumed																
	to be grade C24, wall or partition members; 125 x 125mm posts Sawn softwood: to timber store: Sawn	18	m	£10.80	£194.40	39	56	72	0.28125	630		0.59	0.59	0.59	104.540625	104.540625	104.540625
D	softwood; preservative treated, assumed to be grade C24, wall or partition																
F	members; 125 x 50mm rails Sawn softwood: to car port: Sawn	26	m	£5.45	£141.70	39	56	72	0.1625	630		0.59	0.59	0.59	60.40125	60.40125	60.40125
	softwood; preservative treated, assumed to be grade C24, wall or partition																
F	members; 150 x 150mm posts Sawn softwood; to car port; Sawn	18	m	£11.33	£203.94	39	56	72	0.405	630		0.59	0.59	0.59	150.5385	150.5385	150.5385
	softwood; preservative treated, assumed to be grade C24, wall or partition members: 300 x 200mm beams	40	m	£37.50	£1.500.00	39	56	72	2.4	630		0.59	0.59	0.59	892.08	892.08	892.08
G	Sawn softwood; to car port; Sawn softwood; preservative treated, assumed	40		E37.30	£1,300.00	39	30	12	2.4	650		0.39	0.35	0.55	852.08	892.08	892.08
	to be grade C24, wall or partition members; 200 x 150mm bracings -																
н	assumed to be dowelled mortice and Sawn softwood; to car port; Sawn	20	m	£19.35	£387.00	39	56	72	0.6	630		0.59	0.59	0.59	223.02	223.02	223.02
	softwood; preservative treated, assumed to be grade C24, wall or partition members; 200 x 150mm curved entrance																
	bracings - assumed to be dowelled mortice Sawn softwood; to car port; Sawn	3	m	£33.35	£100.05	39	56	72	0.09	630		0.59	0.59	0.59	33.453	33.453	33.453
	softwood; preservative treated, assumed to be grade C24, wall or partition	73	m	£4.17	£304.41	39	56	72	0.365	630		0.59	0.59	0.59	135.6705	135.6705	135.6705
1	Fixings; Assumed to be stainless steel shoes, resin bolted to concrete floor slab;																
	complete with all required fixings, bolts and the like; to suit 125 x 125mm post	8	Nr	£87.50	£700.00												
к	Fixings; Assumed to be stainless steel shoes, resin bolted to concrete floor slab; complete with all required fixings, bolts																
L	complete with all required tixings, bolts and the like; to suit 150 x 150mm post Truss clips; to accept rails; nailed as	8	Nr	£87.50	£700.00												
A	required; to suit 125 x 50mm rails H30 FIBRE CEMENT PROFILED SHEET	44	Nr	£2.27	£99.88												
	CLADDING/COVERING /SIDING; Assumed to be profiled large format cladding panels;																
	including all insulation, vapour barriers, breather membranes, brackets, fixings and the life to complete installation until																
в	the like to complete installation; wall claddings; vertical H30 FIBRE CEMENT PROFILED SHEET	13	m2	£280.32	£3,644.16	24	38	49	0.26	350		1.09	1.09	1.09	99.19	99.19	99.19
-	CLADDING/COVERING /SIDING; Abutments; as required, no details; to roof																
с	profile, to head and sill; generally H30 FIBRE CEMENT PROFILED SHEET	26	m	£31.90	£829.40	24	38	49	0.0624	350		1.09	1.09	1.09	23.8056	23.8056	23.8056
	CLADDING/COVERING /SIDING; Trims to windows and the like; generally	5	m	£31.90	£159.50	24	38	49									
D	H30 FIBRE CEMENT PROFILED SHEET CLADDING/COVERING /SIDING; Holes, no			£1,000.00	C3 000 00	24	20	40									
E	details H41 GLASS REINFORCED PLASTICS PANEL CLADDING / FEATURES; Approved timber	1	11EM	21,000.00	z 1,000.00	24	38	49									
	framed or Glass Reinforced Plastic off site manufactured chimney unit with																
	brickwork to match below DPC; including capping and two chimney pots, blanking																
F	panels and the like; generally H41 GLASS REINFORCED PLASTICS PANEL CLADDING / FEATURES; Approved timber	2	Nr	£800.00	£1,600.00	24	37	48									
	framed or Glass Reinforced Plastic off site manufactured entrance porch with slate																
	roofing to match main roof; including supporting framing fixed to masonry walls;																
	generally; 2.00m wide; 900mm projection, to unit 2	1	Nr	£609.95	£609.95	24	37	48									

G	H41 GLASS REINFORCED PLASTICS PANEL CLADDING / FEATURES; Approved timber framed or Glass Reinforced Plastic off site manufactured entrance porch with slate																
н	roofing to match main roof; including supporting framing fixed to masonry walls; generally; 2.30m wide; 900mm projection, to units 3 and 4 H41 GLASS REINFORCED PLASTICS PANEL	2	Nr É	609.95	£1,219.90	24	37	48									
н	And a Dess relivery Approved timber framed or Glass Reinforced Plastic off site manufactured entrance porch with slate roofing to match main roof; including supporting framing fixed to masonry walls;																
A	generally; 3.47m wide; 600mm projection, to units 5 to 9 Timber boarding; James Hardiplank timber	1	Nr £	609.95	£609.95	24	37	48									
в	effect Fibre Cement boarding; over 300mm wide	109	m2	£65.99	£7,192.91	17	29	42	0.872	1300		1.09	1.09	1.09	1235.624	1235.624	1235.624
c	effect Fibre Cement boarding; not exceeding 300mm wide Timber boarding; James Hardiplank timber	32	m	£34.30	£1,097.60	17	29	42	0.256	1300		1.09	1.09	1.09	362.752	362.752	362.752
	effect Fibre Cement boarding; over 300mm wide; to soffits; complete with 100mm of apporved insulation board	9	m2	£78.66	£707.94	17	29	42	0.072	1300		1.09	1.09	1.09	102.024	102.024	102.024
D E	Timber boarding; Abutments; complete with all additional framing and the like; to Timber boarding; Finished external angles;	22	m	£17.09	£375.98	17	29	42	0.0528	1300		1.09	1.09	1.09	74.8176	74.8176	74.8176
F	complete with feature trim and the like; external angles generally Timber boarding; Sills; complete with	59	m	£13.59	£801.81	17	29	42									
G	feature trim and the like; sills generally Timber boarding; Holes, generally	48 1		£13.59 100.00	£652.32 £100.00	17 17	29 29	42 42									
I	Timber boarding; Raking cutting to tops of walls, generally Timber boarding; to timber store; Assumed	20	m	£4.00	£80.00	17	29	42									
	to be preservative treated tongue and groove 凹槽 horizontal boarding; in 19 x 150mm planks, secret fixed to timber framing; walls; over 300mm wide Timber boarding; to timber store; Finished	21	m2	£65.79	£1,381.59	17	29	42	0.399	480		0.72	0.72	0.72	137.8944	137.8944	137.8944
r	external angles; complete with feature trim and the like; external angles generally Timber boarding; to timber store;	13	m	£20.30	£263.90	17	29	42	0.0312	480		0.72	0.72	0.72	10.78272	10.78272	10.78272
	Sills甚石; complete with feature trim and the like; sills generally Timber boarding; to timber store; Raking	8	m	£7.84	£62.72	17	29	42									
м	cutting to tops of walls; generally Timber boarding; to car port; Assumed to be preservative treated tongue and groove horizontal boarding; in 19 x 150mm planks,	6	m	£4.84	£29.04	17	29	42									
A	secret fixed to timber framing; walls; over 300mm wide Timber boarding; to car port; Finished	44	m2	£65.79	£2,894.76	17	29	42	0.836	480		0.72	0.72	0.72	288.9216	288.9216	288.9216
в	external angles; complete with feature trim and the like; external angles generally Timber boarding; to car port; Finished	5	m	£13.09	£65.45	17	29	42	0.012	480		0.72	0.72	0.72	4.1472	4.1472	4.1472
c	ends; complete with feature trim and the like; open abutments generally Timber boarding; to car port; Sills;	5	m	£13.09	£65.45	17	29	42	0.012	480		0.72	0.72	0.72	4.1472	4.1472	4.1472
D	complete with feature trim and the like; Assumed to be stainless steel framed balustrading, with safety laminated glass	20	m	£13.09	£261.80	17	29	42	0.048	480		0.72	0.72	0.72	16.5888	16.5888	16.5888
E	infill panels; fixed to masonry walls with approved brackets; 2710mm long; 1100mm high; to unit 2 Assumed to be stainless steel framed	1	Nr £2,	,149.31	£2,149.31	15	20	25 0.	.0049014	8000		6.15	6.15	6.15	241.149588	241.149588	241.149588
	balustrading, with safety laminated glass infill panels; clamp fixed at base to masonry walls with approved brackets;																
F	500mm high; to unit 10 Assumed to be stainless steel framed balustrading, with safety laminated glass infill panels; clamp fixed at base to masonry walls with approved brackets;	6	m £	607.95	£3,647.70	15	20	25 0.	.0108518	8000		6.15	6.15	6.15	533.910528	533.910528	533.910528
G	1100mm high; to unit 3 and 4 Assumed to be stainless steel framed balustrading, with safety laminated glass infill panels; clamp fixed at base to	17	m £	623.25	£10,595.25	15	20	25	3.074688	8000		6.15	6.15	6.15	151274.65	151274.65	151274.65
н	masonry walls with approved brackets; 1500mm high; to unit 3 and 4; obscure Assumed to be stainless steel framed balustrading, with safety laminated glass infill panels; clamo fixed at base to	3	m £1,	,001.89	£3,005.67	15	20	25 (0.542592	8000		6.15	6.15	6.15	26695.5264	26695.5264	26695.5264
ļ	masonry walls with approved brackets; ends / abutments to walls Assumed to be stainless steel framed balustrading, with safety laminated glass	5	Nr	£95.91	£479.55	15	20	25									
1	infill panels; clamp fixed at base to masonry walls with approved brackets; Assumed to be stainless steel framed balustrading, with safety laminated glass infill panels; clamp fixed at base to	4	Nr	£95.91	£383.64	15	20	25									
к	masonry walls with approved brackets; Assumed to be stainless steel framed balustrading, with safety laminated glass infill panels; clamp fixed at base to masonry walls with approved brackets;	1	Nr	£95.91	£95.91	15	20	25									
L	1100mm high; to unit 3 and 4 Assumed to be stainless steel framed balustrading, with safety laminated glass infill panels; clamp fixed at base to	24	m £	586.86	£14,084.64	15	20	25	4.340736	8000		6.15	6.15	6.15	213564.211	213564.211	213564.211
м	masonry walls with approved brackets; ends / abutments to walls Assumed to be stainless steel framed balustrading, with safety laminated glass	8	Nr	£95.91	£767.28	15	20	25									
A	Infill panels; clamp fixed at base to masonry walls with approved brackets; M20 PLASTERED /RENDERED /ROUGHCAST COATINGS; Proprietary two coat render system; to blockwork, through colour, over	8	Nr	£95.91	£767.28	15	20	25									
в	300mm wide M20 PLASTERED /RENDERED /ROUGHCAST COATINGS; Proprietary two coat render	954	m2	£26.00	£24,804.00	32	52	81	9.54	1900		0.174	0.174	0.174	3153.924	3153.924	3153.924
c	system; to blockwork, through colour, not exceeding 300mm wide M20 PLASTERED /RENDERED /ROUGHCAST COATINGS; Waterproof proprietary two	338	m	£8.00	£2,704.00	32	52	81	1.014	1900		0.174	0.174	0.174	335.2284	335.2284	335.2284
D	coat render system; to blockwork, through colour, over 300mm wide M20 PLASTERED /RENDERED /ROUGHCAST	80	m2	£52.00	£4,160.00	32	52	81	0.8	1900		0.174	0.174	0.174	264.48	264.48	264.48
	COATINGS; Waterproof proprietary two coat render system; to blockwork, through colour, not exceeding 300mm wide	26	m	£10.00	£260.00	32	52	81	0.078	1900		0.174	0.174	0.174	25.7868	25.7868	25.7868
E	M20 PLASTERED /RENDERED /ROUGHCAST COATINGS; Waterproof proprietary two coat render system; to blockwork, through colour, Approved beads to suit render																
F	system, external angle beads M20 PLASTERED /RENDERED /ROUGHCAST COATINGS; Waterproof proprietary two coat render system; to blockwork, through colour, Approved beads to suit render	495	m	£1.15	£569.25	32	52	81									
E	system, belicast stop bead Sashless无窗框的 Windows Company Limited; white flush casement timber windows; handles to match style of internal door handles and be of brushed	230	m	£1.15	£264.50	32	52	81									
	stainless steel; complete unit comprising all framing, EPDM seals (minimum of 300mm wide), ironmongery, opening restrictors, insulated infill panels, aluminium sill and head flashings, sill and head ends, sealant internally and																
F	externally, trickle vents and the like as required to complete the installation; 570 x 1210mm; plots 5, 6, 7, 8 and 9; reference W03, W05, W08, W13, W19 and W21; Sashless无窗框的 Windows Company	6	Nr £10,	,004.50	£60,027.00	22	34	45	0.08208	140		0.91	0.91	0.91	10.456992	10.456992	10.456992
	Limited; white flush casement timber windows; handles to match style of internal door handles and be of brushed stahless steel; complete unit comprising all framing. EPDM seals (minimum of 300mm wide), ironmongery, opening restrictors; nisulated milli panels, aluminium sill and head flashings; sill and head ends; sealan internally and																
G	externally, trickle vents and the like as required to complete the installation; 685 x 685mm; plot 10; reference W08; Sashless无意概的 Windows Company Limited; white flush casement timber windows; handles to match style of internal door handles and be of brushed stabiless steet; complete unit comprising all framing, EPON seals (minimum of	1	Nr	£35.00	£35.00	22	34	45 0.	.0093845	140		0.91	0.91	0.91	1.1955853	1.1955853	1.1955853
	300mm wide), ironmongery, opening restrictors, insulated infill panels, aluminium all and head flashings, sill and head ends, sealant internally and externally, trickle vents and the like as required to complete the installation; 685 x 685mm; plot 10; references W04 and																
	W07; comprising of 1Nr obscure glazed	2	Nr	£35.00	£70.00	22	34	45 (0.018769	140		0.91	0.91	0.91	2.3911706	2.3911706	2.3911706

A	Sashless无窗框的 Windows Company Limited; white flush casement timber windows; handles to match style of internal door handles and be of brushed stainless steel; complete unit comprising all framing, EPDM seals (minimum of 300mm wide), ironmongery, opening														
в	restrictors, insulated infill panels, aluminium sill and head flashings, sill and head ends, sealant internally and externally, trickle vents and the like as required to complete the installation; 685 × 1060mm; plots 3 and 4; references W02, W05, W07, W08, W13 and W14; Sachiesz-RärdkØ) windows: company	6 1	lr £35.00	£210.00	22	34	45	0.087132	140	0.91	0.91	0.91	11.1006168 11.	1006168 1	1.1006168
в	Limited; white flush casement timber windows; handles to match style of internal door handles and be of brushed stainless steel; complete unit comprising all framing, EPDM seals (minimum of 300mm wide), ironmongery, opening restrictors; nualated infill panels,														
c	aluminium ail and head flashings, sill and head ends, sealan internally and externally, trickle vents and the like as required to complete the installation;685 x 1000mm; pitot 1 and 2; references W04, W15 and W16; comprising of 1Mr obscure Sahlesz; Tägtke Windows Company Limited; white fluch casement timber windows: handles to match stive of	3 1	ir £35.00	£105.00	22	34	45	0.043566	140	0.91	0.91	0.91	5.5503084 5.	5503084	5.5503084
	Internal door handles and be of brushed stainless steel; complete unit comprising all framing; EPDM seals (minimum of 300mm wide), tronmongery, opening restrictors, insulated infill panels, aluminium sill and head flashings, sill and head ends, sealant internally and externally, trickle vents and the life as														
D	required to complete the installation;855 xt 2120nm; bid VI orderionce WOI; Sachless无能權的 Windows Company Limited; while flush casement timber windows; handles to match style of internal door handles and be of brushed tahless steel; complete unit comprising all framing, EPDM seak; finhimum of 300mm wide), normongery, opening	1 1	ir £35.00	£35.00	22	34	45	0.016577	140	0.91	0.91	0.91	2.1119098 2.	1119098	2.1119098
E	restrictors, insulated infill panels, aluminium iil and head fashings, sill and head ends, sealant internally and externally, trickle vents and the like as required to complete the installation,685 x 1210mm; plot 10; reference W02; egress window comprising of 1Nr side opening Sachiest, Tädt Ridb Windows: Company	1 1	ir £35.00	£35.00	22	34	45	0.016577	140	0.91	0.91	0.91	2.1119098 2.	1119098	2.1119098
	Limited; while fluck casement timber windows; handles to match style of internal door handles and be of brushed tabiless stel; complete unit comprising all framing, EPDM seals (minimum of 300mm wide), incolated nifil panel restrictors, incolated nifil panel, aluminium sill and head flashings, sill and head ends; sealan internally and														
F	externally, tricile vents and the like as required to complete the installation; 685 x1210mm; pick 10; reference W05; comprising of the obscure glasted side Sachless无意權的 Windows. Company Limited; white fluch casement timber windows; handles to match site of internal door handles and be of brushed tabaless steel; complete unit comprising	1 ,	ir £35.00	£35.00	22	34	45	0.016577	140	0.91	0.91	0.91	2.1119098 2.	1119098	2.1119098
G	all framing, EPDM seals (minimum of 300m wide), ionmongeny, opening restrictors, invalated infili panels, aluminium sill and head flashings, sill and head ends; sealant internally and externally, trickle vents and the like as required to complete the installation; 685 x 1810mm; pilot 10; reference W66; scahlesz-Stäteg Windrows Company	1 1	Ir <u>£38.00</u>	£38.00	22	34	45	0.024797	140	0.91	0.91	0.91	3.1591378 3.	1591378	3.1591378
	Limited; while fluck casement timber windows; handles to match style of internal door handles and be of brushed stainless steel; complete unit comprising all framing. EPDM seads (minismum of 300mm wide), ironmongery, opening restrictors; misuaded nifili panels, alumnium sill and head flashings; sill and head ends; seadan internally and														
н	externally, trickle vents and the like as required to complete the installation; 1023 x 1210mm; plots 5, 6, 7, 8 and 9; references W24, W25 and W26; comprising of 1hr Sashles:Z@atk@h) windows: company Limited; white flush casement timber windows; handles to the of brushed internal door handles and be of brushed	3 1	ir £38.00	£114.00	22	34	45	0.0742698	140	0.91	0.91	0.91	9.46197252 9.4	6197252 9	.46197252
	stailers steel; complete unit comprising all framing; FDM selds (minimum of 300mm wide), ironmongery, opening restrictors, insulated infill panels, aluminium all and head flashings, ill and head ends, sealant internally and externally, rickle vents and the like as required to complete the installation; 1023 1 210mm; pitch 5, 6, 7, 8 and 9; reference														
I	V23: express window comprising of 1Nr Scaliesz5 affab (Windows: Company Limited; white flush casement timber windows; handles to match style of internal dorb indels and be of brushed staliess steel; complete unit comprising all framing; EPOM seals (minimum of 300mm wide), ironmonger, opening restrictors; hisvaled infill canels.	1 ,	Ir £38.00	£38.00	22	34	45	0.0247566	140	0.91	0.91	0.91	3.15399084 3.1	5399084 3	.15399084
ł	aluminium sill and head flashings, sill and head ends, sealant internally and externally, trickle vents and the like as required to complete the installation; 1135 x 1060m; joict and 2; reference W09; Saahlesz: 國報的 Windows Company Limited; white fluch assement timber windows; handles to match style of internal doch brushed	1 /	ir £38.00	£38.00	22	34	45	0.024062	140	0.91	0.91	0.91	3.0654988 3.	0654988	3.0654988
	stainless steel; complete unit comprising all framing, EPDM seals (minimum of 300mm wide), ironmongery, opening restrictors, insulated infill panels, aluminium all and head fashings, sill and head ends, sealant internally and externally, trickle vents and the like as required to complete the installation; 1135														
к	x 1360mm; piots 1 and 2; references W05, W05 and W11; comprising of 21 Nr side SashtesZ意識權的 Windows Company Limited; white Ruh casement timber windows; handles to match style of internal doch handles and be of brushed stainless steel; complete unit comprising all framing, EPDM seals (minimum of 300mm wide), normongery, opening	3 1	ir £38.00	£114.00	22	34	45	0.092616	140	0.91	0.91	0.91	11.7992784 11.	7992784 1	1.7992784
L	restrictors, invalated infili panels, aluminium sil and head flashings, sill and head ends, sualant internally and externally, trickle vents and the like as required to complete the installation: 1135 x 1360mm; plots 1 and 2; reference W12; egress window comprising of 2 riv side Sashies27.管理的 vindows: Company Limited; white fluch casement timber	1 ,	Ir £38.00	£38.00	22	34	45	0.030872	140	0.91	0.91	0.91	3.9330928 3.	9330928	3.9330928
	windows; handles to match style of internal doc horubed stainless steel; complete unit comprising all framing, EPDM seals (minimum of 300mm wide), inomongery, opening restrictors, insulated infili panels, aluminium all and head flashings, sill and head ends, sealant internally and externally, rickle vents and the like as														
м	required (), normpeters the installation; 1135 a Jáčánna; joint Jan dž. rejenence W08; Saohersz:王第任的 Windows Company Limited; white Link casement timber windows; handles to match style of internal door handles and be of bruhed stalifess steel; complete unit comprising all framing; EPOM sads (infinitum of 300mm wide), ironmonger, opening retrictors; munued infili panels,	1 ,	ir £38.00	£38.00	22	34	45	0.037682	140	0.91	0.91	0.91	4.8006868 4.	8006868	4.8006868
	aluminium sill and head flashings, sill and head ends, sealant internally and externally, rickle vents and the like as required to complete the installation; 1248 x 685mm; plots 1 and 2; reference W10; comprising of 1Nr obscure glazed bottom	1 1	ir £35.00	£35.00	22	34	45	0.0170976	140	0.91	0.91	0.91	2.17823424 2.1	7823424 2	.17823424

	Sashless无窗框的 Windows Company												
N	Sashless尤菌植的 Windows Company Limited; white flush casement timber windows: handles to match style of												
	internal door handles and be of brushed stainless steel; complete unit comprising												
	all framing, EPDM seals (minimum of 300mm wide), ironmongery, opening												
	restrictors, insulated infill panels, aluminium sill and head flashings, sill and												
	head ends, sealant internally and externally, trickle vents and the like as												
	required to complete the installation; 1248 x 1210mm; plots 3 and 4; references W01												
A	and W06; comprising of 1Nr side opening Bill 9 Windows and External Doors; 1248 x	2	Nr	£38.00	£76.00	22	34	45 0.0604032	140	0.91	0.91	0.91	7.69536768 7.69536768 7.69536768
	1210mm; plots 5, 6, 7, 8 and 9; references W04, W06, W07, W11, W12, W16, W20, W22 and W33; comprising of 1Nr side												
	opening pane and 1Nr fixed pane Bill 9 Windows and External Doors; 1248 x	9	Nr	£38.00	£342.00	22	34	45 0.2718144	140	0.91	0.91	0.91	34.6291546 34.6291546 34.6291546
в	1210mm; plots 3 and 4; references W03, W04, W09, W10, W11 and W12; egress												
	window comprising of 1Nr side opening pane and 1Nr fixed pane	6	Nr	£38.00	£228.00	22	34	45 0.1812096	140	0.91	0.91	0.91	23.086103 23.086103 23.086103
с	Bill 9 Windows and External Doors; 1248 x 1210mm; plots 5, 6, 7, 8 and 9; references	0	N	238.00	£228.00	22	34	45 0.1812050	140	0.91	0.51	0.91	25.080105 25.080105 25.080105
	W01, W02, W09, W10, W14, W15, W17 and W18; egress window comprising of 1Nr												
D	side opening pane and 1Nr fixed pane Bill 9 Windows and External Doors; 1248 x	8	Nr	£38.00	£304.00	22	34	45 0.2416128	140	0.91	0.91	0.91	30.7814707 30.7814707 30.7814707
5	1210mm; plot 10; reference W12; comprising of 1Nr side opening pane and	1	Nr	£38.00	£38.00	22	34	45 0.0302016	140	0.91	0.91	0.91	3.84768384 3.84768384 3.84768384
E	Bill 9 Windows and External Doors; 1360 x 1210mm; plots 1 and 2; references W13			130.00	230.00	**	54	45 0.0502010	140	0.51	0.51	0.51	3.4703.04 3.04703.04 3.04703.04
	and W17; egress window comprising of 2Nr side opening panes and 1Nr fixed pane	2	Nr	£38.00	£76.00	22	34	45 0.065824	140	0.91	0.91	0.91	8.3859776 8.3859776 8.3859776
F	Bill 9 Windows and External Doors; 1360 x 1210mm; plot 10; reference W10;												
G	comprising of 2Nr side opening panes and Bill 9 Windows and External Doors; 1698 x	1	Nr	£38.00	£38.00	22	34	45 0.032912	140	0.91	0.91	0.91	4.1929888 4.1929888 4.1929888
	1210mm; plots 1 and 2; reference W02; comprising of 2Nr obscure glazed side												
н	opening panes and 1Nr obscure glazed Bill 9 Windows and External Doors; 1698 x	1	Nr	£38.00	£38.00	22	34	45 0.0410916	140	0.91	0.91	0.91	5.23506984 5.23506984 5.23506984
	1210mm; plot 10; reference W11; comprising of 2Nr obscure glazed side												
I.	opening panes and 1Nr obscure glazed Bill 9 Windows and External Doors; 1810 x	1	Nr	£38.00	£38.00	22	34	45 0.0410916	140	0.91	0.91	0.91	5.23506984 5.23506984 5.23506984
	1210mm; plots 1 and 2; reference W01; comprising of 2Nr side opening panes and												
ı	1Nr fixed pane Bill 9 Windows and External Doors; 1810 x	1	Nr	£38.00	£38.00	22	34	45 0.043802	140	0.91	0.91	0.91	5.5803748 5.5803748 5.5803748
	1210mm; plot 10; reference W09; comprising of 2Nr side opening panes and	1	Nr	£38.00	£38.00	22	34	45 0.043802	140	0.91	0.91	0.91	5.5803748 5.5803748 5.5803748
к	Bill 9 Windows and External Doors; 1810 x 1210mm; plots 1 and 2; reference W03,												
	W07 and W14; egress windows comprising of 2Nr side opening panes and 1Nr fixed	3	Nr	£38.00	£114.00	22	34	45 0.131406	140	0.91	0.91	0.91	16.7411244 16.7411244 16.7411244
L	Bill 9 Windows and External Doors; 1810 x 1210mm; plot 10; reference W03; egress												
	windows comprising of 2Nr side opening panes and 1Nr fixed pane	1	Nr	£38.00	£38.00	22	34	45 4.3802	140	0.91	0.91	0.91	558.03748 558.03748 558.03748
A	Velux windows; 550 x 980mm; plots 5, 6, 7, 8 and 9; references W35, W36 and W37 Velux windows; 660 x 1398mm; plots 5, 6,	3	Nr	£585.00	£1,755.00	24	35	45 0.03234	140	0.91	0.91	0.91	4.120116 4.120116 4.120116
в	Velux Windows; 660 x 1.998mm; plots 5, 6, 7, 8 and 9; references W27, W28, W29, W30, W31 and W32	6		£690.00			35		140	0.91		0.91	
с	The Rooflight Company Plateau Slimline Profile or similar approved; flat rooflight;	ь	Nr	£690.00	£4,140.00	24	35	45 0.1107216	140	0.91	0.91	0.91	14.1059318 14.1059318 14.1059318
p	669 x 690mm; plots 5, 6, 7, 8 and 9; Triangle roof element; 2900 x 1020mm	1	Nr	£1,438.00	£1,438.00	24	35	45 0.0089512	140	0.91	0.91	0.91	1.14038543 1.14038543 1.14038543
b	(maximum height); plots 5, 6, 7, 8 and 9; reference W40	1	Nr	£165.00	£165.00	24	35	45 0.05916	140	0.91	0.91	0.91	7.536984 7.536984 7.536984
E	Patio / French doorset; Profile 22 uPVC or similar approved; glazed with Ovolo	1	N	1103.00	£163.00	24	33	45 0.03510	140	0.91	0.51	0.91	7.330364 7.330364 7.330364
	beads玻璃粉; 1810 x 2110; plot 10; reference ED02; safety glazed single door												
	with 2Nr safety glazed side lights and 2Nr top hung opening vents	1	Nr	£1,183.15	61 192 15	22	32	41 0.076382	1430	3.1	3.1	3.1	338.601406 338.601406 338.601406
F	Patio / French doorset; Profile 22 uPVC or similar approved; glazed with Ovolo			11,103.13	11,103.13	**	32	41 0.070301	1450	3.1	3.1	3.1	532.03400 532.03400 532.03400
	beads玻璃粉; 2730 x 2110; plots 1 and 2; reference ED05; double door with 6Nr side												
G	lights and 2Nr top hung opening vents Patio / French doorset; Profile 22 uPVC or	1	Nr	£1,183.15	£1,183.15	22	32	41 0.115206	1430	3.1	3.1	3.1	510.708198 510.708198 510.708198
-	similar approved; glazed with Ovolo beads玻璃粉; 2940 x 2110; plots 3 and 4;												
	references ED05 and ED06; safety glazed double door with 6Nr safety glazed side												
A	lights and 2Nr top hung opening vents Patio / French doorset; Profile 22 uPVC or	2	Nr	£1,183.15	£2,366.30	22	32	41 0.248136	1430	3.1	3.1	3.1	1099.98689 1099.98689 1099.98689
	similar approved; glazed with Ovolo beads玻璃粉; 2940 x 2110; plots 5, 6, 7, 8												
	and 9; references ED02, ED03, ED04, ED05, ED06 and ED07; safety glazed double door												
	with 2Nr safety glazed side lights and 2Nr top hung opening vents	6	Nr	£1,291.98	£7,751.88	22	32	41 0.744408	1430	3.1	3.1	3.1	3299.96066 3299.96066 3299.96066
в	Sashless 无窗框的 Window Company Limited or similar approved; European Oak												
	with a Light Oak finish; PAS 24 door; 1023 x 2110; plots 1 and 2; reference ED02; single												
с	door with 1Nr obscure glazed vision panel Sashless 无窗框的 Window Company	1	Nr	£95.00	£95.00	25	39	50 0.0755486	700	0.72	0.72	0.72	38.0764692 38.0764692 38.0764692
	Limited or similar approved; European Oak with a Light Oak finish; PAS 24 door; 1023 x												
	2110; plots 1 and 2; reference ED01; single door with 2Nr obscured safety glazed	1	Nr	£95.00	£95.00	25	39	50 0.0755486	700	0.72	0.72	0.72	38.0764692 38.0764692 38.0764692
D	Sashless 无窗框的 Window Company Limited or similar approved; European Oak												
	with a Light Oak finish; PAS 24 door; 1023 x 2110; plots 3 and 4; reference ED01; single												
E	door with 1Nr obscure glazed vision panel Sashless 无窗框的 Window Company	1	Nr	£95.00	£95.00	25	39	50 0.0755486	700	0.72	0.72	0.72	38.0764692 38.0764692 38.0764692
	Limited or similar approved; European Oak with a Light Oak finish; PAS 24 door; 1023 x												
	2110; plots 3 and 4; reference ED02; single door with 4Nr obscure glazed vision panels	1	Nr	£95.00	£95.00	25	39	50 0.0755486	700	0.72	0.72	0.72	38.0764692 38.0764692 38.0764692
F	Sashless 无窗框的 Window Company Limited or similar approved; European Oak												
	with a Light Oak finish; PAS 24 door; 1023 x 2110; plot 10; reference ED01; single door												
A	deemed to include 4Nr obscure glazed Front doorset to apartments; FD30S;	1	Nr	£95.00	£95.00	25	39	50 0.0755486	700	0.72	0.72	0.72	38.0764692 38.0764692 38.0764692
	Vicaima Oak EX5.1 or similar approved; assumed to be PAS 24; timber veneered;												
	1023 x 2110; plots 5, 6, 7, 8 and 9; references ED08, ED09, ED10, ED12 and	5	Nr	£638.95	£3,194.75	25	39	50 0.3777428	700	0.72	0.72	0.72	190.382346 190.382346 190.382346
в	Front doorset to apartments; FD30S; solid oak high quality bespoke glazed feature front door 1033 - 2100 elect 5 6 7 8 and												
<i>.</i>	front door; 1023 x 2110; plots 5, 6, 7, 8 and 9; reference ED01, single door	1	Nr	£95.00	£95.00	25	39	50 0.0755486	700	0.72	0.72	0.72	38.0764692 38.0764692 38.0764692
	Front doorset to apartments; FD30S; Visofold 1000 Series or similar approved; white aluminium doors; 2373 x 2110; plots												
	white aluminium doors; 2373 x 2110; plots 1 and 2; references ED03 and ED04; safety Front doorset to apartments: FD30S:	2	Nr	£2,775.86	£5,551.72	15	30	38 0.3504921	2700	1.81	9.16	12.79	1712.85489 8668.37062 12103.5437
~	Visofold 1000 Series or similar approved; white aluminium doors; 3610 x 2110; plots												
в	white aluminium doors; 3610 x 2110; plots 3 and 4; references ED03 and ED04; safety Front doorset to apartments; FD30S;	2	Nr	£3,577.66	£7,155.32	15	30	38 0.533197	2700	1.81	9.16	12.79	2605.73374 13187.0282 18412.892
-	Front doorset to apartments; FD30S; Visofold 1000 Series or similar approved; white aluminium doors; 2598 x 2110; plot												
c	10; reference ED03 Garador or standard 8070 frame or similar	1	Nr	£2,835.32	£2,835.32	15	30	38 0.1918623	2700	1.81	9.16	12.79	937.63106 4745.1384 6625.58081
	approved; recessed with Sherwood metal door with laminated oak finish; 2579 x												
D	2194; plot 10; reference ED04 Garador or standard 8070 frame or similar	1	Nr	£1,500.00	£1,500.00	15	30	38 0.2546247	2700	1.81	9.16	12.79	1244.35076 6297.37734 8792.95373
	approved; recessed with Sherwood metal door with laminated oak finish; 2485 x												
E	2185; garage block; reference ED01, 02, 03, External timber door to match timber	4	Nr	£1,195.00	£4,780.00	15	30	38 0.9773505	2700	1.81	9.16	12.79	4776.31189 24171.8326 33750.8448
	boarding; 1022.5 x 2110; garage block; reference ED05	1	Nr	£1,094.00	£1,094.00	20	30	40 0.0647243	700	0.72	0.72	0.72	32.621022 32.621022 32.621022
F	M60 PAINTING/CLEAR FINISHING, not exceeding 300mm girth	33	m	£4.00	£132.00								
A	MDF window boards; factory primed; generally; 25 x 250mm; bullnosed profile	33	m	£21.00	£693.00								
в	Veneered timber window boards; generally; 25 x 250mm; bullnosed profile	66	m	£27.00	£1,782.00								
A	Dense aggregate blockwork; 7.3N/mm2 nominally 100mm thick; in cement mortar;						_						
в	stretcher bond; laid flat 100mm thick; in party walls	162 446	m2 m2	£22.80 £22.80	£3,693.60 £10,168.80	52 52	72 72	101 16.2 101 44.6	2200 2200	0.0749 0.0749	0.107	0.1391 0.1391	2669.436 3813.48 4957.524 7349.188 10498.84 13648.492
C	Dense aggregate blockwork; 7.3N/mm2 in cement mortar; stretcher bond; laid flat;												
	215mm thick; assumed to be 100mm blocks laid flat	16	m2	£45.58	£729.28	52	72	101 3.44	2200	0.0749	0.107	0.1391	566.8432 809.776 1052.7088
D	Dense aggregate blockwork; 7.3N/mm2 nominally 100mm thick; in cement mortar; stratchar bond; bid fat; sutting blockwork												
F	stretcher bond; laid flat; cutting blockwork to course 100mm thick Dense aggregate blockwork; 7.3N/mm2	137	m	£5.00	£685.00	52	72	101					
E	Dense aggregate blockwork; 7.3N/mm2 nominally 100mm thick; in cement mortar; stretcher bond; laid flat; cutting blockwork												
F	stretcher bond; laid flat; cutting blockwork to course 100mm thick; raking Dense aggregate blockwork; 7.3N/mm2	78	m	£10.00	£780.00	52	72	101					
	nominally 100mm thick; in cement mortar; stretcher bond; laid flat; cutting blockwork												
	to course 215mm thick	6	m	£10.00	£60.00	52	72	101					

	Forming cavities in hollow walls; complete														
G	Forming cavities in hollow walls; complete with Ancon stainless steel HRT4 safety ties at the rate of five per square metre;														
н	100mm wide Cavity closers; 100mm wide, vertical	263 21	m2 m	£18.91 £8.15	£4,973.33 £171.15	52 50	72 75	101 131.5 100	8000	6.15	6.15	6.15	6469800	6469800	6469800
1	Pre cast concrete lintels; 100 x 215mm deep; building in as work proceeds, to suit														
L	structural opening 930mm wide Pre cast concrete lintels; 100 x 215mm	8	Nr	£31.75	£254.00	51	76	106 0.15996	850	0.18	0.18	0.18	24.47388	24.47388	24.47388
	deep; building in as work proceeds, to suit structural opening 1025mm wide	10	Nr	£32.75	£327.50	51	76	106 0.220375	850	0.18	0.18	0.18	33.717375	33.717375	33.717375
к	Pre cast concrete lintels; 100 x 215mm deep; building in as work proceeds, to suit	3		£35.97			76	106 0.0719175	850		0.18	0.18			
L	structural opening 1115mm wide Pre cast concrete lintels; 100 x 215mm deep; building in as work proceeds, to suit	3	Nr	£35.97	£107.91	51	76	106 0.0719175	850	0.18	0.18	0.18	11.0033775	11.0033775	11.0033775
м	structural opening 1275mm wide Sawn softwood, preservative treated.	1	Nr	£39.65	£39.65	51	76	106 0.0274125	850	0.18	0.18	0.18	4.1941125	4.1941125	4.1941125
м	grade C24, wall or partition members, nominally 45 x 89mm	3718	m	CA 10	£15,243.80	39	56	72 14.89059	630	0.59	0.59	0.59	FF34 8333	5534.8323	FF 24 8222
Ν	Sawn softwood, preservative treated, grade C24, wall or partition members,	5/16		14.10	E13,243.80	39	30	72 14.65035	650	0.35	0.55	0.55	3334.8323	3334.6323	3334.8323
	nominally 45 x 89mm; fixed to screed or Standard assumed 12.5mm thick	274	m	£4.10	£1,123.40	39	56	72 1.09737	630	0.59	0.59	0.59	407.892429	407.892429	407.892429
	plasterboard linings to timber framing (framing measured elsewhere), generally -														
в	measured over openings Moisture resistant or cement particle	1385	m2	£4.90	£6,786.50	39	56	72 17.3125	950	0.39	0.39	0.39	6414.28125	6414.28125	6414.28125
	board linings assumed 12.5mm thick to timber framing (framing measured														
с	elsewhere), generally - measured over Gyproc Soundblock board linings, two	370	m2	£6.40	£2,368.00	39	56	72 4.625	950	0.39	0.39	0.39	1713.5625	1713.5625	1713.5625
	layers assumed 12.5mm thick to timber framing (framing measured elsewhere),														
D	generally - measured over openings Gyproc Soundblock board linings, two	38	m2	£11.70	£444.60	26	39	51 0.475	950	0.39	0.39	0.39	175.9875	175.9875	175.9875
	layers assumed 12.5mm thick to timber framing (framing measured elsewhere),														
	Angles; complete with all required additional boarding and the like; measured														
E	to both sides of walls, generally Gyproc Soundblock board linings, two	417	m	£2.00	£834.00										
	layers assumed 12.5mm thick to timber framing (framing measured elsewhere),														
	Angles; complete with all required additional boarding and the like; measured														
F	to both sides of walls, generally, 45 degree Gyproc Soundblock board linings, two layers assumed 12.5mm thick to timber	83	m	£2.00	£166.00										
	fayers assumed 12.5mm trick to timber framing (framing measured elsewhere), Fair ends; complete with all required														
G	additional boarding and the like, generally Gyproc Soundblock board linings, two	42	m	£3.00	£126.00										
G	layers assumed 12.5mm thick to timber framing (framing measured elsewhere),														
	Abutments; to masonry walls; complete with all required sealant and the like:														
н	measured to both sides of walls, generally deflection heads; nominally 15mm	635 341	m m	£1.00 £1.20	£635.00 £409.20										
i I	putty油灰 pads to partitions; allowance provision of plywood linings between stud	211	Nr	£4.50	£949.50										
-	framing to accept heavy fixings, future equipment and the like	431	m2	£9.85	£4,245.35										
к	installation of approved acoustic insulation between studs assumed to be Isover														
L	50mm thick forming opening for single leaf floors	847 65	m2 Nr	£2.70 £5.00	£2,286.90 £325.00										
M N	forming opening for pairs of doors forming opening for wardrobe doors	13 6	Nr Nr	£5.00 £5.00	£65.00 £30.00										
A	Allow for forming soil pipe casings, comprising of approved 38 x 38mm timber														
	framing构架 at 600mm centres vertically, with vertical framing at all corners and														
	abutments; lining with two layers of Gyproc Soundblock board, two faces,	86	m	£35.65	£3,065.90	18	22	33 1.548	950	0.39	0.39	0.39	573.534	573.534	573.534
в	Allow for forming soil pipe casings, comprising of approved 38 x 38mm timber														
	framing构第 at 600mm centres vertically, with vertical framing at all corners and abutments; lining with two layers of														
	Gyproc Soundblock board, three faces, Vicaima or similar approved; internal doors	4	m	£43.67	£174.68	18	22	33 90	950	0.39	0.39	0.39	33345	33345	33345
A	to ground floors, product reference														
	Vicaima Oak with veneer inlay猥嵌; EX5.1/01 or equal and approved; single door to plot 1 and 2; 838 x 1981mm;	5	Nr	£253.43	£1,267.15	28	41	53 0.2905137	700	0.72	0.72	0.72	140 41000	146.41888	146 41000
в	Vicaima or similar approved; internal doors to ground floors, product reference	5	NI	E233.43	1,207.13	20	41	55 0.2905157	700	0.72	0.72	0.72	140.41000	140.41000	140.41000
	Vicaima Oak with veneer inlay猥琐; EX5.1/01 or equal and approved; single														
c	door to plot 1 and 2; 626 x 1981mm; Vicaima or similar approved; internal doors	1	Nr	£303.98	£303.98	28	41	53 0.0434037	700	0.72	0.72	0.72	21.8754698	21.8754698	21.8754698
	to ground floors, product reference Vicaima Oak with veneer inlay猥琐;														
	EX5.1/01 or equal and approved; double door to plot 1 and 2; 839 x 2100mm;	1	Nr	£474.75	£474.75	28	41	53 0.0616665	700	0.72	0.72	0.72	31.079916	31.079916	31.079916
D	Vicaima or similar approved; internal doors to ground floors, product reference														
	Vicaima Oak with veneer inlay猥嵌; EX5.1/01 or equal and approved; single														
E	door to plot 3 and 4; 838 x 1981mm; Vicaima or similar approved; internal doors	5	Nr	£241.48	£1,207.40	28	41	53 0.2905137	700	0.72	0.72	0.72	146.41888	146.41888	146.41888
	to ground floors, product reference Vicaima Oak with veneer inlay領策;														
	EX5.1/01 or equal and approved; single door to plot 3 and 4; 686 x 1981mm;	3	Nr	£248.38	£745.14	28	41	53 0.1426914	700	0.72	0.72	0.72	71.9164807	71.9164807	71.9164807
F	Vicaima or similar approved; internal doors to ground floors, product reference														
	Vicaima Oak with veneer inlay猥琐; EX5.1/01 or equal and approved; single														
	door to plots 5,6,7,8 and 9; 838 x 1981mm; reference ID01, ID03, ID04, ID07, ID11,														
G	ID13, ID14, ID16; assumed to be fire rated Vicaima or similar approved; internal doors to ground floors, product reference	8	Nr	£256.43	£2,051.44	28	41	53 0.4648218	700	0.72	0.72	0.72	234.270207	234.270207	234.270207
	Vicaima Oak with veneer inlay猥嵌;														
	EX5.1/01 or equal and approved; single door to plot 5,6,7,8 and 9; 726 x 1981mm; reference ID17: assumed to be fire rated	1	Nr	£285.08	£285.08	28	41	53 0.0503372	700	0.72	0.72	0.72	25.3699538	27.2600728	35 3600538
н	Vicalma or similar approved; internal doors to ground floors, product reference	1	NI	E203.00	1203.00	20	41	55 0.0505572	700	0.72	0.72	0.72	23.3035338	23.3099338	23.3039338
	Vicaima Oak with veneer inlay領策; EX5.1/01 or equal and approved; double														
	door to plot 5,6,7,8 and 9; 1062 x 1981mm; reference ID06, ID10; assumed to be fire	2	Nr	£485.20	£970.40	28	41	53 0.1472675	700	0.72	0.72	0.72	74,2228402	74.2228402	74.2228402
I	Vicaima or similar approved; internal doors to ground floors, product reference														
	Vicaima Oak with veneer inlay猥嵌; EX5.1/01 or equal and approved; single														
J	door to plot 10; 838 x 1981mm; reference Vicaima or similar approved; internal doors	5	Nr	£244.48	£1,222.40	28	41	53 0.2905137	700	0.72	0.72	0.72	146.41888	146.41888	146.41888
	to ground floors, product reference Vicaima Oak with veneer inlay領策;														
	EX5.1/01 or equal and approved; single door to plot 10; 626 x 1981mm; reference	1	Nr	£306.98	£306.98	28	41	53 0.0434037	700	0.72	0.72	0.72	21.8754698	21.8754698	21.8754698
к	Vicaima or similar approved; internal doors to ground floors, product reference														
	Vicaima Oak with veneer inlay猥嵌; EX5.1/01 or equal and approved; single														
L	door to plot 10; 762 x 1981mm; reference Vicaima or similar approved; internal doors	1	Nr	£239.43	£239.43	28	41	53 0.0528333	700	0.72	0.72	0.72	26.6279681	26.6279681	26.6279681
	to ground floors, product reference Vicaima Oak with veneer inlay猥琐; EX5.1/01 or equal and approved; double														
A	door to plot 10; 1070 x 1981mm; reference Vicaima or similar approved; internal doors	2	Nr	£451.45	£902.90	28	41	53 0.1483769	700	0.72	0.72	0.72	74.7819576	74.7819576	74.7819576
~	to living rooms, product reference Vicalma Oak with fully glazed infill panel;														
	EX5.1/1/DFG16 or equal and approved; single door to plot 1 and 2; 838 x 1981mm;	2	Nr	£403.06	£806.12	28	41	55 0.1162055	700	0.72	0.72	0.72	58.5675518	58 5675518	58 5675518
в	Vicaima or similar approved; internal doors to living rooms, product reference Vicaima	-	-			-									
	Oak with fully glazed infill panel; EX5.1/1/DFG16 or equal and approved;														
с	single door to plot 3 and 4; 838 x 1981mm; Vicaima or similar approved; internal doors	2	Nr	£403.06	£806.12	28	41	55 0.1162055	700	0.72	0.72	0.72	58.5675518	58.5675518	58.5675518
	to living rooms, product reference Vicaima Oak with fully glazed infill panel;														
	EX5.1/1/DFG16 or equal and approved; single door to plot 5,6,7,8 and 9; 838 x														
	1981mm; reference ID05, ID12, ID22, ID29; assumed to be fire rated 30 minutes	4	Nr	£592.43	£2,369.72	28	41	55 0.2324109	700	0.72	0.72	0.72	117.135104	117.135104	117.135104
D	Vicaima or similar approved; internal doors to living rooms, product reference Vicaima														
	Oak with fully glazed infill panel; EX5.1/1/DFG16 or equal and approved; single door to plot 10; 838 x 1981mm;	1	Nr	£592.43	£592.43	28	41	55 0.0581027	700	0.72	0.72	0.72	29.2837759	20 2022-0	20.2027776
E	Vicaima or similar approved; internal doors to first floors, product reference Vicaima	1	нî	LJ72.45	72.43	*0	-1	33 3.0361027	700	0.72	J.12	0.12	23.2837759		
	Oak N1000 plain doors with no inlay; EX5.1/01 or equal and approved; single														
	door to plot 1 and 2; 838 x 1981mm; reference ID10, ID11, ID12, ID13, ID15,	10	Nr	£205.97	£2,059.70	28	41	55 0.5810273	700	0.72	0.72	0.72	292.837759	292.837759	292.837759
F	Vicaima or similar approved; internal doors to first floors, product reference Vicaima														
	Oak N1000 plain doors with no inlay; EX5.1/01 or equal and approved: single														
	door to plot 3 and 4; 838 x 1981mm; reference ID12, ID13, ID14, ID15, ID16,	11	Nr	£205.97	£2,265.67	28	41	55 0.63913	700	0.72	0.72	0.72	322.121535	322.121535	322.121535

u u	Vicaima or similar approved; internal doors															
	to first floors, product reference Vicaima Oak N1000 plain doors with no inlay;															
	EX5.1/01 or equal and approved; single door to plot 3 and 4; 762 x 1981mm;	1	Nr	£201.40	£201.40	28	41	55 0.0	0528333	700	0.72	0.72	0.72	26.6279681	26.6279681	26.6279681
н	Vicaima or similar approved; internal doors to first floors, product reference Vicaima															
	Oak N1000 plain doors with no inlay; EX5.1/01 or equal and approved; single															
	door to plot 5,6,7,8 and 9; 838 x 1981mm; reference ID18, ID20, ID21, ID24, ID27,															
	ID30, ID31, ID33, ID34, ID35, ID36, ID37, ID38; assumed to be fire rated 30 minutes Vicaima or similar approved; internal doors	13	Nr	£217.92	£2,832.96	28	41	55 0.3	7553355	700	0.72	0.72	0.72	380.689087	380.689087	380.689087
I	vicaima or similar approved; internal doors to first floors, product reference Vicaima Oak N1000 plain doors with no inlay:															
	EX5.1/01 or equal and approved; single door to plot 5,6,7,8 and 9; 626 x 1447mm;															
	reference ID39, ID42, ID45; assumed to be Vicaima or similar approved; internal doors	3	Nr	£249.02	£747.06	28	41	55 0.0	0951113	700	0.72	0.72	0.72	47.9361002	47.9361002	47.9361002
1	vicaima or similar approved; internal doors to first floors, product reference Vicaima Oak N1000 plain doors with no inlay;															
	EX5.1/01 or equal and approved; double door to plot 5,6,7,8 and 9; 1062 x 1981mm;															
~	reference ID23, ID28; assumed to be fire Vicalma or similar approved; internal doors	2	Nr	£482.46	£964.92	28	41	55 14	47.26754	700	0.72	0.72	0.72	74222.8402	74222.8402	74222.8402
ĸ	to first floors, product reference Vicaima Oak N1000 plain doors with no inlay;															
	EX5.1/01 or equal and approved; single door to plot 10; 838 x 1981mm; reference	1	Nr	£205.97	£205.97	28	41	55 00	0581027	700	0.72	0.72	0.72	20 2927750	29.2837759	20 2927750
А	Vicaima or similar approved; internal doors to boiler cupboards, product reference			2203.37	1103.57	20		33 0.0	0001017	700	0.72	0.72	0.72	13.2037733	13.1037733	13.2037733
	Vicaima performance door; single door to plot 1 and 2: 838 x 1981mm: 33 dB acoustic															
в	rating; fire rated; reference ID14 Vicaima or similar approved; internal doors	1	Nr	£254.52	£254.52	28	41	53 0.0	0581027	700	0.72	0.72	0.72	29.2837759	29.2837759	29.2837759
	to boiler cupboards, product reference Vicaima performance door; single door to															
	plot 1 and 2; 726 x 1981mm; 33 dB acoustic rating; fire rated; reference ID17	1	Nr	£299.49	£299.49	28	41	53 0.0	0503372	700	0.72	0.72	0.72	25.3699538	25.3699538	25.3699538
с	Vicaima or similar approved; internal doors to boiler cupboards, product reference															
	Vicaima performance door; double door to plot 3 and 4; 839 x 1981mm; 33 dB acoustic															
D	rating; fire rated; reference ID11 Vicaima or similar approved; internal doors	1	Nr	£262.52	£262.52	28	41	53 0.0	0581721	700	0.72	0.72	0.72	29.3187208	29.3187208	29.3187208
	to boller cupboards, product reference Vicaima performance door; single door to															
	plot 3 and 4; 762 x 1981mm; 33 dB acoustic rating; fire rated; reference ID20	1	Nr	£299.49	£299.49	28	41	53 0.0	0528333	700	0.72	0.72	0.72	26.6279681	26.6279681	26.6279681
E	Vicaima or similar approved; internal doors to boiler cupboards, product reference															
	Vicaima performance door; single door to plot 5,6,7,8 and 9; 926 x 1447mm; 33 dB															
F	acoustic rating; fire rated; reference ID02, sliderobe door to plot 1 and 2; 2Nr sliding	5	Nr	£541.68	£2,708.40	28	41	53 0.2	2344864	700	0.72	0.72	0.72	118.18112	118.18112	118.18112
	leaves within structural opening of 1828.8 x 2375mm; reference ID23	1	Nr	£620.00	£620.00	28	41	53 0	0.130302	700	0.72	0.72	0.72	65.672208	65.672208	65.672208
G	sliderobe door to plot 1 and 2; 2Nr sliding leaves within structural opening of 1440 x															
н	2375mm; reference ID24, ID25 sliderobe door to plot 3 and 4; 2Nr sliding	2	Nr	£620.00	£1,240.00	28	41	53	0.2052	700	0.72	0.72	0.72	103.4208	103.4208	103.4208
	leaves within structural opening of 2435 x 2375mm; reference ID25, ID26	2	Nr	£620.00	£1,240.00	28	41	53 0.3	3469875	700	0.72	0.72	0.72	174.8817	174.8817	174.8817
1	sliderobe door to plot 5,6,7,8 and 9; 2Nr sliding leaves within structural opening of															
L	1828.8 x 2000mm; reference ID40, ID41 sliderobe door to plot 10; 2Nr sliding	2	Nr	£620.00	£1,240.00	28	41	53 0	0.219456	700	0.72	0.72	0.72	110.605824	110.605824	110.605824
	leaves within structural opening of 1825 x 2025mm; reference ID10	1	Nr	£620.00	£620.00	28	41	53 0.1	1108688	700	0.72	0.72	0.72	55.87785	55.87785	55.87785
A	UPVC White loft hatch; plot 1 and 2; 900 x 900 mm	2	Nr	£135.00	£270.00	18	26	35	0.0405	1430	3.1	3.1	3.1	179.5365	179.5365	179.5365
в	UPVC White loft hatch; plot 3 and 4; 900 x 900 mm	2	Nr	£135.00	£270.00	18	26	35	0.0405	1430	3.1	3.1	3.1	179.5365	179.5365	179.5365
C D	UPVC White loft hatch; plot 10; 900 x 900 Dulux water based satin銀子 paint or	1	Nr	£135.00	£135.00	18	26	35	0.02025	1430	3.1	3.1	3.1	89.76825	89.76825	89.76825
	similar approved; plot 1 and 2; not exceeding 300mm girth	101	m	£2.65	£267.65	6	6	6	30.3		0.44	0.44	0.44 (kgCO2/Sqm)	13.332	13.332	13.332
E	Dulux water based satin銀子 paint or similar approved; plot 3 and 4; not															
F	exceeding 300mm girth Dulux water based satin銀子 paint or	115	m	£2.65	£304.75	6	6	6	34.5		0.44	0.44	0.44	15.18	15.18	15.18
	similar approved; plot 5,6,7,8 and 9; not exceeding 300mm girth	174	m	£2.65	£461.10	6	6	6	52.2		0.44	0.44	0.44	22.968	22.968	22.968
G	Dulux water based satin跟子 paint or similar approved; plot 10; not exceeding	53	m	£2.65	£140.45	6	6	6	15.9		0.44	0.44	0.44	6.996	6.996	6.996
н	Hardwood architraves; 20 x 75mm to match skirtings; finished with DUlux water															
	based satin paint as M60; plot 1 and 2; not exceeding 300mm girth	187	m	£6.70	£1,252.90	29	48	63	0.2805	700	0.72	0.72	0.72	141.372	141.372	141.372
I	Hardwood architraves; 20 x 75mm to match skirtings; finished with DUlux water															
	based satin paint as M60; plot 3 and 4; not exceeding 300mm girth	229	m	£6.70	£1,534.30	29	48	63	0.3435	700	0.72	0.72	0.72	173.124	173.124	173.124
1	Hardwood architraves; 20 x 75mm to match skirtings; finished with DUlux water															
	based satin paint as M60; plot 5,6,7,8 and 9; not exceeding 300mm girth	349	m	£6.70	£2,338.30	29	48	63	0.5235	700	0.72	0.72	0.72	263.844	263.844	263.844
к	Hardwood architraves; 20 x 75mm to match skirtings; finished with DUlux water															
	based satin paint as M60; plot 10; not exceeding 300mm girth	106	m	£6.70	£710.20	29	48	63	0.159	700	0.72	0.72	0.72	80.136	80.136	80.136
L	Denleigh Ironmongery or similar approved; single doors; plot 1 and 2; generally	13	Nr	£56.70	£737.10	12	17	24 0	0.000312	7870	2.03	2.03	2.03	4.9845432	4.9845432	4.9845432
м	Denleigh Ironmongery or similar approved; double doors; plot 1 and 2; generally	2	Nr	£35.00	£70.00	12	17	24 0	0.000048	7870	2.03	2.03	2.03	0.7668528	0.7668528	0.7668528
N	Denleigh Ironmongery or similar approved; single doors; plot 3 and 4; generally	15	Nr	£58.64	£879.60	12	17	24	0.00036	7870	2.03	2.03	2.03	5.751396	5.751396	5.751396
A	Denleigh Ironmongery or similar approved; double doors; plot 3 and 4; generally						17		0.000048	7870			2.03			0.7668528
в		2	Nr	£35.00	£70.00	12	17	24 0			2.03	2.03		0.7668528	0.7668528	
	Denleigh Ironmongery or similar approved; single doors; plot 5,6,7,8 and 9; generally	2 18	Nr Nr	£35.00 £68.91	£70.00 £1,240.38	12	17		0.000432	7870	2.03	2.03	2.03		6.9016752	6.9016752
с	Denleigh Ironmongery or similar approved; single doors; plot 5,6,7,8 and 9; generally Denleigh Ironmongery or similar approved; double doors; plot 5,6,7,8 and 9; generally							24 0	0.000432	7870			2.03	6.9016752		
D	Denleigh Ironmongery or similar approved; single doors; plot 5,6,7,8 and 9; generally Denleigh Ironmongery or similar approved; double doors; plot 5,6,7,8 and 9; generally Denleigh Ironmongery or similar approved; single doors; plot 10; generally	18	Nr	£68.91	£1,240.38	12	17	24 0 24 0			2.03	2.03		6.9016752 6.9016752	6.9016752	6.9016752
D E	Denleigh troamongery or similar approved; single doors; plot 5,6,7,8 and 9; generally Denleigh troamongery or similar approved; double doors; plot 5,6,7,8 and 9; generally Denleigh troamongery or similar approved; single doors; plot 10; generally Denleigh troamongery or similar approved; double doors; plot 10; generally	18 18	Nr Nr	£68.91 £35.00	£1,240.38 £630.00	12 12	17 17	24 0 24 0 24 0	0.000432	7870	2.03 2.03	2.03 2.03	2.03	6.9016752 6.9016752 2.3005584	6.9016752 6.9016752	6.9016752 2.3005584
E	Denlegh trommongery or similar approved; single doors; Jot 5, 7, 3 and 9; generally Denlegh trommongery or similar approved; double doors; Jot 5, 7, 8 and 9; generally Denlegh trommongery or similar approved; single doors; Jot 10; generally Denlegh trommongery or similar approved; double doors; Jot 10; generally Denlegh trommongery or similar approved; single doors; Jot 10; zenerally	18 18 6	Nr Nr Nr	£68.91 £35.00 £63.98	£1,240.38 £630.00 £383.88	12 12 12	17 17 17	24 0 24 0 24 0 24 0	0.000432	7870 7870	2.03 2.03 2.03	2.03 2.03 2.03	2.03	6.9016752 6.9016752 2.3005584 1.5337056	6.9016752 6.9016752 2.3005584	6.9016752 2.3005584 1.5337056
C D F G	Denleigh Inonmorgery or similar approved; anigel doors; juck 5,7,8 and 9; generally Denleigh Inonmorgery or similar approved; double doors; juck 5,7,8 and 9; generally Denleigh Inonmorgery or similar approved; anigel doors; juck 10; generally Denleigh Inonmorgery or similar approved; double doors; juck 10; generally Denleigh Inonmorgery or similar approved; anigel doors; juck 1 and 2; generally Denleigh Inonmorgery or similar approved; anigel doors; juck 3 and 4; generally	18 18 6 4	Nr Nr Nr Nr	£68.91 £35.00 £63.98 £35.00	£1,240.38 £630.00 £383.88 £140.00	12 12 12 12	17 17 17 17	24 0 24 0 24 0 24 0 24 0 24 0	0.000432 0.000144 0.000096	7870 7870 7870	2.03 2.03 2.03 2.03	2.03 2.03 2.03 2.03	2.03 2.03 2.03	6.9016752 6.9016752 2.3005584 1.5337056 2.6839848	6.9016752 6.9016752 2.3005584 1.5337056	6.9016752 2.3005584 1.5337056 2.6839848
E	Denleigh Inormongery or similar approved; angle door; juck 5,7,8 and 9; generally Denleigh Inormongery or similar approved; double door; juck 5,7,8 and 9; generally Denleigh Inormongery or similar approved; double door; juck 10; generally Denleigh Inormongery or similar approved; double door; juck 11 and 2; generally Denleigh Inormongery or similar approved; angle door; juck 11 and 2; generally Denleigh Inormongery or similar approved; Denleigh Inormongery or similar approved;	18 18 6 4 7	Nr Nr Nr Nr	£68.91 £35.00 £63.98 £35.00 £29.00	£1,240.38 £630.00 £383.88 £140.00 £203.00	12 12 12 12 12	17 17 17 17 17	24 0 24 0 24 0 24 0 24 0 24 0 24 0	0.000432 0.000144 0.000096 0.000168	7870 7870 7870 7870	2.03 2.03 2.03 2.03 2.03	2.03 2.03 2.03 2.03 2.03	2.03 2.03 2.03 2.03	6.9016752 6.9016752 2.3005584 1.5337056 2.6839848 3.0674112	6.9016752 6.9016752 2.3005584 1.5337056 2.6839848	6.9016752 2.3005584 1.5337056 2.6839848 3.0674112
E F G	Denleigh troimongeny or similar approved, singel doors; Joh Zi, Jia ah Si, generally Denleigh troimongeny or similar approved, double doors; Joh Zi, Jia ah Si, generally nenleigh troimongeny or similar approved, double doors; Joh Zi, generally Denleigh troimongeny or similar approved, single doors; Joh Zi, generally Denleigh troimongeny or similar approved, single doors; Joh Zi ah 4, generally Denleigh troimongeny or similar approved, single doors; Joh Zi, and 4, generally Denleigh troimongeny or similar approved, single doors; Joh Zi and 4, generally Denleigh troimongeny or similar approved, single doors; Joh Zi, and 6, generally	18 18 6 4 7 8	Nr Nr Nr Nr Nr	£68.91 £35.00 £63.98 £35.00 £29.00 £29.00	£1,240.38 £630.00 £383.88 £140.00 £203.00 £232.00	12 12 12 12 12 12 12	17 17 17 17 17 17	24 0 24 0 24 0 24 0 24 0 24 0 24 0 24 0	0.000432 0.000144 0.000096 0.000168 0.000192	7870 7870 7870 7870 7870	2.03 2.03 2.03 2.03 2.03 2.03	2.03 2.03 2.03 2.03 2.03 2.03	2.03 2.03 2.03 2.03 2.03	6.9016752 6.9016752 2.3005584 1.5337056 2.6839848 3.0674112 4.2176904	6.9016752 6.9016752 2.3005584 1.5337056 2.6839848 3.0674112	6.9016752 2.3005584 1.5337056 2.6839848 3.0674112 4.2176904
E F G	Denlegh homongeny or similar approved, angel doors, jolk 2, Jia, and 5, generally Denlegh homongeny or similar approved, double doors, jolk 2, Jia, and 5, and 5, angened bennower, or similar approved, double doors, jolk 2, and 5, and 5, and 5, Benlegh homongeny or similar approved, double doors, jolk 1, and 2, generally Denlegh homongeny or similar approved, angel doors, jolk 1, and 2, generally Denlegh homongeny or similar approved, angel doors, jolk 2, generally Denlegh homongeny or similar approved, period bennoment of the second second Denlegh homongeny or similar approved polyupublek seature, to usin fire and	18 18 6 4 7 8 11 3	Nr Nr Nr Nr Nr Nr	f68.91 f35.00 f63.98 f35.00 f29.00 f29.00 f29.00 f29.00	£1,240.38 £630.00 £383.88 £140.00 £203.00 £232.00 £319.00 £87.00	12 12 12 12 12 12 12 12 12	17 17 17 17 17 17 17 17 17	24 0 24 0 24 0 24 0 24 0 24 0 24 0 24 0	0.000432 0.000144 0.000096 0.000168 0.000192 0.000264 0.000072	7870 7870 7870 7870 7870 7870 7870	2.03 2.03 2.03 2.03 2.03 2.03 2.03 2.03	2.03 2.03 2.03 2.03 2.03 2.03 2.03 2.03	2.03 2.03 2.03 2.03 2.03 2.03 2.03	6.9016752 6.9016752 2.3005584 1.5337056 2.6839848 3.0674112 4.2176904 1.1502792	6.9016752 6.9016752 2.3005584 1.5337056 2.6839848 3.0674112 4.2176904 1.1502792	6.9016752 2.3005584 1.5337056 2.6839848 3.0674112 4.2176904 1.1502792
E F G	Deniegih traimmogeny or similar approved, ingel dooru, joh 52, Jai ah 52, generally beniegih traimmogene or similar approved, sangel dooru, joh 52, Jai ah 52, generally beniegih traimmogeny or similar approved, double dooru, joh 13, generally beniegih traimmogeny or similar approved, double dooru, joh 13, generally beniegih traimmogeny or similar approved, magel dooru, joh 14, generally beniegih traimmogeny or similar approved, magel dooru, joh 14, generally beniegih traimmogeny or similar approved, magel dooru, joh 14, generally beniegih traimmogeny or similar approved, sangel dooru, joh 14, generally beniegih traimmogeny or similar approved, sangel dooru, joh 15, generally adding and pointique similar. To u ali adding and pointique similar.	18 18 6 4 7 8 11	Nr Nr Nr Nr Nr	£68.91 £35.00 £63.98 £35.00 £29.00 £29.00 £29.00	E1,240.38 £630.00 £383.88 £140.00 £203.00 £232.00 £319.00	12 12 12 12 12 12 12 12	17 17 17 17 17 17 17 17	24 0 24 0 24 0 24 0 24 0 24 0 24 0 24 0	0.000432 0.000144 0.000096 0.000168 0.000192 0.000264	7870 7870 7870 7870 7870 7870	2.03 2.03 2.03 2.03 2.03 2.03 2.03 2.03	2.03 2.03 2.03 2.03 2.03 2.03 2.03 2.03	2.03 2.03 2.03 2.03 2.03 2.03	6.9016752 6.9016752 2.3005584 1.5337056 2.6839848 3.0674112 4.2176904	6.9016752 6.9016752 2.3005584 1.5337056 2.6839848 3.0674112 4.2176904	6.9016752 2.3005584 1.5337056 2.6839848 3.0674112 4.2176904
E F H I J	Deniegin training or similar approved, ingel doors, jolk 27,3 and 5, generally Deniegin houses operating and search of the Deniegin houses operating and search of the Deniegin houses operating and the Deniegin houses operating and the Deniegin houses operating approved, double doors, jolk 10, generally Deniegin houses, good 20, generally Deniegin house	18 18 6 4 7 8 11 3	Nr Nr Nr Nr Nr Nr	f68.91 f35.00 f63.98 f35.00 f29.00 f29.00 f29.00 f29.00	£1,240.38 £630.00 £383.88 £140.00 £203.00 £232.00 £319.00 £87.00	12 12 12 12 12 12 12 12 12	17 17 17 17 17 17 17 17 17	24 0 24 0 24 0 24 0 24 0 24 0 24 0 24 0	0.000432 0.000144 0.000096 0.000168 0.000192 0.000264 0.000072	7870 7870 7870 7870 7870 7870 7870	2.03 2.03 2.03 2.03 2.03 2.03 2.03 2.03	2.03 2.03 2.03 2.03 2.03 2.03 2.03 2.03	2.03 2.03 2.03 2.03 2.03 2.03 2.03	6.9016752 6.9016752 2.3005584 1.5337056 2.6839848 3.0674112 4.2176904 1.1502792	6.9016752 6.9016752 2.3005584 1.5337056 2.6839848 3.0674112 4.2176904 1.1502792	6.9016752 2.3005584 1.5337056 2.6839848 3.0674112 4.2176904 1.1502792
E F G H I J	Deniegih toomoogeny or similar approved, angie doors, jot 6,27 and 9, generally Deniegih toomoogeny or similar approved, policipal toomoogeny or similar approved, angie doors, jol 12, generally Deniegih toomoogeny or similar approved, double doors, jol 12, generally Deniegih toomoogeny or similar approved, angie doors, jol 12, generally Deniegih toomoogeny or similar approved, polyaulpho toomoogeny or similar approved, polyaulpho seature, to suit fre and accuster tating, polyaulpha septieved bedrag and politicity, with approved polyaulpho seature, to ui fre and bedrag and politicity with approved polyaulpho seature, to ui fre and bedrag and politicity with approved polyaulpho seature, to ui fre and bedrag and politicity with approved polyaulpho seature, to ui fre and bedrag and politicity with approved polyaulpho seature, to ui fre and bedrag and politicity with approved polyaulpho seature, to ui fre and bedrag and politicity with approved polyaulpho seature, to ui fre and bedrag and politicity with approved	18 6 4 7 8 11 3 101 115	Nr Nr Nr Nr Nr m	f68.91 f35.00 f63.98 f35.00 f29.00 f20 f29.00 f29.00 f29.00 f29.0	£1,240.38 £630.00 £383.88 £140.00 £203.00 £232.00 £319.00 £319.00 £126.25 £143.75	12 12 12 12 12 12 12 12 12 5 5	17 17 17 17 17 17 17 17 17 15 15	24 0 24 0 24 0 24 0 24 0 24 0 24 0 24 0	0.000432 0.000144 0.000096 0.000168 0.000192 0.000264 0.000072 1.01 0.0115	7870 7870 7870 7870 7870 7870 7870 7870	2.03 2.03 2.03 2.03 2.03 2.03 2.03 0.435	2.03 2.03 2.03 2.03 2.03 2.03 2.03 2.03	2.03 2.03 2.03 2.03 2.03 2.03 2.03 0.435 kgC02/m	6.9016752 6.9016752 2.3005584 1.5337056 2.6839848 3.0674112 4.2176904 1.1502792 43.935 50.025	6.9016752 6.9016752 2.3005584 1.5337056 2.6839848 3.0674112 4.2176904 1.1502792 43.935 50.025	6.9016752 2.3005584 1.5337056 2.6839848 3.0674112 4.2176904 1.1502792 43.935 50.025
E F H I J	Deniegh Internorogeny or similar approved, angel doors, jol 62, 73, and 9, generally Deniegh Internorogeny or similar approved, doors, jol 62, generally Deniegh Internorogeny or similar approved, double doors, jol 61, generally Deniegh Internorogeny or similar approved, angel doors, jol 61, generally Deniegh Internorogeny or similar approved, angel doors, jol 61, and 6, generally Deniegh Internorogeny or similar approved, angel doors, jol 73, and 8, generally Deniegh Internorogeny or similar approved, apple doors, jol 62, and 6, generally Deniegh Internorogeny or similar approved, apple doors, jol 62, and 6, generally Deniegh Internorogeny or similar approved applyubite stasistic, to unif fer and accusitic rating, piol 13 and 4 Bedding and painting with approved polyupidhe stasistic, to unif fer and accusitic rating, piol 3 and 4, fire Bedding and painting with approved polyupidhe stasistic, to unif fer and accusitic rating, piol 3 and 4, fire Bedding and painting with approved polyupidhe stasistic, to unif fer and accusitic rating, piol 3 and 4 Bedding and painting with approved polyupidhe stasistic, to unif fer and accusitic rating, piol 3, and 6, fire Bedding and painting with approved	18 18 6 4 7 8 11 3 101	Nr Nr Nr Nr Nr Nr	f68.91 f35.00 f63.98 f35.00 f29.00 f29.00 f29.00 f29.00 f29.00 f29.00	£1,240.38 £630.00 £383.88 £140.00 £203.00 £232.00 £319.00 £87.00 £87.00	12 12 12 12 12 12 12 12 12 5	17 17 17 17 17 17 17 17 17 15	24 0 24 0 24 0 24 0 24 0 24 0 24 0 24 0	0.000432 0.000144 0.000096 0.000168 0.000192 0.000264 0.000072 1.01	7870 7870 7870 7870 7870 7870 7870 7870	2.03 2.03 2.03 2.03 2.03 2.03 2.03 0.435	2.03 2.03 2.03 2.03 2.03 2.03 2.03 2.03	2.03 2.03 2.03 2.03 2.03 2.03 2.03 2.03	6.9016752 6.9016752 2.3005584 1.5337056 2.6839848 3.0674112 4.2176904 1.1502792 43.935	6.9016752 6.9016752 2.3005584 1.5337056 2.6839848 3.0674112 4.2176904 1.1502792 43.935	6.9016752 2.3005584 1.5337056 2.6839848 3.0674112 4.2176904 1.1502792 43.935
E F G H J J K	Denlegih traimageny or similar approved, ingle doors, joh 52, jat and 52, generally beningh troomogeny or similar approved, ingle doors, joh 52, jat and 52, generally beningh troomogeny or similar approved, ingle doors, joh 52, jat and 52, generally beningh troomogeny or similar approved, ingle doors, joh 12, generally beningh troomogeny or similar approved, ingle doors, joh 14, jat and 22, generally beningh troomogeny or similar approved, ingle doors, joh 14, jat and 22, generally beningh troomogeny or similar approved, ingle doors, joh 14, jat and 22, generally beningh troomogeny or similar approved, ingle doors, joh 14, jat and 32, generally beningh troomogeny or similar approved ingle doors, joh 14, jat and 32, generally beningh troomogeny or similar approved ingle doors, joh 15, jat and 3 generally with approved polyudipide sastant; to usit median and pointing with approved polyudipide sastant; to usit and approved polyudipide sastant; to usit median bedoing and pointing with approved ingle doors, joh 10, jat and 3 general approved polyudipide sastant; to usit firs and approved approved ingle doors, joh 10, jat approved ingle doors, joh 10	18 6 4 7 8 11 3 101 115	Nr Nr Nr Nr Nr m	f68.91 f35.00 f63.98 f35.00 f29.00 f20 f29.00 f29.00 f29.00 f29.0	£1,240.38 £630.00 £383.88 £140.00 £203.00 £232.00 £319.00 £319.00 £126.25 £143.75	12 12 12 12 12 12 12 12 12 5 5	17 17 17 17 17 17 17 17 17 15 15	24 0 24 0 24 0 24 0 24 0 24 0 24 0 24 0	0.000432 0.000144 0.000096 0.000168 0.000192 0.000264 0.000072 1.01 0.0115	7870 7870 7870 7870 7870 7870 7870 7870	2.03 2.03 2.03 2.03 2.03 2.03 2.03 2.03	2.03 2.03 2.03 2.03 2.03 2.03 2.03 2.03	2.03 2.03 2.03 2.03 2.03 2.03 2.03 0.435 kgC02/m	6.9016752 6.9016752 2.3005584 1.5337056 2.6839848 3.0674112 4.2176904 1.1502792 43.935 50.025	6.9016752 6.9016752 2.3005584 1.5337056 2.6839848 3.0674112 4.2176904 1.1502792 43.935 50.025	6.9016752 2.3005584 1.5337056 2.6839848 3.0674112 4.2176904 1.1502792 43.935 50.025
E F G H J J K	Deniegh transmogeny or similar approved, ingel doors, joh 52, Ja and 52, generally considered and second second second second considered and second second second second benefingh transmogeney or similar approved, double doors, joh 51, Ja and 52, generally Deniegh transmogeny or similar approved, double doors, joh 12, generally Deniegh transmogeny or similar approved, ingel doors, joh 14, generally Deniegh transmogeny or similar approved, ingel doors, joh 14, generally Deniegh transmogeny or similar approved, ingel doors, joh 14, Ja and 42, generally Deniegh transmogeny or similar approved, and doors, joh 52, Ja and 52, generally Deniegh transmogeny or similar approved, and doors, joh 52, Ja and 52, generally Deniegh transmogeny with approved polyudipide sasiant; to us if mand accounts rating, polyudipide sasiant; to us if mand polyudipide sasia	18 18 6 4 7 8 11 3 101 115 174	Nr Nr Nr Nr Mr m	668.91 63.98 63.98 63.98 629.00 629.00 629.00 629.00 629.00 61.25 61.25 61.25 61.99	£1,240.38 £630.00 £383.88 £140.00 £201.00 £322.00 £839.00 £839.00 £839.00 £839.00 £839.00 £839.00 £839.00 £126.25 £143.75 £346.26	12 12 12 12 12 12 12 12 5 5 5	17 17 17 17 17 17 17 17 15 15	24 0 24 0 24 0 24 0 24 0 24 0 24 0 24 0 24 0 24 0 24 0 25 25 25 25	0.000432 0.000144 0.000096 0.000168 0.000192 0.000264 0.000072 1.01 0.0115 0.0174	7870 7870 7870 7870 7870 7870 7870 7870	2.03 2.03 2.03 2.03 2.03 2.03 2.03 2.03	2.03 2.03 2.03 2.03 2.03 2.03 2.03 2.03	2.03 2.03 2.03 2.03 2.03 2.03 2.03 0.435 kgC02/m 0.435	6.9016752 6.9016752 2.3005584 1.5337056 2.6839848 3.0674112 4.2176904 1.1502792 43.935 50.025 75.69	6.9016752 6.9016752 2.3005584 1.5337056 2.6839848 3.0674112 4.2176904 1.1502792 43.935 50.025 75.69	6.9016752 2.3005584 1.5337056 2.6839848 3.0674112 4.2176904 1.1502792 43.935 50.025 75.69
E F G H I J K L M	Deniegin transmostery or similar approved, implementary of a sub-provided periodic boxes, tock 20, 20, and 25, generally Deniegin transmostery, 20, 20, and 25, generally Deniegin transmostery or similar approved, inder doors, piol 10, generally Deniegin transmostery or similar approved, double doors, piol 10, generally Deniegin transmostery or similar approved, ingle doors, piol 10, generally Deniegin transmostery or similar approved, pioled doors, piol 10, generally Deniegin transmostery or similar approved, polyupides sealent, to us uf the and accounts rating, piol 10, and polyupides sealent, to us if the and accounts rating, piol 10, and polyupides sealent, to us if the and accounts rating, piol 10, and polyupides sealent, to us if the and accounts rating, piol 10, and polyupides sealent, to us if the and accounts rating, piol 10, and accounts rating, piol 10, and fish accounts rating piologing accounts fish accounts rating piol 10, and fish ac	18 18 6 4 7 8 11 3 101 115 174	Nr Nr Nr Nr Mr m	668.91 635.00 663.98 635.00 629.00 629.00 629.00 629.00 61.25 61.25 61.25	£1,240.38 £630.00 £383.88 £140.00 £201.00 £322.00 £839.00 £839.00 £839.00 £839.00 £839.00 £839.00 £839.00 £126.25 £143.75 £346.26	12 12 12 12 12 12 12 12 5 5 5	17 17 17 17 17 17 17 17 15 15	24 0 24 0 24 0 24 0 24 0 24 0 24 0 24 0 24 0 24 0 24 0 25 25 25 25	0.000432 0.000144 0.000096 0.000168 0.000192 0.000264 0.000072 1.01 0.0115 0.0174	7870 7870 7870 7870 7870 7870 7870 7870	2.03 2.03 2.03 2.03 2.03 2.03 2.03 2.03	2.03 2.03 2.03 2.03 2.03 2.03 2.03 2.03	2.03 2.03 2.03 2.03 2.03 2.03 2.03 0.435 kgC02/m 0.435	6.9016752 6.9016752 2.3005584 1.5337056 2.6839848 3.0674112 4.2176904 1.1502792 43.935 50.025 75.69	6.9016752 6.9016752 2.3005584 1.5337056 2.6839848 3.0674112 4.2176904 1.1502792 43.935 50.025 75.69	6.9016752 2.3005584 1.5337056 2.6839848 3.0674112 4.2176904 1.1502792 43.935 50.025 75.69
E F G H J J K	Deniegin transmostery or similar approved, angle doors, jot 6,27 and 9, generally Deniegin homorogeny or similar approved, angle doors, jot 6,12 agreenaly Deniegin transmostery or similar approved, angle doors, jot 10, generally Deniegin transmostery or similar approved, double doors, joi 10, generally Deniegin transmostery or similar approved, angle doors, joi 12, generally Deniegin transmostery or similar approved, project doors, joi 12, jane rahly Deniegin transmostery or similar approved, angle doors, joi 12, and 9, generally Deniegin transmostery or similar approved, angle doors, joi 12, and 9, generally Deniegin doors, joi 12, and 9, generally Deniegin doors, joi 12, and 9, generally Deniegin doors, joi 13, and 9, generally Deniegin doors, joi 13, and 9, generally Deniegin doors, joi 13, and 9, generally polyudpide saakent, to auf frand account: arting, joi 13, and 9, free account: arting, joi 13, and 14, and account: arting, joi 14, and account:	18 18 6 7 8 11 3 101 115 174 53	Nr Nr Nr Nr Nr m m	668.91 635.00 663.98 635.00 629.00 629.00 629.00 629.00 61.25 61.25 61.25	E1,240.38 E630.00 E383.88 E140.00 E203.00 E319.00 E87.00 E126.25 E143.75 E346.26 E66.25	12 12 12 12 12 12 12 12 5 5 5	17 17 17 17 17 17 17 17 15 15 15	24 0 24 0 24 0 24 0 24 0 24 0 24 0 24 0 25 25 25 25	0.000432 0.000144 0.000096 0.000168 0.000192 0.000264 0.00072 1.01 0.0115 0.0174 0.0053	7870 7870 7870 7870 7870 7870 7870 7870	2.03 2.03 2.03 2.03 2.03 2.03 2.03 0.435 0.435 0.435	2.03 2.03 2.03 2.03 2.03 2.03 2.03 2.03	2.03 2.03 2.03 2.03 2.03 2.03 2.03 2.03	6.9016752 6.9016752 2.3005584 1.5337056 2.6839848 3.0674112 4.2176904 1.1502792 43.935 50.025 75.69 23.055	6.9016752 6.9016752 2.3005584 1.5337056 2.6839848 3.0674112 4.2176904 1.1502792 43.935 50.025 75.69 23.055	6.9016752 2.3005584 1.5337056 2.6839848 3.0674112 4.2176904 1.1502792 4.3335 50.025 75.69 2.3.055
E F G H I J K L M	Deniegh treamogeny or similar approved, angle doors, pick 5,73 and 9, generally Deniegh treamogeny or similar approved, angle doors, pick 12, generally Deniegh treamogeny or similar approved, angle doors, pick 12, generally Deniegh treamogeny or similar approved, double doors, pick 12, generally Deniegh treamogeny or similar approved, pick 20, pick 12, generally Deniegh treamogeny or similar approved, pick doors, pick 12, and 9, generally Deniegh treamogeny or similar approved, pick doors, pick 12, and 9, generally Deniegh treamogeny or similar approved, pick doors, pick 12, and 9, generally Deniegh treamogeny or similar approved, pick doors, pick 12, and 9, generally Deniegh treamogeny or similar approved, pick doors, pick 14 and 2 Bedding and picking with approved pick doors, pick 14, and 14, free Bedding and picking with approved pick doors, pick 12, and 14, free Bedding and picking with approved pick doors, pick 5, 7, 8 and 9, free Bedding and picking with approved pick approved pick 12, 5, 7, 8 and 9, free Bedding and picking with approved pick approved pick with pick treamogen, pick with pick treamogen, pick 12, memory, pick approxed, pick approxed pick with pick treamogen, pick with pick with pick treamogen, pick with pick with pick treamogen, pick with pick with pick with pick treamogen, pick with pick treamogen, pick with pick with pick treamogen, pick with pick with pick with pick treamogen, pick with pick with pick with pick with pick treamogen, pick with pick with pick with pick with pick treamogen, pick with pick with pick with pick with p	18 18 6 7 8 11 3 101 115 174 53	Nr Nr Nr Nr Nr m m	668.91 635.00 663.98 635.00 629.00 629.00 629.00 629.00 61.25 61.25 61.25	E1,240.38 E630.00 E383.88 E140.00 E203.00 E319.00 E87.00 E126.25 E143.75 E346.26 E66.25	12 12 12 12 12 12 12 12 5 5 5	17 17 17 17 17 17 17 17 15 15 15	24 0 24 0 24 0 24 0 24 0 24 0 24 0 24 0 25 25 25 25	0.000432 0.000144 0.000096 0.000168 0.000192 0.000264 0.00072 1.01 0.0115 0.0174 0.0053	7870 7870 7870 7870 7870 7870 7870 7870	2.03 2.03 2.03 2.03 2.03 2.03 2.03 0.435 0.435 0.435	2.03 2.03 2.03 2.03 2.03 2.03 2.03 2.03	2.03 2.03 2.03 2.03 2.03 2.03 2.03 2.03	6.9016752 6.9016752 2.3005584 1.5337056 2.6839848 3.0674112 4.2176904 1.1502792 43.935 50.025 75.69 23.055	6.9016752 6.9016752 2.3005584 1.5337056 2.6839848 3.0674112 4.2176904 1.1502792 43.935 50.025 75.69 23.055	6.9016752 2.3005584 1.5337056 2.6839848 3.0674112 4.2176904 1.1502792 4.3335 50.025 75.69 2.3.055
E F G H I J K L L	Deniegh treamogeny or similar approved, ingel doors, joh 5, J.2 and 5, generally beniegh toronomogeny or similar approved, ingel doors, joh 5, J.2 and 5, generally beniegh treamogeny or similar approved, ingel doors, joh 5, J.2 and 5, generally beniegh treamogeny or similar approved, ingel doors, joh 10, J.2 and 12, generally beniegh treamogeny or similar approved, ingel doors, joh 10, J.2 and 12, generally beniegh treamogeny or similar approved, ingel doors, joh 10, J.2 and 12, generally beniegh treamogeny or similar approved ingel doors, joh 10, J.2 and 12, generally beniegh treamogeny with approved accustor, idot, joh 21, and 2 excustor, idot, joh 21, and 2 excustor, idot, joh 21, and 2 excustor, idot, joh 24, J.8 and 9, free bedring and pointing with approved isolator and pointing with approved isolator bard approved isolator bard approved isolator barbon plantboard data to macrony (masured bashendra lings, field Jom thick plantboard intog thest with plantboard intog thest with plantboard intog thest with plantboard lings, instraity, net exceeding classed approved 12, smorthick plantboard lings (field with plantboard lings, instraity, net exceeding classed approved 12, smorthick, net exceeding classed approved 2	18 18 6 4 7 8 11 3 101 115 174 53 1654 356	Nr Nr Nr Nr Nr Mr m m m m m m 2 m	668.91 663.98 663.98 623.00 623.00 623.00 623.00 61.23 61.23 61.23 61.23 61.23 61.23	£1,240.38 £630.00 £383.88 £140.00 £232.00 £126.25 £148.75 £346.26 £148.75 £148.75 £346.26 £13,893.60	12 12 12 12 12 12 12 12 12 12 12 5 5 5 5	17 17 17 17 17 17 17 17 15 15 15 39	24 0 24 0 24 0 24 0 24 0 24 0 24 0 24 0 24 0 24 0 24 0 24 0 25 25 25 25 51 51	1.000432 1.000144 1.000096 1.000168 1.000192 1.000264 1.00115 1.0115 1.0174 1.0053 20.675 1.335	7870 7870 7870 7870 7870 7870 7870 7870	2.03 2.03 2.03 2.03 2.03 2.03 2.03 0.435 0.435 0.435 0.435	2.03 2.03 2.03 2.03 2.03 2.03 2.03 0.435 0.435 0.435 0.435	2.03 2.03 2.03 2.03 2.03 2.03 2.03 0.435 kgC02/m 0.435 0.435	6.9016752 6.9016752 2.3005584 1.5337056 2.6839848 3.0674112 4.2176904 1.1502792 43.935 50.025 75.69 23.055 7660.0875	6.9016752 6.9016752 2.3005584 1.5337056 2.6839848 3.0674112 4.2176904 1.1502792 43.935 50.025 75.69 2.3.055 7660.0875 494.6175	6.9016752 2.3005584 1.5337056 2.6839848 3.0674112 4.2176904 1.1502792 43.935 5.0.025 75.69 23.055 7660.0875
E F G H I J K L M	Deniegh transmogeny or similar approved, ingel dooro, joh 52, Ja and 52, generally conside to corr, joh 52, Ja and 52, generally conside to corr, joh 52, Ja and 52, generally conside to corr, joh 52, Ja and 52, generally beniegh transmogeny or similar approved, and e dooro, joh 53, Ja and 52, generally Deniegh transmogeny or similar approved, ingel dooro, joh 12, jan similar beniegh transmogeny or similar approved, ingel dooro, joh 14, Jan similar beniegh transmogeny or similar approved, ingel dooro, joh 14, Jan similar beniegh transmogeny or similar approved, ingel dooro, joh 14, Jan and 2, generally Deniegh transmogeny or similar approved, ingel dooro, joh 14, Jan and 3, generally Deniegh transmogeny or similar approved polyabide sastent; to out fir and accusit rating, joh 1, jan 2 and approved polyabide sastent; to out fir and polyabide sastent; to and fer adeubered, jan polyabide sastent; to out fir and polyabide sastent; to in fir and polyabide sastent; to in fir and polyabide sastent; to in firs and patartobrad links; pere with plastrobrad links; pereved polyabide sastent; to in firs and plastrobrad links; pereved plastrobrad links; pereved plastrobr	18 18 6 4 7 8 11 3 101 115 174 53 1654	Nr Nr Nr Nr Nr m m m	668.91 635.00 663.98 635.00 629.00 629.00 629.00 629.00 61.25 61.25 61.25 61.25 61.25 61.25 61.25	£1,240.38 £630.00 £383.88 £140.00 £730.00 £330.00 £330.00 £37.00	12 12 12 12 12 12 12 12 12 5 5 5 5 5 26	17 17 17 17 17 17 17 17 15 15 15 15	24 0 24 0 24 0 24 0 24 0 24 0 24 0 25 25 25 25 25 51	2.000432 2.000144 2.00096 2.000168 2.000168 2.000264 1.01 0.0115 0.01174 0.0053 20.675	7870 7870 7870 7870 7870 7870 7870 7870	2.03 2.03 2.03 2.03 2.03 2.03 2.03 0.435 0.435 0.435 0.435	2.03 2.03 2.03 2.03 2.03 2.03 2.03 0.435 0.435 0.435 0.435	2.03 2.03 2.03 2.03 2.03 2.03 2.03 2.03	6.9016752 6.9016752 2.3005584 1.5337056 2.6839848 3.0674112 4.2176904 1.1502792 43.935 50.025 75.69 23.055 7660.0875	6.9016752 6.9016752 2.3005584 1.5337056 2.6839848 3.0674112 4.2176904 1.1502792 43.935 50.025 75.69 23.055 7660.0875	6.9016752 2.3005584 1.5337056 2.6839848 3.0674112 4.2176904 1.1502792 43.935 50.025 75.69 23.055 7660.0875
- F G H I J K L M A B B	Deniegin transmostery or similar approved, angle doors, jolk 2,73 and 9, generally Deniegin homorogeny or similar approved, angle doors, jolk 2,73 and 9, generally Deniegin transmostery or similar approved, angle doors, jolk 12, generally Deniegin transmostery or similar approved, double doors, jolk 12, generally Deniegin transmostery or similar approved, angle doors, jolk 12, generally Deniegin transmostery or similar approved, angle doors, jolk 12, generally Deniegin transmostery or similar approved, angle doors, jolk 12, and 9, generally Deniegin transmostery or similar approved, angle doors, jolk 2, and 9, generally Deniegin transmostery or similar approved, angle doors, jolk 2, and 9, generally Deniegin dan approtect and 2 angle doors, jolk 2, and 9, generally polyubpide satisfication 11 and 2 account crafting, polk 13, and 4, file accounts crafting, polk 3, and 4, file accounts crafting, polk 12, som thick platethood at jamos to amonty file accounts crafting, polk 12, som thick platethood at jamos, proc. Accounts and scandar assumed 12, som thick tactard assumed 12, som thick to these fing any approximation, pore 20, both to accounts crafting, polk 3, bit and 4, bit and table fing approximation, polk 2, som thick to these fing approximation, pore 20, som thick to these fing approximation.	18 18 6 4 7 8 11 3 101 115 174 53 1654 356	Nr Nr Nr Nr Nr Mr m m m m m m 2 m	668.91 663.98 663.98 623.00 623.00 623.00 623.00 61.23 61.23 61.23 61.23 61.23 61.23	£1,240.38 £630.00 £383.88 £140.00 £232.00 £126.25 £148.75 £346.26 £148.75 £148.75 £346.26 £13,893.60	12 12 12 12 12 12 12 12 12 12 12 5 5 5 5	17 17 17 17 17 17 17 17 15 15 15 39	24 0 24 0 24 0 24 0 24 0 24 0 24 0 24 0 24 0 24 0 24 0 24 0 25 25 25 25 51 51	1.000432 1.000144 1.000096 1.000168 1.000192 1.000264 1.00115 1.0115 1.0174 1.0053 20.675 1.335	7870 7870 7870 7870 7870 7870 7870 7870	2.03 2.03 2.03 2.03 2.03 2.03 2.03 0.435 0.435 0.435 0.435	2.03 2.03 2.03 2.03 2.03 2.03 2.03 0.435 0.435 0.435 0.435	2.03 2.03 2.03 2.03 2.03 2.03 2.03 0.435 kgC02/m 0.435 0.435	6.9016752 6.9016752 2.3005584 1.5337056 2.6839848 3.0674112 4.2176904 1.1502792 43.935 50.025 75.69 23.055 7660.0875	6.9016752 6.9016752 2.3005584 1.5337056 2.6839848 3.0674112 4.2176904 1.1502792 43.935 50.025 75.69 2.3.055 7660.0875 494.6175	6.9016752 2.3005584 1.5337056 2.6839848 3.0674112 4.2176904 1.1502792 43.935 5.0.025 75.69 23.055 7660.0875
- F G H I J K L M A B B	Deniegh treamogeny or similar approved, angle doors, jok 12, 34 and 5, generally Deniegh treamogeny or similar approved, angle doors, jok 12, 34 and 5, generally Deniegh treamogeny or similar approved, angle doors, jok 12, generally Deniegh treamogeny or similar approved, angle doors, jok 12, generally Deniegh treamogeny or similar approved, angle doors, jok 12, and 5, generally Deniegh treamogeny or similar approved, angle doors, jok 12, and 5, generally Deniegh treamogeny or similar approved, angle doors, jok 12, and 5, generally Deniegh treamogeny or similar approved, angle doors, jok 12, and 5, generally Deniegh treamogeny or similar approved, angle doors, jok 12, and 5, generally Deniegh treamogeny or similar approved, angle doors, jok 12, and 5, generally angle doors, jok 13, and 5, generally polyubpide satisfic to us if frand accusic angle, pol 13, 14 and 1 Reding and pointing with approved polyubpide satisfic to us if frand accusic angle, pol 13, 14 and 1 Reding and pointing with approved polyubpide satisfic to us if frand accusic angle, pol 13, 14 and 1 Reding and pointing with approved polyubpide satisfic to us if frand accusic angle, pol 13, 14 and 1 Reding and pointing with approved polyubpide satisfic to us if frand accusic angle, pol 13, 16 and 1 Reding and pointing with approved polyubpide satisfic to us if frand accusic angle, pol 13, 16 and 16 Reding and pointing with approved polyubpide satisfic to us if frand accusic angle, pol 13, 16 and 16 Reding and pointing with approved polyubpide satisfic to us if frand accusic angle, pol 12, 50m thick tasked nagenet 12, 50m thick to theore finange, angenet 13, 50m thick to theore finange, angenet 13, 50m thick to theore finange, angenet 13, 50m thick to theore finange, a	18 18 6 4 7 8 11 3 101 115 174 53 1654 3366 218	Nr Nr Nr Nr Nr Mr m m m m m 2 m	668.91 435.00 663.98 435.00 623.00 623.00 623.00 61.25	£1,340.38 £530.00 £383.88 £140.00 £203.00 £319.00 £319.00 £126.25 £148.75 £148.75 £148.60 £1,393.60 £1,395.20	12 12 12 12 12 12 12 12 5 5 5 5 5 26 28	17 17 17 17 17 17 15 15 15 15 39 39	24 0 24 0 24 0 24 0 24 0 24 0 25 25 51 51 53 53	0.00432 0.00044 0.00066 0.00168 0.00192 0.00264 0.00174 0.0174 0.0174 0.0174 0.0174 1.335 2.725	7870 7870 7870 7870 7870 7870 7870 7870	203 203 203 203 203 203 203 203 203 203	2.03 2.03 2.03 2.03 2.03 2.03 2.03 2.03	2.03 2.03 2.03 2.03 2.03 2.03 2.03 2.03	6.9016752 6.9016752 2.3005584 1.3337056 2.683948 3.0674112 4.2176904 1.1502792 43.935 50.025 75.69 23.055 7660.0875 494.6175 1039.5875	6.9016752 6.9016752 2.3005584 1.5337056 2.6839848 3.0674112 4.2176904 4.3.935 5.0.025 75.69 2.3.055 7660.0875 494.6175 1039.5875	6.9016752 2.3005584 1.5337056 2.6839848 3.0674112 4.217604 1.1502792 43.935 50.025 75.69 23.055 7660.0875 494.6175 1039.5875
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с 6 Н 1 Ј К Ц М 8 8 С Д	Deniegh treamogeny or similar approved, angle doors, jot 57, Ja and 59, generally basical doors, jot 57, Ja and 59, generally basical doors, jot 57, Ja and 59, generally beningin treamogeny or similar approved, angle doors, jot 10, generally polyubpide seathert, to usi frand account criting, jot 10 and pointing with approved polyubpide seathert, to usi frand account criting, jot 10 account criting, jot 11 account criting, jot 10 account criting, jot 10 accou	18 18 4 7 8 11 3 101 115 174 53 1654 356 218 66	Nr Nr Nr Nr Nr Mr Mr m m m m m m m m m m m m m m m m	668.91 F35.00 F63.98 F23.00 F23.00 F1.23 F1.25 F1.25 F3.40 F3.40 F3.40 F4.25	£1,340.38 £630.00 £383.88 £140.00 £203.00 £139.00 £176.25 £346.26 £66.25 £13,893.60 £1,886.80 £1,886.80	12 12 12 12 12 12 12 12 12 5 5 5 5 26 28 28	17 17 17 17 17 17 17 15 15 15 39 39 42 42	24 0 24 0 24 0 24 0 24 0 24 0 25 25 25 51 51 53	0.00412 0.000144 0.00006 0.000168 0.000162 0.000242 1.01 0.0174 0.0174 0.0174 1.335 2.725 0.2475	7870 7870 7870 7870 7870 7870 7870 7870	2.03 2.03 2.03 2.03 2.03 2.03 2.03 0.435 0.435 0.435 0.435 0.39 1.09	2.03 2.03 2.03 2.03 2.03 2.03 2.03 2.03	2.03 2.03 2.03 2.03 2.03 2.03 0.435 0.435 0.435 0.435 0.435 0.435	6.501572 6.501572 2.305584 1.533706 1.533706 4.537964 1.064912 4.217694 4.217694 4.217694 4.3355 75.69 4.3355 75.60 4.3355 75.60 4.3355 75.60 4.3355 75.60 4.3355 75.60 4.3355 75.60 4.3355 75.60	6.9010752 6.9016752 2.1005584 1.51370564 1.51370564 1.0674112 4.2170504 4.2170504 4.2170504 3.0655 7.660 2.10055 1039.5475 1039.5475 9.4.42125	6.9016752 2.3005584 1.5337056 2.6839848 3.0674112 4.2176904 1.1502792 4.3935 5.0.025 75.69 2.3.055 7660.0875 494.6175 1039.5875 94.42125
с 6 Н 1 Ј К Ц М 8 8 С Д	Deniegh treamogeny or similar approved, angle doors, jote 5, 12, and 15, generally beniegh toronomogeny or similar approved, angle doors, jote 5, 12, and 15, generally beniegh toronomogeny or similar approved, angle doors, jote 13, generally beniegh toronomogeny or similar approved, angle doors, jote 13, generally beniegh toronomogeny or similar approved, angle doors, jote 14, 24, and 24, generally beniegh toronomogeny or similar approved, angle doors, jote 15, 24 and 3, generally beniegh toronomogeny or similar approved angle doors, jote 13, 24, and 34, fere adding and pointing with approved polyubide seaturt, to usit accustor, tarte, jook 1 and 2 accustor, and accustor, jook 1 accustor, and accustor	18 18 4 7 8 11 3 101 115 174 53 1654 356 218 66	Nr Nr Nr Nr Nr Mr Mr m m m m m m m m m m m m m m m m	668.91 F35.00 F63.98 F23.00 F23.00 F1.23 F1.25 F1.25 F3.40 F3.40 F3.40 F4.25	£1,340.38 £630.00 £383.88 £140.00 £203.00 £139.00 £176.25 £346.26 £66.25 £13,893.60 £1,886.80 £1,886.80	12 12 12 12 12 12 12 12 12 5 5 5 5 26 28 28	17 17 17 17 17 17 17 15 15 15 39 39 42 42	24 0 24 0 24 0 24 0 24 0 24 0 25 25 25 51 51 53	0.00412 0.000144 0.00006 0.000168 0.000162 0.000242 1.01 0.0174 0.0174 0.0174 1.335 2.725 0.2475	7870 7870 7870 7870 7870 7870 7870 7870	2.03 2.03 2.03 2.03 2.03 2.03 2.03 0.435 0.435 0.435 0.435 0.39 1.09	2.03 2.03 2.03 2.03 2.03 2.03 2.03 2.03	2.03 2.03 2.03 2.03 2.03 2.03 0.435 0.435 0.435 0.435 0.435 0.435	6.501572 6.501572 2.305584 1.533706 1.533706 4.537964 1.064912 4.217694 4.217694 4.217694 4.3355 75.69 4.3355 75.60 4.3355 75.60 4.3355 75.60 4.3355 75.60 4.3355 75.60 4.3355 75.60 4.3355 75.60	6.9010752 6.9016752 2.1005584 1.51370564 1.51370564 1.0674112 4.2170504 4.2170504 4.2170504 3.0655 7.660 2.10055 1039.5475 1039.5475 9.4.42125	6.9016752 2.3005584 1.5337056 2.6839848 3.0674112 4.2176904 1.1502792 4.3935 5.0.025 75.69 2.3.055 7660.0875 494.6175 1039.5875 94.42125
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- F G H I J K L M A B C D E F	Deniegh treampogner or similar approved, angle doors, joht 5, 1,2 and 5, generally beniegh treampogner or similar approved, angle doors, joht 5, 1,2 and 5, generally beniegh treampogner or similar approved, angle doors, joht 5, 1,2 and 5, generally beniegh treampogner or similar approved, angle doors, joht 1,2 angle angle approximation approximation approximation approximation approximation approxim	18 18 6 4 7 8 11 3 101 115 174 53 1654 218 66 80	Nr Nr Nr Nr Nr Nr Nr M M M m m m m m m m m m m m m m m m m	668.91 63.50 663.98 625.00 623.00 623.00 623.00 61.25 61.25 61.25 63.00 64.25 643.04 643.04 643.04	£1,340.38 £30.00 £38.88 £140.00 £232.00 £13.00 £13.00 £13.62 £13,893.60 £1,885.80 £13,895.20 £3,443.20	12 12 12 12 12 12 12 12 12 12 12 12 12 1	17 17 17 17 17 17 15 15 15 15 39 42 42 68	24 0 24 0 24 0 24 0 24 0 24 0 24 0 25 25 25 51 51 51 53 53 107	0.000412 0.000144 0.000168 0.000182 0.000182 0.000192 0.000192 0.000192 0.000192 0.000192 0.000192 0.000192 0.000192 0.00192 0	7870 7870 7870 7870 7870 7870 7870 7870	2.03 2.03 2.03 2.03 2.03 2.03 2.03 0.435 0.435 0.435 0.435 0.435 0.435	2.03 2.03 2.03 2.03 2.03 2.03 0.43 0.435 0.435 0.435 0.39 1.09	2.03 2.03 2.03 2.03 2.03 2.03 0.45 0.45 0.45 0.45 0.45 0.45 0.45 0.45	6.5016752 6.5016752 2.305584 1.531706 4.531706 4.227064 4.227064 4.227064 4.31057 7.649 2.2.055 7.649 2.2.055 7.649 2.2.055 7.649 2.2.055 7.649 2.2.055 4.4.125 4.4.125	6.9016732 6.9016732 2.200554 1.5337066 4.2537066 4.2270604 1.1502792 4.3270604 7.560.0057 7.560 2.2.055 7.560 2.2.055 9.494.6175 9.4.4125	6.9016752 2.3005584 1.5337056 2.639848 3.0674112 4.21276904 1.1502792 4.3.935 50.025 75.69 2.3.055 7660.0875 1039.5875 1039.5875 94.42125
- F G H I J K L M A B C D E F	Deniegh transmogeny or similar approved, ingel dooro, juck 52, Ja and 52, generally Deniegh transmogene y animal approved, anited dooro, juck 52, Ja and 52, generally Deniegh transmogeney or similar approved, anited dooro, juck 13, generally Deniegh transmogeney or similar approved polyabidite satistict, to us 4 and 20, juck 24, juck 24, juck 24, juck 24, and 24, juck 24, juck 24, juck 24, juck 24, juck 24, and 24, juck 24	18 18 6 4 7 8 11 3 101 115 174 336 218 66 80 27 3666	Nr Nr Nr Nr Nr M M M M M M M M M M M M M	668.91 615.00 663.98 613.00 623.00 623.00 61.23 61.23 61.23 64.40 64.25 641.04 623.87 625.87 625	£1,340.38 £30.00 £38.38 £44.00 £232.00 £139.00 £176.25 £346.26 £13,893.60 £1,886.80 £1,886.80 £1,886.80 £3,852.00 £3,443.20	12 12 12 12 12 12 12 12 12 12 12 12 12 1	17 17 17 17 17 17 17 15 15 15 15 39 42 42 68 68	24 0 24 0 24 0 24 0 24 0 25 25 25 25 51 53 53 53 107 48	0.000412 0.00104 0.00006 0.000122 0.00022 0.00122 0.00124 0.0115 0.0174 0.0115 0.0174 1.335 2.755 0.2475 1.2	 7870 7870<td>2.03 2.03 2.03 2.03 2.03 2.03 0.435 0.435 0.435 0.435 0.435 0.39 1.09</td><td>2.03 2.03 2.03 2.03 2.03 2.03 0.435 0.435 0.435 0.435 0.435 0.39 1.09 1.09</td><td>2.03 2.03 2.03 2.03 2.03 0.45 4,50 2.04 0.45 0.45 0.45 0.45 0.45 0.45 0.45 0</td><td>6.501572 4.501572 2.305584 1.533756 1.533756 4.1533756 4.153776 4.155776 4.155776 4.355 50.05 75.69 4.355 75.69 4.45175 4.45125 4.4</td><td>6.9010732 6.9016732 2.1005584 1.51370508 1.51370508 1.017112 4.1270504 4.1270504 4.1370504 1.0197722 4.13955 1.039.5475 1.039.5475 1.039.5475 4.44.6 4.5.01575</td><td>6.9016752 2.3005584 1.5337056 2.683948 3.0674112 4.11502792 4.3335 5.0.025 75.69 2.3.055 7560.0875 1039.5875 94.6175 94.42125 444.6</td>	2.03 2.03 2.03 2.03 2.03 2.03 0.435 0.435 0.435 0.435 0.435 0.39 1.09	2.03 2.03 2.03 2.03 2.03 2.03 0.435 0.435 0.435 0.435 0.435 0.39 1.09 1.09	2.03 2.03 2.03 2.03 2.03 0.45 4,50 2.04 0.45 0.45 0.45 0.45 0.45 0.45 0.45 0	6.501572 4.501572 2.305584 1.533756 1.533756 4.1533756 4.153776 4.155776 4.155776 4.355 50.05 75.69 4.355 75.69 4.45175 4.45125 4.4	6.9010732 6.9016732 2.1005584 1.51370508 1.51370508 1.017112 4.1270504 4.1270504 4.1370504 1.0197722 4.13955 1.039.5475 1.039.5475 1.039.5475 4.44.6 4.5.01575	6.9016752 2.3005584 1.5337056 2.683948 3.0674112 4.11502792 4.3335 5.0.025 75.69 2.3.055 7560.0875 1039.5875 94.6175 94.42125 444.6
- F G H I J K L M A B C D E F	Denkelph termonogeny or similar approved, ingel aconz, pick 5, 12 and 5, generally benelph termonogeny or similar approved, ingel aconz, pick 5, 12 and 5, generally benelph termonogeny or similar approved, ingel aconz, pick 5, 12 and 5, generally benelph termonogeny or similar approved, ingel aconz, pick 5, 12 and 5, generally benelph termonogeny or similar approved, ingel aconz, pick 5, 12 and 5, generally benelph termonogeny or similar approved, ingel aconz, pick 5, 12 and 5, generally benelph termonogeny or similar approved, ingel aconz, pick 5, 12 and 5, generally benelph termonogeny or similar approved, ingel aconz, pick 5, 13 and 5, generally benelph termonogeny or similar approved, ingel aconz, pick 5, 13 and 5, generally benelph termonogeny or similar approved, ingel aconz, pick 5, 13 and 5, generally benelph termonogeny or similar approved, ingel aconz, pick 5, 13 and 5, generally benelph termonogeny or similar approved, ingel aconz, pick 5, 13 and 5, generally benelph termonogeny or similar approved, ingel aconz, pick 13, 13, 13 and 5, file accounts rating, pick 13 and 2 accounts rating, pick 13 and 15 and 13 andred acounted 13 amon thio standerd acounted 13 amon thio standerd acounted 13 amon thio standerd acounted 13 amon thio standerd acounted 13 amon thio pickenberg, generally, net exceeding Mostume metation to correst particle backenberg, and 13, mon thio and a stander atom the 13 amon thio beneberg in approximation and 13 amon to the benefician particle back and backenberg, anoreally, net exceeding Mostume metation to correst particle backenberg, anoreally, net exceeding Mostume metation to correst particle backenberg, anoreally, find exceeding and dispersional stander that the approxe- al abs motioned from the approxemity of genes consolities back and the approxemity of dispersional stander that the approxemity of dis	18 18 6 4 7 8 10 101 105 174 336 218 66 80 227	Nr Nr Nr Nr Nr Mr Mr M M M M M M M M M M	668.91 63.50 663.98 625.00 623.00 623.00 623.00 61.25 61.25 61.25 63.00 64.25 643.04 643.04 643.04	£1,340.38 £30.00 £38.38 £140.00 £03.00 £319.00 £319.00 £319.00 £3142.75 £142.75 £142.75 £142.75 £143.75 £13,893.60 £1,385.80 £1,395.20 £3,443.20	12 12 12 12 12 12 12 12 12 12 12 12 12 1	17 17 17 17 17 15 15 15 15 15 39 29 42 42 68	24 0 24 0 24 0 24 0 24 0 25 25 25 25 51 51 53 53 53 107	0.000412 0.00144 0.000068 0.000182 0.000182 0.000182 0.000182 0.00172 1.01 0.0115 0.0174 0.0115 0.0174 0.0155 0.02475 1.2 0.1215	 7870 7870<td>2.03 2.03 2.03 2.03 2.03 2.03 2.03 0.435 0.435 0.435 0.435 0.435 0.435 0.39 1.09</td><td>2.03 2.03 2.03 2.03 2.03 2.03 2.03 2.03</td><td>2.03 2.03 2.03 2.03 2.03 2.03 0.435 0.435 0.435 0.435 0.435 0.435 0.39 0.39 0.39</td><td>6.501572 4.501572 2.305584 1.533756 1.533756 4.1533756 4.153776 4.155776 4.155776 4.355 50.05 75.69 4.355 75.69 4.45175 4.45125 4.4</td><td>6.9010732 6.9016732 2.1005584 1.51317056 2.613948 2.613948 1.51317056 4.2175604 4.2175604 4.2175604 4.2175604 4.9145175 3.445175</td><td>6.901772 2.3005384 3.333766 2.683984 4.037412 4.217694 1.303772 4.317694 1.303772 4.000375 9.64.0175 4.64.0175</td>	2.03 2.03 2.03 2.03 2.03 2.03 2.03 0.435 0.435 0.435 0.435 0.435 0.435 0.39 1.09	2.03 2.03 2.03 2.03 2.03 2.03 2.03 2.03	2.03 2.03 2.03 2.03 2.03 2.03 0.435 0.435 0.435 0.435 0.435 0.435 0.39 0.39 0.39	6.501572 4.501572 2.305584 1.533756 1.533756 4.1533756 4.153776 4.155776 4.155776 4.355 50.05 75.69 4.355 75.69 4.45175 4.45125 4.4	6.9010732 6.9016732 2.1005584 1.51317056 2.613948 2.613948 1.51317056 4.2175604 4.2175604 4.2175604 4.2175604 4.9145175 3.445175	6.901772 2.3005384 3.333766 2.683984 4.037412 4.217694 1.303772 4.317694 1.303772 4.000375 9.64.0175 4.64.0175
- F G H I J K L M A B C D E F	Denkelp homonogeny or similar approved, ingel acon, pick 5, 12 and 5, generally benelph homonogeny or similar approved, ingel acon, pick 5, 12 and 5, generally benelph homonogeny or similar approved, ingel acon, pick 5, 12 and 5, generally benelph homonogeny or similar approved, ingel acon, pick 5, 12 and 5, generally benelph homonogeny or similar approved, ingel acon, pick 5, 12 and 5, generally benelph homonogeny or similar approved, ingel acon, pick 5, 12 and 5, generally benelph homonogeny or similar approved, ingel acon, pick 5, 12 and 5, generally benelph homonogeny or similar approved, ingel acon, pick 5, 12 and 5, generally benelph homonogeny or similar approved, ingel acon, pick 5, 12 and 5, generally benelph homonogeny or similar approved, ingel acon, pick 5, 12 and 5, generally benelph homonogeny or similar approved, ingel acon, pick 5, 12 and 5, generally benelph homonogeny or similar approved, ingel acon, pick 5, 12 and 5, generally benelph homonogeny or similar approved, ingel acon, pick 5, 12 and 5, generally benelph homonogeny or similar approved, ingel acon, pick 5, 12 and 5, generally benelph homonogeny or similar approved, ingel acon, pick 5, 12 and 5, generally benelph homonogeny or similar approved, ingel acon, pick 5, 12 and 5, fee benelph and picking and pick 5, 21 and 5, fee benelph and picking and picking and pick instantorial lines field with pickerboard lines field with pickerboard lines field with pickerboard lines field with approved lines approved 1, 5, monolish to the freming, general, over 100mm vick 12 and ming amproved 1, 5, monolish 12 and ming and 12, mon thick 12 and ming aconserval, over 100mm vick 12 and ming aconserval	18 18 6 4 7 8 11 3 101 115 53 1654 356 66 80 20 27 3666 645 778	Nr Nr Nr Nr Nr Nr M M M M M M M M M M M	668.91 615.00 663.98 613.00 623.00 623.00 6123.00 61.25 61.25 61.25 61.25 61.25 61.25 64.00 64.25 643.04 643.05 643.04 643.05 645.05 64	£1,340.38 £30.00 £38.38 £140.00 £332.00 £332.00 £13.00 £13.60 £1,386.80 £1,385.00 £3,443.20 £4,443.20	12 12 12 12 12 12 12 12 12 12 12 12 12 1	17 17 17 17 17 17 17 15 15 15 15 15 15 15 29 20 42 42 68 68 38	24 0 24 0 24 0 24 0 24 0 25 25 25 25 51 53 53 53 107 48 48 48	0.000412 0.00144 0.000168 0.000182 0.00152	 7870 7870 7870 7870 7870 7870 7000 1700 1700 950 350 350 350 950 	2.03 2.03 2.03 2.03 2.03 2.03 0.435 0.435 0.435 0.435 0.435 0.39 1.09 1.09	2.03 2.03 2.03 2.03 2.03 2.03 0.435 0.435 0.435 0.435 0.435 0.39 1.09 1.09 0.39	2.03 2.03 2.03 2.03 2.03 2.03 0.45 0.45 0.45 0.45 0.45 0.45 0.45 0.45	6.501672 6.501672 2.305584 1.517054 1.517054 4.2176564 4.21765656 4.217656656 4.2176566666666666666666666666666666666666	6.901973 6.901973 2.100584 1.5137058 1.5137059 4.227054 4.277054 1.50775 7.60 23.055 7.60 23.055 7.60 4.94.6175 9.4.4225 4.44.6 4.5.01575 4.074.759	6.9016752 2.3005584 1.5337056 2.639484 3.0674112 4.3.935 5.0.025 7.669 23.055 7.660.0875 1039.5875 1039.5875 94.42125 444.61 45.01575 4074.759 215.07525
- F G H I J K L M A B C D E F	Deniegh treamogeny or similar approach ingel doors, Joh 52, Ja and 52, generally coulde doors, Joh 52, Ja and 52, generally beniegh treamogeney or similar approach ingel doors, Joh 52, Ja and 52, generally beniegh treamogeney or similar approach ingel doors, Joh 53, Ja and 52, generally beniegh treamogeney or similar approach ingel doors, Joh 12, generally beniegh treamogeney or similar approach ingel doors, Joh 12, generally beniegh treamogeney or similar approach ingel doors, Joh 12, Ja and 32, generally beniegh treamogeney or similar approach ingel doors, Joh 12, Ja and 32, generally beniegh treamogeney or similar approach ingel doors, Joh 12, Ja and 32, generally beniegh treamogeney or similar approach ingel doors, Joh 12, Ja and 32, generally beniegh treamogeney or similar approach ingel doors, Joh 12, Ja and 43, generally beniegh treamogeney or similar approach ingel doors, Joh 12, Ja and 44, generally beniegh treamogeney or similar approach ingel doors, Joh 12, Ja and 44, generally beniegh treamogeney or similar approach ingel doors, Joh 12, Ja and 44, generally beniegh treamogeney or similar approach ingel doors, Joh 12, Ja and 44, generally beniegh treamogeney or similar approach ingel doors, Joh 12, Ja and 44, generally beniegh treamogeney or similar approach ingel doors, Joh 12, Ja and 44, generally beniegh treamogeney or similar approach ingel doors, Joh 12, Ja and 44, fere approach and pointing with approach ingel doors, Joh 12, Ja and 44, fere ingel doors, Ja Ja 24, fe	18 18 6 4 7 8 11 3 101 115 174 53 1654 218 66 80 27 3666 645	Nr Nr Nr Nr Nr M M M M M M M M M M M M M	668.91 615.00 663.98 613.00 623.00 623.00 6123.00 61.25 61.25 61.25 61.25 61.25 61.25 64.00 64.25 643.04 643.05 643.04 643.05 645.05 64	£1,340.38 £30.00 £38.88 £440.00 £312.00 £312.00 £313.00 £139.00 £1,866.80 £1,866.80 £1,866.80 £1,866.80 £1,866.80 £1,866.80 £1,850.00	12 12 12 12 12 12 12 12 12 12 12 12 12 1	17 17 17 17 17 17 17 15 15 15 15 39 42 42 68 68	24 0 24 0 24 0 24 0 24 0 25 25 25 25 51 53 53 53 107 48	0.000412 0.000104 0.000104 0.000102 0.000124 0.00124 0.00125 0.00124 0.0115 0.0115 0.0114 0.0115 0.0124 1.335 2.755 0.2475 1.2	 7870 7870<td>2.03 2.03 2.03 2.03 2.03 2.03 0.435 0.435 0.435 0.435 0.435 0.435 0.39 1.09</td><td>2.03 2.03 2.03 2.03 2.03 2.03 0.435 0.435 0.435 0.435 0.435 0.39 1.09 1.09</td><td>2.03 2.03 2.03 2.03 2.03 0.45 4,50 2.04 0.45 0.45 0.45 0.45 0.45 0.45 0.45 0</td><td>6.501572 4.501572 2.305584 1.533756 1.533756 4.1533756 4.153776 4.155776 4.155776 4.355 50.05 75.69 4.355 75.69 4.45175 4.45125 4.4</td><td>6.9316792 6.9316792 2.1005584 1.53370594 1.53370594 1.53370594 1.0179792 4.1370792 4.1370792 4.1370792 3.0055 7.660 1.039.5475 1.039.5475 1.039.5475 4.42125 4.42125</td><td>6.9016752 2.3005584 1.5337056 2.683948 3.0674112 4.11502792 4.3335 5.0.025 75.69 2.3.055 7560.0875 1039.5875 94.6175 94.42125 444.6</td>	2.03 2.03 2.03 2.03 2.03 2.03 0.435 0.435 0.435 0.435 0.435 0.435 0.39 1.09	2.03 2.03 2.03 2.03 2.03 2.03 0.435 0.435 0.435 0.435 0.435 0.39 1.09 1.09	2.03 2.03 2.03 2.03 2.03 0.45 4,50 2.04 0.45 0.45 0.45 0.45 0.45 0.45 0.45 0	6.501572 4.501572 2.305584 1.533756 1.533756 4.1533756 4.153776 4.155776 4.155776 4.355 50.05 75.69 4.355 75.69 4.45175 4.45125 4.4	6.9316792 6.9316792 2.1005584 1.53370594 1.53370594 1.53370594 1.0179792 4.1370792 4.1370792 4.1370792 3.0055 7.660 1.039.5475 1.039.5475 1.039.5475 4.42125 4.42125	6.9016752 2.3005584 1.5337056 2.683948 3.0674112 4.11502792 4.3335 5.0.025 75.69 2.3.055 7560.0875 1039.5875 94.6175 94.42125 444.6

в	Large format ceramic陶瓷的 wall tiles;															
	complete with approved adhesive and coloured grout; not exceeding 300mm	42	m	£13.80	£579.60	16	27	41	0.063	2000	0.78	0.78	0.78	98.28	98.28	98.28
с	Stainless steel perimeter边缘 trim装饰 beads, generally	209	m	£9.00	£1,881.00											
D	Approved sanitary grade white sealant to internal joints and the like, generally; 8 x															
	8mm fillet	305	m	£0.92	£280.60				0.01952	1700	0.435	0.435	0.435 (kgCO2/m)	132.675	132.675	132.675
E	Assumed to be Dulux Trade Diamond Matt Emulsion or similar, over 300 girth	3459	m2	£4.35	£15,046.65	5	8	12	1037.7		0.44	0.44	0.44 (kgCO2/Sqm)	1521.96	1521.96	1521.96
F	Assumed to be Dulux Trade Diamond Matt Emulsion or similar, over 300 girth															
A	Harlech select oak lacquered涂漆, 5mm	283	m2	£4.35	£1,231.05	5	8	12	84.9		0.44	0.44	0.44 (kgCO2/Sqm)	124.52	124.52	124.52
	thick veneered 薄片镶面 floor or similar approved: over 300mm wide	176	m2	6120.00	£22 880 00	29	48	63	0.528	700	0.72	0.72	0.72	266.112	266.112	266.112
в	Screed construction; level or to falls only															
c	not exceeding 15 degrees from horizontal Screed construction: level or to falls only	803	m2	£14.00	£11,242.00	30	48	63	56.21	2100	0.221	0.221	0.221	26087.061	26087.061	26087.061
	not exceeding 15 degrees from horizontal;															
D	to garage; Provisional Quantity Screed construction; level or to falls only	16	m2	£14.00	£224.00	30	48	63	1.12	2100	0.221	0.221	0.221	519.792	519.792	519.792
	not exceeding 15 degrees from horizontal; landings	3	m2	£14.00	£42.00	30	48	63	0.21	2100	0.221	0.221	0.221	97.461	97.461	97.461
E	Screed construction; perimeter isolation								0.21	2100	0.221	0.221	0.221	57.401	57.401	57.401
F	strip including mastic sealant where Screed construction; forming recess壁凹	1095	m	£1.50	£1,642.50	30	48	63								
	for entrance matting	4	m2	£10.00	£40.00	30	48	63								
G	Screed construction; construction joints Screed construction; forming holes for	1	ITEM	Included	Included											
	shower gullies 水沟 Visqueen 1000gauge厚度/直径 DPM	1	ITEM	Included	Included											
	separating membrane	803	m2	£1.00	£803.00	10	20	30	0.2409	32	4.2	4.2	4.2	32.37696	32.37696	32.37696
L L	2000 gauge DPM Trowelling smooth, generally	483 803	m2 m2	£1.50 Included	£724.50 Included	10	20	30	0.1449	32	4.2	4.2	4.2	19.47456	19.47456	19.47456
L	Latex smoothing compound, level or to falls only not exceeding 15 degrees from															
	horizontal - Provisional Quantity	738	m2	£6.54	£4,826.52	18	29	40	2.214	2100	0.74	0.74	0.74	3440.556	3440.556	3440.556
м	Latex smoothing compound, level or to falls only not exceeding 15 degrees from															
	horizontal - Provisional Quantity; landings	3	m2	£6.54	£19.62	18	29	40	0.009	2100	0.74	0.74	0.74	13.986	13.986	13.986
A	Liquid damp proof membrane; trowelling smooth; vinyl and rubber floors, level or to															
	falls only not exceeding 15 degrees from	-														
в	horizontal - Provisional Quantity Liquid damp proof membrane; trowelling	738	m2	£8.74	£6,450.12	10	20	30	2.214	32	4.2	4.2	4.2	297.5616	297.5616	297.5616
	smooth; vinyl and rubber floors, level or to falls only not exceeding 15 degrees from															
	horizontal - Provisional Quantity; landings	3	m2	£8.74	£26.22	10	20	30	0.009	32	4.2	4.2	4.2	1.2096	1.2096	1.2096
C D	Ceramic floor tiling; level or to falls Ceramic floor tiling; Tiled skirting -	104 184	m2 m	£66.00 £11.45	£6,864.00 £2,106.80	10 11	20 18	30 25 f	0.52 Rexible tile viny	1700	0.78	0.78	0.78	689.52	689.52	689.52
E	New Oaklands 80/20/50oz or similar															
	approved on and including PU foam underlay; over 300mm wide	778	m2	£44.45	£34,582.10	8	13	19			4.38	4.38	4.38 (kgCO2/Sqm)	3407.64	3407.64	3407.64
F	New Oaklands 80/20/50oz or similar approved on and including PU foam															
	underlay; risers; not exceeding 300mm	96	m	£14.99	£1,439.04	7	11	16	28.8		4.38	4.38	4.38	126.144	126.144	126.144
G	New Oaklands 80/20/50oz or similar approved on and including PU foam															
	underlay; treads; not exceeding 300mm	79	m	£14.99	£1,184.21	7	11	16	23.7		4.38	4.38	4.38	103.806	103.806	103.806
н	New Oaklands 80/20/50oz or similar approved on and including PU foam															
	underlay; winder treads; over 300mm wide Stair nosings, generally - to all staircases	2 91	m2 m	£19.99 £19.99	£39.98 £1,819.09	7	11 11	16 16			4.38	4.38	4.38	8.76	8.76	8.76
1	Stair nosings, generally; winder stairs	6	m	£29.99	£179.94	7	11	16								
A	generally; wood to carpet; to match wood flooring	62	m	£17.50	£1,085.00											
В	generally; wood to tile; to match wood flooring	8			£140.00											
с	generally; wood to wood; to match wood		m	£17.50	£140.00											
D	flooring generally; carpet to tile; metal in gold or	11 17	m	£17.50 £9.50	£192.50 £161.50											
E	Dulux Trade water based satin or similar															
F	approved; not exceeding 300mm girth Dulux Trade water based satin or similar	839	m	£2.85	£2,391.15	29	48	63	251.7		0.44	0.44	0.44 (kgCO2/Sqm)	110.748	110.748	110.748
	approved; Paint to enhanced skirtings in hallways, not exceeding 300mm girth	103	m	£3.00	£309.00	29	48	63	30.9		0.44	0.44	0.44 (keCO2/Sam)	13.596	13.596	13.596
G	Coir entrance matwell mat; over 300mm	4	m2	£81.10	£324.40	5	7	10	50.9		6.26	6.26	6.26 (kgCO2/Sqm)	13.350	15.550	13.390
н	Entrance matting frame; generally Rigid 單硬的 insulation boards: to achieve	17	m	£24.35	£413.95	41	68	107								
	U Values; tight butt joints; 150mm thick,															
	over 300mm wide Skirtings; MDF, 18mm x 144mm	483 839	m2 m	£12.95 £8.06	£6,254.85 £6,762.34	50 21	85 36	120 48	72.45 2.174688	1890 575	16.5 0.74	16.5 0.74	16.5 0.74	2259353.25 925.329744	2259353.25 925.329744	2259353.25 925.329744
В	Skirtings; MDF, generally; to hallways	103	m	£8.57	£882.71	21	36	48								
с	Sealant joint between bottom of skirting and tiled / timber floors, nominally 6 x															
	6mm fillet, generally	305	m	£1.25	£381.25	5	15	25	0.01098	1700	0.435	0.435	0.435 (kgCO2/m)	132.675	132.675	132.675
D	Sealant joint between bottom of skirting and tiled / timber floors, nominally 6 x															
F	6mm fillet, generally Temporary protection of finishes/floors,	943	m	£1.25	£1,178.75	5	15	25	0.033948	1700	0.435	0.435	0.435 (kgCO2/m)	410.205	410.205	410.205
E	generally	1057	m2	£2.50	£2,642.50	1	1	1	2.114	920						
F	Temporary protection of finishes/floors, generally; treads	79	m	£3.00	£237.00	1	1	1		920						
G	Temporary protection of finishes/floors,															
н	generally; risers Temporary protection of finishes/floors,	91	m	£3.00	£273.00	1	1	1		920						
	generally; winder treads Temporary protection of finishes/floors.	2	m2	£2.50	£5.00	1	1	1	0.004	920						
1	generally; winder risers	6	m	£3.00	£18.00	1	1	1		920						
1	Cleaning covered floors; generally Cleaning covered floors; generally; treads	1057 79	m2 m	£1.50 £1.00	£1,585.50 £79.00	1	1	1								
L	Cleaning covered floors; generally; risers	91	m	£1.00	£91.00	1	1	1								
м	Cleaning covered floors; generally; winder treads	2	m2	£1.50	£3.00	1	1	1								
N	Cleaning covered floors; generally; winder															
А	risers Plasterboard ceiling; Lafarge standard	6	m	£1.00	£6.00	1	1	1								
	15mm wallboard or similar approved; Plasterboard ceiling: Lafarge standard	293	m2	£5.70	£1,670.10	24	40	50	4.395	950	0.39	0.39	0.39	1628.3475	1628.3475	1628.3475
B	15mm wallboard or similar approved;															
c	generally; raking Plasterboard ceiling; pattresses; (allowed	13	m2	£7.25	£94.25	24	40	50	0.195	950	0.39	0.39	0.39	72.2475	72.2475	72.2475
-	for 1nr per 5m2 of ceiling areas) -															
D	Provisional Quantities Plasterboard ceiling; flush access panels	61 1	Nr ITEM	£4.50 £500.00	£274.50 £500.00	24 24	40 40	50 50								
E	Plasterboard ceiling; Contractor to make				£500.00											
F	allowance for fixing around services Plasterboard ceiling; moisture resistant		ITEM													
G	board in lieu代替 of standard board Plasterboard ceiling; Lafarge standard	25		£500.00		1	1	1								
9			m2	£500.00 £1.35	£33.75	1	1	1								
	15mm vapour check wallboard or similar			£1.35	£33.75											
н	15mm vapour check wallboard or similar approved; generally Plasterboard ceiling; Lafarge standard	273				1 24	1 40	1 50	4.095	950	0.39	0.39	0.39	1517.1975	1517.1975	1517.1975
н	15mm vapour check wallboard or similar approved; generally Plasterboard ceiling; Lafarge standard 15mm vapour check wallboard or similar	273	m2	£1.35 £7.20	£33.75 £1,965.60	24	40	50								
н	15mm vapour check wallboard or similar approved; generally Plasterboard celling; Lafarge standard 15mm vapour check wallboard or similar approved; generally; sloping Plasterboard celling; pattresse; (allowed			£1.35	£33.75				4.095	950 950	0.39	0.39	0.39		1517.1975 1039.2525	
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в	Manhattan 40mm thick worktop or similar approved; cut outs for sinks	10 M	r £0.00	£0.00			0.744	700		0.87	0.87	0.87	453.096	453.096	453.096
с	stainless steel single bowl and drainer of 0.9mm minimum thickness; Bristan Java														
D	single flow monoblock mixer (chrome); generally; assumed to be 1Nr per	10 N 10 N	r £0.00	£0.00 £0.00											
F	generally; assumed to be 1Nr per space for oven space for fridge freezer	10 N	r £0.00	£0.00 £0.00											
G H	space for fridge freezer General directional signage; generally General directional signage; generally	10 N 1 ITER 1 ITER	£250.00	£0.00 £250.00 £250.00	10 10	20 20	30 0.0000189 30 0.0000189	2700 2700		1.81 1.81	9.16 9.16	12.79 12.79	0.0923643	0.4674348	0.6526737 0.6526737
AB	Fire signage systems, generally Fire signage systems, generally	1 ITEF 1 ITEF	A £250.00	£250.00 £250.00	10	20 20 20	30 0.0000189 30 0.0000189 30 0.0000189	2700 2700 2700		1.81	9.16 9.16 9.16	12.79 12.79 12.79	0.0923643 0.0923643	0.4674348	0.6526737 0.6526737
A	Above Ground Drainage Installations generally for the construction of the														
	housing units; in accordance with the design criteria provided by the employer's														
в	representative - Units 1 and 2 Above Ground Drainage Installations	1 ITE	A Included	Included											
	generally for the construction of the housing units; in accordance with the design criteria provided by the employer's														
с	representative - Units 3 and 4 Above Ground Drainage Installations	1 ITE	A Included	Included											
c	generally for the construction of the housing units; in accordance with the														
D	design criteria provided by the employer's Above Ground Drainage Installations	1 ITE	A Included	Included											
	generally for the construction of the housing units; in accordance with the														
E	design criteria provided by the employer's attendance on the installation of the above		A Included	Included											
F	ground drainage special attendance on the installation of		A Included	Included											
A	the above ground drainage Mechanical Installations; in accordance with the design criteria provided by the	1 ITE	A Included	Included											
в	employer's representative - Units 1 and 2 Mechanical Installations; in accordance	1 ITE	A £99,590.00	£99,590.00	1	1	1								
-	with the design criteria provided by the employer's representative - Units 3 and 4	1 ITE7	A Included	Included											
с	Mechanical Installations; in accordance with the design criteria provided by the														
D	employer's representative - Units 5 to 9 Mechanical Installations; in accordance	1 ITE	A Included	Included											
	with the design criteria provided by the employer's representative - Unit 10 attendance on the Mechanical Installation	1 ITE#	A Included	Included											
E	contractor	1 ITE	A Included	Included											
A	special attendance on the Mechanical Installation contractor Electrical Installations; in accordance with	1 ITE	A Included	Included											
^	the design criteria provided by the employer's representative - Units 1 and 2	1 1757	A £74,724.24	£74,724.24	20	30	43 Used electrical circ	cuit							
В	Electrical Installations; in accordance with the design criteria provided by the				-										
с	employer's representative - Units 3 and 4 Electrical Installations; in accordance with	1 ITE	A Included	Included											
	the design criteria provided by the employer's representative - Units 5 to 9	1 ITE#	A Included	Included											
D	Electrical Installations; in accordance with the design criteria provided by the employer's representative - Unit 10		A Included	Included											
E	employer's representative - Unit 10 Electrical Installations; lightning protection installation in accordance with the design	1 ITE	included	=iciuded											
	criteria provided by the employer's representative	1 (75)	A Included	Included											
F	attendance on the Electrical Installation contractor		A Included	Included											
G	special attendance on the Electrical Installation contractor		A Included	Included											
А	Lift Installations; access lift; three floors served, ground, first and second floor;														
	opening on one side; including all front enclosure	1 1	r £21,385.00	£21,385.00 Declined	19	26	34								
B C	Lift Installations; fire fighting lift if required allow for testing on completion and provide test certificate	1 ITEP	A Declined	Included											
DE	allow for commissioning on completion provide number of copies as detailed in	1 ITE		Included											
F	the Employers Requirements Main Contractors Attendances / Works;	1 ITE#	A Included	Included											
	Provision and installation of lifting beam fixed to structure as required	1 N	r Declined	Declined											
G	Main Contractors Attendances / Works; Marking positions of and cutting or														
н	forming holes mortices and chases in the Lighting to lift shaft	1 ITE/ 1 N	A Declined r Declined	Declined Declined											
1	Ventilation to top of shaft, provision of suitable external louvre or vent, complete with ducting as may be required	1 1	r Declined	Declined											
1	Installation and fixing in of Halfen or similar slot channels to accept lift framework		A Declined	Declined											
к	Installation or secondary steelwork / timber to allow for installation of lift														
L	framework to upper levels Painting within passenger lift shaft with		A Declined	Declined											
A	sealer and one coat white masonry paint as Painting copper pipework; not exceeding			£216.00	5	8	11								
в	300mm girth - Provisional Quantity Fire stopping works; generally; at locations of penetrations through internal walls	160 1	n £2.65 A Included	£424.00 Included	28	46	58 48			0.44	0.44	0.44	21.12	21.12	21.12
с	Fire stopping works; generally; within cavities of external walls		A Included	Included											
D	Fire stopping works; generally; penetrations in cavities to ceiling		A Included	Included											
E	Air Sealing; provision of sealant and the like to all locations to achieve air sealing	1 ITE	A Included												
F	Builders work in connection with services; all BWIC for the electrical installations as														
<i>c</i>	defined by the performance specification for the electrical works Builders work in connection with services:	1 ITE	A £10,000.00	£10,000.00	20	30	43								
G	Builders work in connection with services; all BWIC for the mechanical installations as defined by the performance specification														
н	for the mechanical works Builders work in connection with services;	1 ITE	A Included	Included											
	all BWIC for the above ground drainage and rainwater pipes as defined by the														
	performance specification for the mechanical works	1 ITE#	A Included	Included											
А	Builders work in connection with services; all BWIC for the lightning protection														
0	installations as defined by the performance specification for the mechanical works Builders work in connection with services;	1 ITE	A Included	Included											
в	Builders work in connection with services; provision of lightning protection rod pits and housing: Provisional Quantity	9 1	r Included	Included											
A	and nousing; Provisional Quantity Excavating Risk; soft spots; including filling all soft spots with approved granular fill		madded	_1010/000											
	material, compacting and proof rolling - to be priced as rate only per cubic metre	0 m	3 £0.00	£0.00											
в	Excavating Risk; Extra over excavation irrespective of depth for excavating; next														
	existing services - to be priced as rate only per cubic metre	0 1	n £0.00	£0.00											
с	Excavating Risk; Extra over excavation irrespective of depth for excavating;														
D	around existing services crossing excavations - to be priced as rate only per Excavating Risk; archeological digging on	0 m	3 £0.00	£0.00											
	site; complete including the risk of time loss and all elements pertaining to the	1 ITE#	A £0.00	£0.00											
E	Excavating Risk; Extra over excavation irrespective of depth for breaking out and		20.00	20.00											
	removal off site all spoils; rock - to be priced as rate only per cubic metre	0 m	3 £0.00	£0.00											
F	Excavating Risk; Extra over excavation irrespective of depth for breaking out and														
	removal off site all spoils; concrete - to be priced as rate only per cubic metre	0 m	3 £0.00	£0.00											
G	Excavating Risk; Extra over excavation irrespective of depth for breaking out and removal off site all spoils; reinforced														
н	removal off site all spoils; reinforced concrete - to be priced as rate only per Excavating Risk; Extra over excavation	0 m	3 £0.00	£0.00											
	Excavating Risk; Extra over excavation irrespective of depth for breaking out and removal off site all spoils; brickwork														
	blockwork or stonework - to be priced as rate only per cubic metre	0 m	3 £0.00	£0.00											
1	Excavating Risk; Extra over excavation irrespective of depth for breaking out and														
	removal off site all spoils; contaminated material - to be priced as rate only per														
1	cubic metre Surface water; including the treatment of	0 m	3 £0.00	£0.00											
	the water to remove all sediment; pollutants and the like before leaving the site perimeters; off site	1	л £199.84	£199.84	1	1	1								
к	Surface water; including the treatment of the water to remove all sediment;	1 11EP	1199.84	2175.84	1		*								
	pollutants and the like before leaving the site perimeters; Excavated material; soft														
	spot material - to be priced as rate only per	0 m	3 £0.00	£0.00											

	Surface water; including the treatment of															
L	the water to remove all sediment;															
	pollutants and the like before leaving the site perimeters; Excavated material; extra															
	over off site disposal for the disposal of contaminated material; Contractor to	0	m3	£0.00	£0.00											
A	Excavating, Trenches; over 300mm wide, 1.00m maximum depth	119	m3	£12.96	£1,542.24	500	750	1000		2050	0.024	0.024	0.024	5854.8	5854.8	5854.8
в	Excavating, Pits, tree pits 12 nr, 1.00m maximum depth	12	m3	£16.20	£194.40	500	750	1000		2050	0.024	0.024	0.024	590.4	590.4	590.4
C D	Excavating pits Excavating trenches	48 226	m2 m2	£6.48 £3.24	£311.04 £732.24	500 500	750 750	1000 1000		2240 2240	0.0051	0.0051	0.0051	548.352 2581.824	548.352 2581.824	548.352 2581.824
E	Earthwork support, To faces of excavation; 1.00m maximum depth; distance between															
	opposing faces not exceeding 2.00m Excavated material; off site; it has been	274	m2	£3.24	£887.76	500	750	1000		2240	0.0051	0.0051	0.0051	3130.176	3130.176	3130.176
F	assumed all excavated material to be taken															
	off site; to be treated as inert hazardous material	131	m3	£35.65	£4,670.15	1	1	1		2050	0.024	0.024	0.024	6445.2	6445.2	6445.2
G	Filling to excavations; over 250mm average thick	12	m3	£36.73	£440.76	100	300	500		2050	0.024	0.024	0.024	590.4	590.4	590.4
н	Imported topsoil. Filling to make up levels; not exceeding 250mm average thick	78	m3	£36.73	£2.864.94	100	300	500		2050	0.024	0.024	0.024	3837.6	3837.6	3837.6
1	Imported topsoil. over 250mm average Compacting ground; generally	71	m3 m2	£36.73 £0.76	£2,607.83 £9.12	100	300 750	500 1000		2050	0.024	0.024	0.024	3493.2	3493.2	3493.2
ĸ	Compacting bottoms of excavations;	148	m2	£0.76	£112.48	500	750	1000								
A	Blinding concrete; not exceeding 150mm Foundations; generally	7 61	m3 m3	£149.07 £182.56	£1,043.49 £11,136.16	100 64	150 108	200 178		2100 2300	221.76 0.0749	221.76 0.107	221.76 (kgCO2/m3) 0.1391	1552.32 10508.47	1552.32 15012.1	1552.32 19515.73
в	Formwork for in situ concrete, Sides of ground beams and edges of beds, 250 to	202	m	£23.77	£4,801.54	47	70	110	3.7875	480	8.034	8.034	8.034 (kgCO2/m2)	608.5755	608.5755	608.5755
с	Formwork for in situ concrete, Sides of ground beams and edges of beds, 250 to															
n	500mm high; curved on plan Steel fabric reinforcement to B.S.4483,	54	m	£25.93	£1,400.22	47	70	110	2.025	480	8.034	8.034	8.034 (kgCO2/m2)	162.6885	162.6885	162.6885
-	generally, B785 Dense aggregate blockwork; nominally 7.3	136	m2	£14.04	£1,909.44	46	70	108			10.245	10.245	10.245 (kgCO2/m2)	1393.32	1393.32	1393.32
-	N/mm2 ion cement mortar; assumed to be 215mm thick	20	m2	£45.58	£911.60	52	72	101	4.3	2200	0.0749	0.107	0.1391	708.554	1012.22	1315.886
F	Natural stone rubble walling, nominally 350mm thick	173	m2	£385.04	£66.611.92	43	60	79	60.55	1900	0.0745	0.107	0.1351	700.334	1011.11	1313.000
G	Cappings to stone walls; generally	173 89	m2 m	£385.04 £98.04	£66,611.92 £8,725.56	43 43	60 60	79 79	60.55 0.623	1900 1900						
н	Cappings to stone walls; generally; curved on plan	27	m	£108.04	£2,917.08	43	60	79	0.189	1900						
I	External handralls; Assumed to be polyester powder coated galvanised mild															
	steel handrails; fixed to masonry walls as required, raking	6	m	£176.24	£1,057.44	15	20	25								
J	External handrails; Extra over for, ends Pre cast concrete kerbs侧石, edgings and	8	Nr	£40.22	£321.76	15	20	25								
	channels to B.S340; bedding and flush jointing in cement mortar (1:3); plain															
	concrete (1:3:6) foundations and Pre cast concrete kerbs则石, edgings and	63	m	£33.49	£2,109.87	60	80	100	2.88225	850	0.18	0.18	0.18	440.98425	440.98425	440.98425
в	channels to B.S340; bedding and flush															
	jointing in cement mortar (1:3); plain concrete (1:3:6) foundations and															
с	haunching, kerbs, HB2; curved on plan; Pre cast concrete kerbs同石, edgings and	5	m	£37.81	£189.05	60	80	100	0.22875	850	0.18	0.18	0.18	34.99875	34.99875	34.99875
	channels to B.S340; bedding and flush jointing in cement mortar (1:3); plain															
	concrete (1:3:6) foundations and haunching, kerbs, BN; conservation format	139	m	£38.89	£5.405.71	60	80	100	6.35925	850	0.18	0.18	0.18	972 96525	972.96525	972.96525
D	Pre cast concrete kerbs侧石, edgings and channels to B.S340; bedding and flush	135		230.03	23,403.71	00	00	100	0.33323	0.50	0.10	0.10	0.10	572.50525	572.50525	572.50525
	jointing in cement mortar (1:3); plain															
	concrete (1:3:6) foundations and haunching, kerbs, BN; conservation format															
E	to match pavings; curved on plan; radius Pre cast concrete kerbs侧石, edgings and	9	m	£48.61	£437.49	60	80	100	0.41175	850	0.18	0.18	0.18	62.99775	62.99775	62.99775
	channels to B.S340; bedding and flush jointing in cement mortar (1:3); plain															
	concrete (1:3:6) foundations and haunching, kerbs, BN; conservation format															
	to match pavings; curved on plan; radius Pre cast concrete kerbs 同石, edgings and	33	m	£51.85	£1,711.05	60	80	100	1.50975	850	0.18	0.18	0.18	230.99175	230.99175	230.99175
r	channels to B.S340; bedding and flush															
	jointing in cement mortar (1:3); plain concrete (1:3:6) foundations and															
G	haunching, path edgings Pre cast concrete kerbs侧石, edgings and	201	m	£20.52	£4,124.52	60	80	100	9.19575	850	0.18	0.18	0.18	1406.94975	1406.94975	1406.94975
	channels to B.S340; bedding and flush jointing in cement mortar (1:3); plain															
	concrete (1:3:6) foundations and haunching, path edgings; curved on plan	7	m	£22.69	£158.83	60	80	100	0.32025	850	0.18	0.18	0.18	48.99825	48.99825	48.99825
н	Pre cast concrete kerbs側石, edgings and channels to B.S340; bedding and flush															
	jointing in cement mortar (1:3); plain concrete (1:3:6) foundations and															
	haunching, extra over for, drop kerbs; HB2	2	Nr	£32.41	£64.82	60	80	100	0.086925	850	0.18	0.18	0.18	13.299525	13.299525	13.299525
I	Granular material, filling to make up levels, not exceeding 250mm average thick	52	m3	£42.13	£2,190.76	100	300	500		2240	0.0051	0.0051	0.0051	594.048	594.048	594.048
1	not exceeding 250mm average thick Granular material, filling to make up levels, over 250mm average thick	52 290	m3 m3		£2,190.76 £12,217.70	100 100	300 300	500 500		2240 2240	0.0051	0.0051	0.0051	594.048 3312.96	594.048 3312.96	3312.96
ĸ	not exceeding 250mm average thick Granular material, filling to make up levels, over 250mm average thick Granular material, filling to make up levels, not exceeding 250mm average thick	290 207	m3 m3	£42.13 £36.73	£12,217.70 £7,603.11	100 100	300 300	500 500								
I J K L	not exceeding 250mm average thick Granular material, filling to make up levels, over 250mm average thick Granular material, filling to make up levels,	290	m3	£42.13	£12,217.70	100	300	500		2240	0.0051	0.0051	0.0051	3312.96	3312.96	3312.96
I J K M	not exceeding 250mm average thick Granular material, filling to make up levels, over 250mm average thick Granular material, filling to make up levels, not exceeding 250mm average thick Compacting filling, generally Reinforced concrete external slabs, beds, not exceeding 150mm thick	290 207	m3 m3	£42.13 £36.73	£12,217.70 £7,603.11	100 100	300 300	500 500		2240	0.0051	0.0051	0.0051	3312.96	3312.96	3312.96
N	not exceeding 250mm siverage thick Granular material, filling to make up levels, over 350mm average thick Granular material, filling to make up levels, not exceeding 250mm sverage thick Compacting filling, generally Reinforced concrete external slabs, beds, not exceeding 150mm thick Reinforced concrete external slabs, degs of beds, not exceeding as 250mm bich	290 207 2002	m3 m3 m2	£42.13 £36.73 £0.76	£12,217.70 £7,603.11 £1,521.52	100 100 100	300 300 300	500 500 500	0.6625	2240 2240	0.0051	0.0051	0.0051	3312.96 2364.768	3312.96 2364.768	3312.96 2364.768
I J K M N O	not exceeding 250mm average thick Granular material, filing to make up levels, over 250mm average thick Granular material, filing to make up levels, not exceeding 250mm average thick Compacting filing, generally Reinforced concrete external slabb, eds, not exceeding 150mm thick Reinforced concrete external slabb, eds folds: not exceeding 150mm thick Steef fabric reinforcement to B S483, reference A25	290 207 2002 6	m3 m3 m2 m3	£42.13 £36.73 £0.76 £178.24	£12,217.70 £7,603.11 £1,521.52 £1,069.44	100 100 100 20	300 300 300 35	500 500 500 45	0.6625	2240 2240 2300	0.0051 0.0051 0.198	0.0051 0.0051 0.198	0.0051 0.0051 0.198	3312.96 2364.768 2732.4	3312.96 2364.768 2732.4	3312.96 2364.768 2732.4
N	not exceeding 250mm äverage thick Granular material (filing to make up levels, over 250mm average thick Granular material, filing to make up levels, Compacting tilling, generally Reinforced concrete external slabs, edges of beds, not exceeding 150mm hick Seef fabric reinforcement to 8.3.4483, takef fabric reinforcement to 8.3.4483, totaken jahrs, comprising of 25mm theory taket in plant, comprising of 25mm theory taket makes and general general general totaken plants, comprising of 25mm theory totaken general general general general general general totaken plants, comprising of 25mm theory totaken general general general general general general general totaken plants, comprising of 25mm theory totaken general	290 207 2002 6 53	m3 m3 m2 m3 m	£42.13 £36.73 £0.76 £178.24 £23.77	£12,217.70 £7,603.11 £1,521.52 £1,069.44 £1,259.81	100 100 100 20	300 300 300 35	500 500 500 45	0.6625	2240 2240 2300	0.0051 0.0051 0.198	0.0051 0.0051 0.198	0.0051 0.0051 0.198	3312.96 2364.768 2732.4	3312.96 2364.768 2732.4	3312.96 2364.768 2732.4
N	not exceeding 320m weregetrick Grandur material, files to make up levels, over 320m wereget thek Grandur material, files to make up levels, to ensure the start of the start of the level of the start of the start of the not exceeding 130m thick Reinforced concerts entrand labb, tele- fenitored concerts entrand labb, tele- fore the start of the start of the order of the start of the start of the start here in the start of the start here in the start of the start of the start of the start of the start of the level start of the start of the start of the back with 53 x50m salart to to, to start 330m the start of the start of the start start 300m the start of the start of the start of the start of the start start start of the sta	290 207 2002 6 53	m3 m3 m2 m3 m	£42.13 £36.73 £0.76 £178.24 £23.77	£12,217.70 £7,603.11 £1,521.52 £1,069.44 £1,259.81	100 100 100 20	300 300 300 35	500 500 500 45	0.6625 7.95	2240 2240 2300	0.0051 0.0051 0.198	0.0051 0.0051 0.198	0.0051 0.0051 0.198	3312.96 2364.768 2732.4	3312.96 2364.768 2732.4	3312.96 2364.768 2732.4
N	not exceeding 250mm excegnitics Grandur material, fling to make up levels, Grandur material, fling to make up levels, Canadar material, fling to make up levels, Canadar material, fling to make merang thick Compacting tilling, penerally Reinforced concrete external slibs, redge d beds, not exceeding 250mm high Seef failer, residencement to 8.3.4.683, Reinforced concrete external slibs, redge d beds, not exceeding 250mm high Seef failer, residencement to 8.3.4.683, Reinforced concrete material slibs, redge d beds, not exceeding 250mm high Seef failer, residencement to 8.3.4.683, Reinforced concrete external slibs, redge d beds, not exceeding 250mm high slibship joint concrete material to 8.0 and 250mm high slibs	290 207 2002 6 53 37	m3 m2 m3 m m2	£42.13 £36.73 £0.76 £178.24 £23.77 £14.04	£12,217.70 £7,603.11 £1,521.52 £1,069.44 £1,259.81 £519.48	100 100 20 47	300 300 300 35 70	500 500 500 45 110		2240 2240 2300 2300	0.0051 0.0051 0.198 0.198	0.0051 0.0051 0.198 0.198	0.0051 0.0051 0.198 0.198	3312.96 2364.768 2732.4	3312.96 2364.768 2732.4	3312.96 2364.768 2732.4
N	not exceeding 250mm everage trick Grandvar matericking files to make up levels, over 250mm average thick over 250mm average thick Compacting Ulling, moreally Reinforced concrete startisking, level and the starting of the starting of the Reinforced concrete startisking, helper a fields, out exceeding 250mm thick the facts, out exceeding 250mm thick the facts, out exceeding 250mm thick the facts and the startisking 250mm thick the startisking 250mm thick the wait 350mm thick tabu	290 207 2002 6 53 37 53	m3 m2 m3 m m2 m2	£42.13 £36.73 £0.76 £178.24 £23.77 £14.04 £12.96	£12,217.70 £7,603.11 £1,521.52 £1,069.44 £1,259.81 £519.48 £686.88	100 100 20 47	300 300 300 35 70	500 500 500 45 110		2240 2240 2300 2300	0.0051 0.0051 0.198 0.198	0.0051 0.0051 0.198 0.198	0.0051 0.0051 0.198 0.198	3312.96 2364.768 2732.4	3312.96 2364.768 2732.4	3312.96 2364.768 2732.4
N A B C	not exceeding 326m werege trick Granular material, filling to make up pievels, over 320m werege thick Granular material, filling to make up levels, Comsating 181m, generally Reinforced concrete entrand Labb, besi- not exceeding 130m thick Reinforced concrete entrand Labb, besi- pier labor, in our care of the second second second second second second second second second second second second based, on the second second second based, with 53 x 55m sealent to top, to suit 150m thick sible Assumed to be brush and spade finish, penerally provide XZ. If shearing to and charding XZ. If shearing to and charding Simon Texa and biolong, generally	290 207 2002 6 53 37 53 37	m3 m2 m3 m m2 m2	£42.13 £36.73 £0.76 £178.24 £23.77 £14.04 £12.96	£12,217.70 £7,603.11 £1,521.52 £1,069.44 £1,259.81 £519.48 £686.88	100 100 20 47	300 300 300 35 70	500 500 500 45 110		2240 2240 2300 2300	0.0051 0.0051 0.198 0.198	0.0051 0.0051 0.198 0.198	0.0051 0.0051 0.198 0.198	3312.96 2364.768 2732.4	3312.96 2364.768 2732.4	3312.96 2364.768 2732.4
N	not exceeding 230mm excegnitics Grandra material, faing to make up levels, Grandra material, faing to make up levels, Grandra material, faing to make up levels, exceeding 240mm excernal skills, being and the second science and skills, regiser desk, not exceeding 230mm high Seef faing residencement to 8.3.4.683, residence document to 8.4.468, residence and constraint skills, regiser desk, not exceeding 230mm high Seef faing residencement to 8.4.468, hitten mergenature(#28 and the second and the second skills, regiser desk, not exceeding 230mm high Saef faing residencement to 8.4.468, hitten mergenature(#28 and the second and the second skills, regiser desk, the second skills, register desk, the se	290 207 2002 6 53 37 53 37	m3 m2 m3 m m2 m m2 m2	£42.13 £36.73 £0.76 £178.24 £23.77 £14.04 £12.96 £6.48 £4.32	£12,217.70 £7,603.11 £1,521.52 £1,069.44 £1,259.81 £519.48 £686.88 £239.76	100 100 20 47	300 300 300 35 70	500 500 500 45 110		2240 2240 2300 2300	0.0051 0.0051 0.198 0.198	0.0051 0.0051 0.198 0.198	0.0051 0.0051 0.198 0.198	3312.96 2364.768 2732.4	3312.96 2364.768 2732.4	3312.96 2364.768 2732.4
N A B C	not exceeding 250mm excent thick Grandur material (initig to make up lower), over 350mm excent pitts, over 350mm excent pitts, contracting 250mm excent pitts, Compacting 150mm thick, not exceeding 250mm thick and excending 150mm thick and excending 150mm thick and excending 150mm thick and excent pitts and a straight and bedress, or a creating 350mm thick shows and the straight and a straight and straight and the straight and straight and the straight and the straight tablesion pitts, straight and straight and and straight and straight and straight and and straight and straight and straight and and straight and straight and straight and straight and straight and straight and including 250mm of and binding exercisity frame to also disclosumentally frame to also for allow to a straight and straight and straight and including 250mm of and binding exercisity frame to also disclosumentally frame to also for allow to a straight and straight and straight and the straight and straight and straight and including 250mm of and binding exercisity frame to also disclosument and straight and straight and the straight and straight and straight and straight and the straight and straight	290 2002 6 53 37 53 37 37	m3 m2 m3 m2 m2 m2 m2 m2 m2	£42.13 £36.73 £0.76 £178.24 £23.77 £14.04 £12.96 £6.48 £4.32	£12,217.70 £7,603.11 £1,521.52 £1,069.44 £1,259.81 £519.48 £686.88 £239.76 £159.84	100 100 20 47	300 300 35 70 75	500 500 45 110	7.95	2240 2240 2300 2300	0.0051 0.0051 0.198 0.198	0.0051 0.0051 0.198 0.198	0.0051 0.0051 0.198 0.198	3312.96 2364.768 2732.4	3312.96 2364.768 2732.4	3312.96 2364.768 2732.4
N A B C	not exceeding 250mm excent thick Grandur material (initig to make up level), over 350mm ærenge thick over 350mm ærenge thick Gransatting filling, generally Reinforred concrete startubility, begin to exceeding 250mm thick and exceeding 250mm thick begin bedies, our exceeding 250mm thick bedies and exceeding 250mm thick the facts, our exceeding 250mm thick bedies and exceeding 250mm thick bedies and exceeding 250mm thick bedies and an exceeding 250mm thick bedies and a start of a start of a start including 250mm of and blinding concreding transers and underlang funder occurs open blin, level or to fails: Gomm thick Marchalls Taplace 180ck Priving tarvent or similer agrowed startward 2500 x 1000	290 207 2002 6 53 37 53 37 37 828 13	m3 m2 m3 m2 m3 m2 m2 m2 m2 m2 m2	£42.13 £36.73 £0.76 £178.24 £23.77 £14.04 £12.96 £6.48 £4.32 £15.77 £16.20	E12,217.70 E7,603.11 E1,521.52 E1,069.44 E1,259.81 E519.48 E686.88 E239.76 E159.84 E139.84 E130,057.56 E210.60	100 100 20 47 50 14	300 300 35 70 75 23 23	500 500 45 110 100 32 32	7.95 49.68 0.975	2240 2240 2300 2300 180 180 1700 2150	0.0051 0.051 0.198 0.198 0.74	0.0051 0.0051 0.198 0.74	0.0551 0.0551 0.198 0.198 0.74	3312.96 2364.768 2732.4 24136.2 125.775	3312.96 2364.768 2732.4 24136.2 125.775	3312.96 2364.768 2732.4 24136.2 125.775
N A B C	not exceeding 250mm average trick Grandvar material, files to make up levels, over 250mm average thick concerned and the second second second second concerned and 250mm average thick Compacting Ulliams, meerage thick Benifored concerned and the second second second and 250mm thick Handhord concerned and the second second second second and 250mm thick therein are selectoream to 8.5.4683, reference A322 Isolation pints; comprising of 250mm thick themes improved the second second second second second second second second second second se	290 207 2002 6 53 37 53 37 53 37 828 13 801	m3 m2 m3 m2 m2 m2 m2 m2 m2 m2 m2	642.13 636.73 60.76 6178.24 623.77 614.04 612.96 66.48 64.32 615.77 616.20 659.41	E12,217.70 E7,603.11 E1,521.52 E1,069.44 E1,259.81 E519.48 E239.76 E159.84 E130,57.56 E210.60 E47,587.41	100 100 20 47 50 14 14 22	300 300 35 70 75 23 23 23 34	500 500 45 110 100 32 32 46	7.95	2240 2240 2300 2300 180	0.0051 0.0051 0.198 0.198 0.74	0.0051 0.098 0.198 0.198	0.0051 0.0051 0.198 0.198	3312.96 2364.768 2732.4 24136.2 125.775	3312.96 2364.768 2732.4 24136.2	3312.96 2364.768 2732.4 24136.2 125.775
N A B C D E F	not exceeding 250mm average trick Grandvar material, files to make up levels, over 350mm average thick. Gonzalter material, files to make up levels, over associating 240mm average thick Compacting Ulliars, moreally Reinforced concrete entranil Lable, Level and the second trick the second trick of the elevels on exceeding 250mm hick and exceeding 250mm hick thannen improvement to 15.2.4.8.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1	290 207 2002 6 53 37 53 37 37 828 13	m3 m2 m3 m2 m3 m2 m2 m2 m2 m2 m2	£42.13 £36.73 £0.76 £178.24 £23.77 £14.04 £12.96 £6.48 £4.32 £15.77 £16.20	E12,217.70 E7,603.11 E1,521.52 E1,069.44 E1,259.81 E519.48 E686.88 E239.76 E159.84 E139.84 E130,057.56 E210.60	100 100 20 47 50 14	300 300 35 70 75 23 23	500 500 45 110 100 32 32	7.95 49.68 0.975	2240 2240 2300 2300 180 180 1700 2150	0.0051 0.051 0.198 0.198 0.74	0.0051 0.0051 0.198 0.74	0.0551 0.0551 0.198 0.198 0.74	3312.96 2364.768 2732.4 24136.2 125.775	3312.96 2364.768 2732.4 24136.2 125.775	3312.96 2364.768 2732.4 24136.2 125.775
N O A C C C F G H	not exceeding 230mm excegnitics Grandur material (init on have up level), each 200mm excegnitics and a second second second second second contract second (init 200mm), Contracting 100mm, excegnitics Consecting 120mm (init), Each 120mm (init), each 120mm), Benforder docuret external labb, select desk, not exceeding 230mm (init), Seel fabre, reinforcement to E3.4.481, reference A323 desk, not exceeding 230mm (init), Seel fabre, reinforcement to E3.4.481, reference A323 desk, not exceeding 230mm (init), Seel fabre, reinforcement to E3.4.481, reference A323 autometation being and pathet histo, reference A323 autometation being and pathet histo, autometation being and pathet histo, autometation being and pathet histo, autometation being 240mm (init), autometation being and pathet histo, autometation being and pathet autometation and pathet autometation and pathet autometation and pathet autometation and pathet autometation and autometation autometation and autometation autometation and autometation autometation and autometation autometation and autometation a	290 207 2002 6 53 37 53 37 53 37 828 13 801	m3 m2 m3 m2 m2 m2 m2 m2 m2 m2 m2	642.13 636.73 60.76 6178.24 623.77 614.04 612.96 66.48 64.32 615.77 616.20 659.41	E12,217.70 E7,603.11 E1,521.52 E1,069.44 E1,259.81 E519.48 E239.76 E159.84 E130,57.56 E210.60 E47,587.41	100 100 20 47 50 14 14 22	300 300 35 70 75 23 23 23 34	500 500 45 110 100 32 32 46	7.95 49.68 0.975	2240 2240 2300 2300 180 180 1700 2150	0.0051 0.051 0.198 0.198 0.74	0.0051 0.0051 0.198 0.74	0.0551 0.0551 0.198 0.198 0.74	3312.96 2364.768 2732.4 24136.2 125.775	3312.96 2364.768 2732.4 24136.2 125.775	3312.96 2364.768 2732.4 24136.2 125.775
N O A B C D E F G	not exceeding 250mm excent thick Grandram material finite to make up lowers, over 250mm excent pittal. Constant material finite, several thick Constant filling, several thick Constant filling, several thick Constant filling, several thick the constant filling, several thick the constant filling, several thick the constant filling of the constant filling of the constant constant filling of the decision of the constant filling of the accurate the the the constant filling of the decision of the constant filling of the constant filling approved the decision of the decision of the constant filling of the constant of the decision of the constant filling of the decision of the constant filling of the constant of the decision of the constant filling of the decision of the decision of the decision of the constant filling of the decision of the decision of the constant filling of the decision of the decision of the constant filling of the decision of the decision of the constant filling of the decision of the decision of the constant filling of the decision of the decision of the decision of the constant filling of the decision of the decision of the decisio	290 207 2002 6 53 37 53 37 53 37 37 828 13 801 113	m3 m3 m2 m3 m2 m2 m2 m2 m2 m2 m2 m2 m2 m2 m2 m2	642.13 f36.73 f0.76 f178.24 f23.77 f14.04 f12.96 f6.48 f4.32 f15.77 f16.20 f59.41 f16.20	E12,217.70 E7,603.11 E1,521.52 E1,069.44 E1,259.81 E519.48 E239.76 E139.84 E13,057.56 E210.60 E47,587.41 E1,830.60	100 100 20 47 50 14 14 22 22	300 300 35 70 75 23 23 34	500 500 45 110 100 32 32 46 46	7.95 49.68 0.975 64.08	2240 2240 2300 2300 180 1700 2150 1920	0.051 0.051 0.198 0.198 0.298 0.24	0.0051 0.0051 0.198 0.198 0.74 0.06 0.24	0.0551 0.0551 0.198 0.198 0.74 0.06	3312.96 2364.768 2732.4 24136.2 125.775 29528.064	3312.96 2364.768 2732.4 24136.2 125.775 29528.064	3312.96 2364.768 2732.4 24136.2 24136.2
N O A C C C F G H	not exceeding 200m everyetick Grandra material, failing to make up levels, Grandra material, failing to make up levels, Grandra material, failing to make up levels, Grandra material, failing to make up levels, Compacting Utilization everyetic to the Development of the second science of the Heard ord correct external skibs, regiser d beds, not exceeding 200m high Seef failer, exclorement to 8.2.4.48.9, residence of the second science of the Selection of the second science of the second science of the selection of the Selection of the second science of the second science of the selection of the Selection of the second science of the second science of the selection of the second science of the selection of the second science of the second science of the second science of the selection of the Selection of the science of the selection of selection of the science of the science of the selection of the science of the science of the science of	290 207 2002 6 53 37 53 37 53 37 37 828 13 801 113	m3 m3 m2 m3 m2 m2 m2 m2 m2 m2 m2 m2 m2 m2 m2 m2	642.13 f36.73 f0.76 f178.24 f23.77 f14.04 f12.96 f6.48 f4.32 f15.77 f16.20 f59.41 f16.20	E12,217.70 E7,603.11 E1,521.52 E1,069.44 E1,259.81 E519.48 E239.76 E139.84 E13,057.56 E210.60 E47,587.41 E1,830.60	100 100 20 47 50 14 14 22 22	300 300 35 70 75 23 23 34	500 500 45 110 100 32 32 46 46	7.95 49.68 0.975 64.08	2240 2240 2300 2300 180 1700 2150 1920	0.051 0.051 0.198 0.198 0.298 0.24	0.0051 0.0051 0.198 0.198 0.74 0.06 0.24	0.0551 0.0551 0.198 0.198 0.74 0.06	3312.96 2364.768 2732.4 24136.2 125.775 29528.064	3312.96 2364.768 2732.4 24136.2 125.775 29528.064	3312.96 2364.768 2732.4 24136.2 24136.2
N O A C C C F G H	not exceeding 230mm excegnitics Grandur material (init on have up level), each of the second second second second constraint exceeding 240mm excegnitics Consecting 240mm exception 240mm exception 240mm exception 240mm exception 240mm exception 240mm except	290 207 2002 6 53 37 53 37 53 37 37 828 13 801 113 85	m3 m3 m2 m3 m2 m2 m2 m2 m2 m2 m2 m2 m2 m2 m2 m2	642.13 f36.73 f0.76 f178.24 f23.77 f14.04 f12.96 f6.48 f4.32 f15.77 f16.20 f59.41 f16.20	E12,217.70 E7,603.11 E1,521.52 E1,069.44 E1,259.81 E519.48 E239.76 E139.84 E13,057.56 E210.60 E47,587.41 E1,830.60	100 100 20 47 50 14 14 22 22	300 300 35 70 75 23 23 34	500 500 45 110 100 32 32 46 46	7.95 49.68 0.975 64.08	2240 2240 2300 2300 180 1700 2150 1920	0.051 0.051 0.198 0.198 0.298 0.24	0.0051 0.0051 0.198 0.198 0.74 0.06 0.24	0.0551 0.0551 0.198 0.198 0.74 0.06	3312.96 2364.768 2732.4 24136.2 125.775 29528.064	3312.96 2364.768 2732.4 24136.2 125.775 29528.064	3312.96 2364.768 2732.4 24136.2 24136.2
N O A B C D E F G H A	not exceeding 250mm excent prick Grandram material (initial roma karu pilewich, over 250mm excent prick), over 250mm excent prick Compacting filling, generally Reinforced concrete estimal Labb, teach or exceeding 250mm thick and exceeding 250mm thick of the second and the second second second 250mm thick second second second second second second second second seco	290 207 2002 6 53 37 53 37 53 37 37 828 13 801 113 85	m3 m2 m3 m2 m2 m2 m2 m2 m2 m2 m2 m2 m2 m2	642.13 626.73 60.76 6178.24 623.77 614.04 612.96 66.48 64.32 615.77 616.20 659.41 616.20 659.41	£12,217.70 £7,603.11 £1,521.52 £1,069.44 £1,259.81 £519.48 £239.76 £159.84 £13,057.56 £120.60 £47,587.41 £1,830.60 £5,049.85	100 100 20 47 50 14 14 22 22 22	300 300 35 70 75 23 23 34 34	500 500 45 110 100 32 32 46 46 46	7.95 49.68 0.975 64.08 6.8	2240 2240 2300 2300 180 1700 2150 1920	0.051 0.053 0.198 0.198 0.04 0.05 0.05 0.05 0.05 0.05 0.05 0.05	0.0051 0.0051 0.198 0.198 0.74 0.06 0.24 0.24	0.0551 0.0551 0.198 0.198 0.74 0.06 0.24	3312.96 2364.768 2732.4 24136.2 125.775 29528.064 3133.44	3312.96 2364.768 2732.4 24136.2 125.775 29528.064 3133.44	3312.96 2364.768 2732.4 24136.2 225.775 29528.064 3133.44
N 0 8 0 2 7 6 4 8 8	not excerding 210mm everage trick Grandur material (ing to make up jewick, over 320mm average thick over 320mm average thick Compacting Ulling, mercelly Relative Compacting Ulling, and the Compacting Ulling, mercelly Relative Compacting Ulling, and the device of the second second second second 2000 second second second second 2000 second second second second second 2000 second second second second second second second 2000 second second second	290 207 2002 6 53 37 53 37 53 37 828 13 801 113 85 5	m3 m2 m3 m2 m2 m2 m2 m2 m2 m2 m2 m2 m2 m2	642.13 626.73 60.76 6178.34 612.96 66.48 64.32 615.77 616.20 659.41 616.20 659.41 616.20	£12,217.70 £7,603.11 £1,521.52 £1,069.44 £1,259.81 £519.48 £239.76 £159.84 £13,057.56 £120.60 £47,587.41 £1,830.60 £5,049.85	100 100 20 47 50 14 14 22 22 22	300 300 35 70 75 23 23 34 34	500 500 45 110 100 32 32 46 46 46	7.95 49.68 0.975 64.08 6.8	2240 2240 2300 2300 180 1700 2150 1920	0.051 0.053 0.198 0.198 0.04 0.05 0.05 0.05 0.05 0.05 0.05 0.05	0.0051 0.0051 0.198 0.198 0.74 0.06 0.24 0.24	0.0551 0.0551 0.198 0.198 0.74 0.06 0.24	3312.96 2364.768 2732.4 24136.2 125.775 29528.064 3133.44	3312.96 2364.768 2732.4 24136.2 125.775 29528.064 3133.44	3312.96 2364.768 2732.4 24136.2 225.775 29528.064 3133.44
N O A B C D E F G H A	not exceeding 210mm severage trick Grandvar matericking from have upper kerk- over 200mm severage thick. Over 200mm severage thick Compacting Ulling, meensally Relative Context enternal Lable, ender Compacting Ulling, meensally Relative Context enternal Lable, ender Auflichter Context enternal Lable, ender Steel fahrer, einforzement to B.S. 448, reference A322 Lindbilding Distis, comprising of 23mm thick harmen impergression 22 models Steel fahrer, einforzement to B.S. 448, reference A322 Lindbilding Distis, comprising of 23mm thick harmen impergression 22 models and 13 mm thick Lable Automet in the Steel Steel Context presently context and the Steel Steel Steel Context presently context and the Steel Steel Context presently context and the Steel Steel Context presently context and present pre- ting. Rever to fails: Gomen thick lables parvises and parking bary, et at core for parking delineationed of the steel and parking bary, et at core for parking delineationed of the steel and parking bary, et at core for parking delineationed of the steel and parking bary, et at core for parking delineationed of the steel and parking bary. Steel Steel Context and parking bary, et at core for parking delineationed of the steel or for fails.	290 207 2002 6 53 37 53 37 53 37 828 13 801 113 85 5	m3 m2 m3 m2 m2 m2 m2 m2 m2 m2 m2 m2 m2 m2 m2	642.13 626.73 60.76 6178.34 612.96 66.48 64.32 615.77 616.20 659.41 616.20 659.41 616.20	£12,217.70 £7,603.11 £1,503.12 £1,069.44 £1,259.81 £519.48 £239.76 £159.84 £13,057.56 £110.60 £47,587.41 £1,830.60 £5,049.85 £324.05	100 100 20 47 50 14 14 22 22 22 5	300 300 35 70 75 23 23 34 34 34	500 500 45 110 100 32 32 46 46 46 15	7.95 49.68 0.975 64.08 6.8 0.5	2240 2240 2300 2300 180 1920 1920 1920	0.051 0.051 0.198 0.198 0.74 0.74 0.24 0.24 0.24	0.0051 0.0051 0.198 0.198 0.198 0.274 0.06 0.24 0.24	0.0051 0.0051 0.198 0.198 0.74 0.74 0.24 0.24 0.24	3312.96 2364.768 2732.4 24136.2 125.775 29528.064 3133.44 1008	3312.96 2364.768 2732.4 24136.2 125.775 29528.064 3133.44 1008	3312.96 2364.768 2732.4 24136.2 225.775 29528.064 3133.44 1008
N 0 8 0 2 7 6 4 8 8	not accerding 200m every entrick Grandra material, failing to make up levels, construction material, failing to make up levels, construction every failing to make up levels, construction every failing to make up levels, construction of the second state of the Reinforced concrete external site, helper desks, not accerding 200m help levels, not accerding 200m help levels, not accerding 200m help second concrete enternal site, helper desks, not accerding 200m help levels, not accerding 200m help accerding 200m di und blondig generally nickeding 200m di und blondig generally material accerding accerding accerding levels and the 1000 page 700 accerding levels and the levels of not including 200m di und blondig generally material accerding accerding distant help accerding to reach and particip bays, catt accerd for particle relation to a summa proveet standard 2000 sub 200 accerding accerding distant help accerding particip acterding accerding accerding accerding accerding	290 2007 2002 6 53 37 53 37 53 37 828 13 801 113 85 5 28	m3 m2 m3 m m2 m2 m2 m2 m2 m2 m2 m2 m2 m2 m2 m2 m	642.13 136.73 10.76 178.34 123.77 114.04 123.77 114.04 123.77 114.04 123.77 114.04 115.77 116.20 159.41 116.20 159.41 116.20 159.41 116.20 116.20 117.20	112,217.70 127,201.31 127,251.32 12,351.32 12,351.32 12,351.34 12,357.34 12,357.3	100 100 20 47 50 14 14 22 22 22 5 5	300 300 35 70 75 23 34 34 34 34 34	500 500 45 110 100 32 46 46 46 15 46	7.95 49.68 0.975 64.08 6.8 0.5 1.4	2240 2240 2300 2300 180 1900 1920 2880 2880	0.051 0.051 0.198 0.198 0.74 0.74 0.24 0.24	0.0051 0.0051 0.198 0.198 0.74 0.24 0.24	0.0051 0.0051 0.198 0.198 0.74 0.74 0.24 0.24 0.24	3112.96 2204.768 2722.4 24136.2 2155.775 29528.064 3133.44 008 645.12	3322.96 2364.768 24136.2 24136.2 25527.054 3133.44 1008 645.12	3312.96 2364.768 2732.4 24136.2 225.775 23528.064 3133.44 1008 645.12
N 0 8 0 2 7 6 4 8 8	not exceeding 210mm excent thick Grandra material fills (to make up level), each 200mm excent plats), each 200mm excent plats, each 200mm plats), each 200mm excent plats, each 200mm plats of each of each 200mm plats), each 200mm excent plats, each 200mm plats of each 200mm excent plats, each 200mm plats, each 200mm plats, each 200mm plats), each 200mm plats, each 200mm plats, each 200mm plats, each each 200mm plats, each 200mm plats, each each 200mm plats, each 200mm plats, each each each 200mm plats, each 200mm plats, each each each 200mm plats, each 200mm plats, each each each 200mm plats, each 200mm plats, each 200mm plats, each 200mm plats	290 2007 2002 6 53 37 53 37 53 37 828 13 801 113 85 5 28	m3 m2 m3 m2 m2 m2 m2 m2 m2 m2 m2 m2 m2 m2 m2	642.13 626.73 60.76 6178.34 612.96 66.48 64.32 615.77 616.20 659.41 616.20 659.41 616.20	£12,217.70 £7,603.11 £1,503.12 £1,069.44 £1,259.81 £519.48 £239.76 £159.84 £13,057.56 £110.60 £47,587.41 £1,830.60 £5,049.85 £324.05	100 100 20 47 50 14 14 22 22 22 5	300 300 35 70 75 23 23 34 34 34	500 500 45 110 100 32 32 46 46 46 15	7.95 49.68 0.975 64.08 6.8 0.5	2240 2240 2300 2300 180 1920 1920 1920	0.051 0.051 0.198 0.198 0.74 0.74 0.24 0.24 0.24	0.0051 0.0051 0.198 0.198 0.198 0.274 0.06 0.24 0.24	0.0051 0.0051 0.198 0.198 0.74 0.74 0.24 0.24 0.24	3312.96 2364.768 2732.4 24136.2 125.775 29528.064 3133.44 1008	3312.96 2364.768 2732.4 24136.2 125.775 29528.064 3133.44 1008	3312.96 2364.768 2732.4 24136.2 225.775 29528.064 3133.44 1008
N 0 4 8 7 7 6 4 8 8 8 7 6 4 8 8 7 8 7 8 8 8 8 8 8 8 8 8 8 8 8 8 8	not exceeding 200m excengencial Grandram material (initial to make up lower), over 200m excenge that, over 200m excenge that, Constant material (initial to make up lower), over exceeding 200m excended 200m excended 200m bits and excended 200m bits over excended 200m bit	290 2007 2002 6 53 37 53 37 53 37 828 13 801 113 85 5 28	m3 m2 m3 m m2 m2 m2 m2 m2 m2 m2 m2 m2 m2 m2 m2 m	642.13 136.73 10.76 178.34 123.77 114.04 123.77 114.04 123.77 114.04 123.77 114.04 115.77 116.20 159.41 116.20 159.41 116.20 159.41 116.20 116.20 117.20	112,217.70 127,201.31 127,251.32 12,351.32 12,351.32 12,351.34 12,357.34 12,357.3	100 100 20 47 50 14 14 22 22 22 5 5	300 300 35 70 75 23 34 34 34 34 34	500 500 45 110 100 32 46 46 46 15 46	7.95 49.68 0.975 64.08 6.8 0.5 1.4	2240 2240 2300 2300 180 1900 1920 2880 2880	0.051 0.051 0.198 0.198 0.74 0.74 0.24 0.24	0.0051 0.0051 0.198 0.198 0.74 0.24 0.24	0.0051 0.0051 0.198 0.198 0.74 0.74 0.24 0.24 0.24	3112.96 2204.768 2722.4 24136.2 2155.775 29528.064 3133.44 008 645.12	3322.96 2364.768 24136.2 24136.2 25527.054 3133.44 1008 645.12	3312.96 2364.768 2732.4 24136.2 225.775 23528.064 3133.44 1008 645.12
N 0 4 8 7 7 6 4 8 8 8 7 6 4 8 8 7 8 7 8 8 8 8 8 8 8 8 8 8 8 8 8 8	not exceeding 210mm severage trick Grandvar matericking from have upper here, over 320mm severage their. Constant matericking files to make upper here, over 320mm severage their Compacting Ulliams, meerage their Compacting Ulliams merages their Compacting Ulliams their Ambitrower Converse enternal Lable, and enterforces Converse enternal Lable, and See Fahrer enter their Converse their Lable and See Fahrer enter their Lable and their their See Fahrer enternal Lable, and their See Fahrer enternal Lable, and their See Fahrer enternal Lable, and their See Fahrer enternal Lable. Their their Lable and their their their their their their see Fahrer enternal Lable and their th	290 2007 6 53 37 53 37 37 828 13 801 113 85 5 28 91	m3 m2 m3 m m2 m2 m2 m2 m2 m2 m2 m2 m2 m2 m2 m2 m	642.13 136.73 10.76 178.34 123.77 114.04 123.77 114.04 123.77 114.04 123.77 114.04 115.77 116.20 159.41 116.20 159.41 116.20 159.41 116.20 116.20 117.20	112,217.70 127,201.31 127,251.32 12,351.32 12,351.32 12,351.34 12,357.34 12,357.3	100 100 20 47 50 14 14 22 22 22 5 5	300 300 35 70 75 23 34 34 34 34 34	500 500 45 110 100 32 46 46 46 15 46	7.95 49.68 0.975 64.08 6.8 0.5 1.4	2240 2240 2300 2300 180 1900 1920 2880 2880	0.051 0.051 0.198 0.198 0.74 0.74 0.24 0.24	0.0051 0.0051 0.198 0.198 0.74 0.24 0.24	0.0051 0.0051 0.198 0.198 0.74 0.74 0.24 0.24 0.24	3112.96 2204.768 2722.4 24136.2 2155.775 29528.064 3133.44 008 645.12	3322.96 2364.768 24136.2 24136.2 25527.054 3133.44 1008 645.12	3312.96 2364.768 2732.4 24136.2 225.775 23528.064 3133.44 1008 645.12
N 0 4 8 7 7 6 4 8 8 8 7 6 4 8 8 7 8 7 8 8 8 8 8 8 8 8 8 8 8 8 8 8	not exceeding 210mm excent prick Grandra material (initia to make up level), econ 200mm excent pricks, econ 200mm excent pricks, econ 200mm excent p	290 2007 6 53 37 53 37 37 828 13 801 113 85 5 28 91	m3 m3 m2 m3 m2 m2 m2 m2 m2 m2 m2 m2 m2 m2 m2	642.13 136.73 10.76 178.34 123.77 114.04 122.96 124.04 122.96 125.94 115.77 125.941 125.94	112,217.76 17,50,313 12,008.44 12,229.81 13,534.48 12,239.76 12,397.40 12,397.41 12,307.46 12,307.46 12,307.46 14,353.06 14,423.51 14,423.51	100 100 20 47 50 14 14 22 22 22 5 22 22 22	300 300 35 70 23 23 34 34 34 34 34	500 500 45 110 100 32 32 46 46 46 15 46	7.95 49.68 0.975 64.08 6.8 0.5 1.4 4.55	2240 2240 2300 2300 180 1920 1920 2880 1920	0.051 0.051 0.198 0.19 0.74 0.24 0.24 0.24	0.0551 0.0551 0.198 0.198 0.74 0.24 0.24 0.24 0.24	0.0051 0.0051 0.198 0.198 0.74 0.74 0.24 0.24 0.24	3312.36 2364.768 21364.768 24136.2 24136.2 24136.2 24136.2 24136.2 24136.2 24136.2 24136.2 24136.2 2056.64	332.96 2364.768 24136.2 24136.2 24136.2 25522.664 3333.44 3038 645.12 2096.64	3312.96 2364.768 2732.4 24136.2 125.775 23528.064 3133.44 1008 645.12 2096.64
N 0 4 8 7 6 7 4 8 8 7 6 4 8 8 7 7 7 7 8 7 8 7 8 7 8 7 8 7 8 7 8	not exceeding 200m everage trick Grandram ratering files (make up levels, over 200m average thick over 200m average thick Constant ratering files, generally Relative Constant (Relative Relative Relative Constant) (Relative Relative Relative Constant) (Relative Relative Constant) (Relative Relative Constant) (Relative Relative Constant) (Relative Relative Constant) (Relative Relative Constant) (Relative Relative Constant) (Relative Constant) (Relative Relative Relative Constant) (Relative Relative Constant) (Relative Relative Constant) (Relative R	290 2007 2002 6 53 37 53 37 828 13 801 113 85 5 28 91 91 64 2	m3 m3 m2 m3 m2 m2 m2 m2 m2 m2 m2 m2 m2 m2 m2	642.13 126.73 10.76 1178.24 123.77 14.04 14.04 14.25 14.04 14.25 14.04 14.25 15.941 1648.61 1648.61 1648.61	L12,17.70 F15(51,11) E1,08.94 E1,259.81 G193.94 C193.94 C193.94 C193.94 E1,057.95 E1,060 E1,060,85	100 100 100 47 50 14 14 22 22 22 22 22 22 22 22 22	300 300 35 70 23 23 34 34 34 34 34 34	500 500 45 110 100 32 32 46 46 46 46 46	7.95 49.68 0.975 64.08 6.8 0.5 1.4 4.55	2240 2240 2300 2300 180 1920 1920 2880 1920	0.051 0.051 0.198 0.19 0.74 0.24 0.24 0.24	0.0551 0.0551 0.198 0.198 0.74 0.24 0.24 0.24 0.24	0.0051 0.0051 0.198 0.198 0.74 0.74 0.24 0.24 0.24	3312.36 2364.768 21364.768 24136.2 24136.2 24136.2 24136.2 24136.2 24136.2 24136.2 24136.2 24136.2 2056.64	332.96 2364.768 24136.2 24136.2 24136.2 25522.664 3333.44 3038 645.12 2096.64	3312.96 2364.768 2732.4 24136.2 125.775 23528.064 3133.44 1008 645.12 2096.64
N 0 4 8 7 6 7 4 8 8 7 6 4 8 8 7 7 7 7 8 7 8 7 8 7 8 7 8 7 8 7 8	not excerding 210mm everage trick Grandram stratering files to make up levels, over 320mm average thick. Concasting 10mm average thick Concasting 10mm average thick Concasting 10mm thick and the strategies and the strategies of the concasting 210mm thick and the strategies 200mm thick the facts, our arcsenized 2200mm thick the facts our arcsenized 200mm thick the facts and the facts our facts the facts our the facts our facts. Committee 200mm thick the facts and the facts our facts our the facts our facts. Committee 200mm thick the facts and the facts our facts our the facts our facts. Committee 200mm the facts our the facts our facts. Committee 200mm the facts our the facts our facts our facts our facts our the facts our facts. Committee 200mm the facts our the facts our facts our facts our facts our the facts our facts our facts our facts our the facts our facts our facts our the facts our facts our facts our the facts our facts	290 2007 2002 6 53 37 53 37 828 13 801 113 85 5 28 91 64 2 1	m3 m3 m2 m3 m2 m2 m2 m2 m2 m2 m2 m2 m2 m2 m2 m2 m2	642.13 156.73 10.78.74 12.25.6 12.178.74 12.25.6 12.17.7 12.15.77 12	L12,17.70 (7,50,113) (1,08,44 (1,259,34 (1,08,48 (1,259,34 (1,09,34 (100 100 100 47 50 14 14 22 22 22 22 22 22 22 22 22 22 22 22 22	300 300 30 35 70 23 23 34 34 34 34 34 34	500 500 45 110 100 32 46 46 46 46 46 46	7.95 49.68 0.975 64.08 6.8 0.5 1.4 4.55	2240 2240 2300 2300 180 1920 1920 2880 1920	0.051 0.051 0.198 0.19 0.74 0.24 0.24 0.24	0.0551 0.0551 0.198 0.198 0.74 0.24 0.24 0.24 0.24	0.0051 0.0051 0.198 0.198 0.74 0.74 0.24 0.24 0.24	3312.36 2364.768 21364.768 24136.2 24136.2 24136.2 24136.2 24136.2 24136.2 24136.2 24136.2 24136.2 2056.64	332.96 2364.768 24136.2 24136.2 24136.2 25522.664 3333.44 3038 645.12 2096.64	3312.96 2364.768 2732.4 24136.2 125.775 23528.064 3133.44 1008 645.12 2096.64
N 0 4 5 6 7 6 8 8 6 8 7 7 7	not excerding 200m everage tick Grandra material, filing on has up levels, Grandra material, filing on has up levels, Grandra material, filing on has up levels, Constant material, filing on has up levels, Constant filing, parserally Reinforced concrete external lab.edge d beck, not excerding 200m high set labor, on the carding 200m high set labor, on the carding 200m high set labor, not excertain 2	290 2007 2002 6 53 37 53 37 828 13 801 113 85 5 28 91 64 2 2 1 1	m3 m3 m2 m3 m2 m2 m2 m2 m2 m2 m2 m2 m2 m2 m2 m2 m2	642.13 616.73 6178.34 612.84 612.96 644.64 644.61 644.6	112,217.70 17,50,313 11,004.41 12,529.81 141,004.41 141,259.81 141,007.36 141,007.3	100 100 20 47 50 22 22 22 22 22 22 22 22	300 300 30 35 70 23 23 34 34 34 34 34 34 34	500 500 45 110 100 32 46 46 46 46 46 46 46	7.95 49.68 0.975 64.08 6.8 0.5 1.4 4.55	2240 2240 2300 2300 180 1920 1920 2880 1920	0.051 0.051 0.198 0.19 0.74 0.24 0.24 0.24	0.0551 0.0551 0.198 0.198 0.74 0.24 0.24 0.24 0.24	0.0051 0.0051 0.198 0.198 0.74 0.74 0.24 0.24 0.24	3312.36 2364.768 21364.768 24136.2 24136.2 24136.2 24136.2 24136.2 24136.2 24136.2 24136.2 24136.2 2056.64	332.96 2364.768 24136.2 24136.2 24136.2 25522.664 3333.44 3038 645.12 2096.64	3312.96 2364.768 2732.4 24136.2 125.775 23528.064 3133.44 1008 645.12 2096.64
N 0 4 5 7 6 7 8 6 7 8 6 7 6	not exceeding 200m excengencia Grandra material (inter on has cup level), consultant material (inter on has cup level), consultant material (inter on has cup level), consultant (inter on has marging thick Consecting 200m parts) and the consection of the consection of the hashing of the consection of the consection of the consection of the consection of the consec- tion of the consection of the consection of the section of the consection of the section of the section of the consection of the section of the section of the section of the	290 2007 2002 6 53 37 53 37 828 33 37 828 33 801 113 85 5 28 91 64 2 2 1 1 1 3518	m3 m3 m2 m3 m2 m2 m2 m2 m2 m2 m2 m2 m2 m2 m2 m2 m2	442.13 16.73 10.782.44 123.77 114.04 112.96 16.48 14.32 15.941 16.620 15.941 16.620 15.941 16.620 15.941 16.6481 16.4861	L12,17.76 F,55,11,15 L,0,04,44 H,2,29,81 L,1,04,44 L,2,29,81 L,1,04,74 L,2,29,81 L,1,04,74 L,2,29,74 L,2,20,74	100 100 20 47 50 22 22 22 22 22 22 22 22	300 300 30 35 70 23 23 34 34 34 34 34 34 34	500 500 45 110 100 32 46 46 46 46 46 46 46	7.95 49.68 0.975 64.08 6.8 0.5 1.4 4.55	2240 2240 2300 2300 180 1920 1920 2880 1920	0.051 0.051 0.198 0.19 0.74 0.24 0.24 0.24	0.0551 0.0551 0.198 0.198 0.74 0.24 0.24 0.24 0.24	0.0051 0.0051 0.198 0.198 0.74 0.74 0.24 0.24 0.24	3312.36 2364.768 21364.768 24136.2 24136.2 24136.2 24136.2 24136.2 24136.2 24136.2 24136.2 24136.2 2056.64	332.96 2364.768 24136.2 24136.2 24136.2 25522.664 3333.44 3038 645.12 2096.64	3312.96 2364.768 2732.4 24136.2 125.775 23528.064 3133.44 1008 645.12 2096.64
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N O A B C D E F G H A B C D E F G H 1 J A B C D E F G H A B C D E F G H A B C D E F G H A B C D E F G H A B C D E F G H A A B C D E F G H A A B C D E F G H A A B C D E F G H A A B B C D E F G H A A B B C D E F G H A A B B C D D E F G H A A B B C D D E F A A A A A A A A A A A A A	not excerning 200m serveg thick Grandra material (init on have up level), our 200m serveg thick Compacting 100m serveg thick Seet fails, enclored and the serveg thick Seet fails, enclored and the serveg thick Compacting 100m serveg thick Seet fails, enclored and the serveg thick Seet fails, enclored and the serveg thick Seet fails, enclored and the serveg the serveg the serveg thick Serveg the serveg the serveg the serveg the serveg the serveg the serveg the serveg the serveg the serveg the ser	290 2007 2002 6 53 37 53 37 828 13 801 113 85 28 91 64 2 1 1 518 518 518 518 518 518 51	m3 m3 m3 m3 m3 m2 m2 m2 m2 m2 m2 m2 m2 m2 m2 m2 m2 m2	642.13 642.13 60.76 6178.24 623.77 614.04 64.42 64.42 659.41 64.62 659.41 648.61 6	L12,217.76 (15,51,51,51,51,51,51,51,51,51,51,51,51,5	100 100 20 47 50 22 22 22 22 22 22 22 22	300 300 30 35 70 23 23 34 34 34 34 34 34 34	500 500 45 110 100 32 46 46 46 46 46 46 46	7.95 49.68 0.975 64.08 6.8 0.5 1.4 4.55	2240 2240 2300 2300 180 1920 1920 2880 1920	0.051 0.051 0.198 0.19 0.74 0.24 0.24 0.24	0.0551 0.0551 0.198 0.198 0.74 0.24 0.24 0.24 0.24	0.0051 0.0051 0.198 0.198 0.74 0.74 0.24 0.24 0.24	3312.36 2364.768 21364.768 24136.2 24136.2 24136.2 24136.2 24136.2 24136.2 24136.2 24136.2 24136.2 2056.64	332.96 2364.768 24136.2 24136.2 24136.2 25522.664 3333.44 3038 645.12 2096.64	3312.96 2364.768 2732.4 24136.2 125.775 23528.064 3133.44 1008 645.12 2096.64
N O A B C D E F G H A B C D E F G H 1 J A B C D E F G H A B C D E F G H A B C D E F G H A B C D E F G H A B C D E F G H A A B C D E F G H A A B C D E F G H A A B C D E F G H A A B B C D E F G H A A B B C D E F G H A A B B C D D E F G H A A B B C D D E F A A A A A A A A A A A A A	not excerning 200m every entities (endure material, filling makes up levels, construction of the second second second construction of the second second second construction of the second second second second second second second second second second second second second secon	290 2007 2002 6 53 37 53 37 828 13 801 113 85 28 91 64 2 1 1 518 518 518 518 518 518 51	m3 m3 m2 m2 m2 m2 m2 m2 m2 m2 m2 m2 m2 m2 m2	42.13 42.13 42.57 42.78,24 42.377 41.404 42.26 4.422 4.59,41 41.577 41.620 4.99,41 4.48,61 4.49,72	L12,217.70 F7,60,114 F7,60,144 F7,60,145 F7,60,145 F7,50,145	100 100 20 47 50 22 22 22 22 22 22 22 22	300 300 30 35 70 23 23 34 34 34 34 34 34 34	500 500 45 110 100 32 46 46 46 46 46 46 46	7.95 49.68 0.975 64.08 6.8 0.5 1.4 4.55	2240 2240 2300 2300 180 1920 1920 2880 1920	0.051 0.051 0.198 0.19 0.74 0.24 0.24 0.24	0.0551 0.0551 0.198 0.198 0.74 0.24 0.24 0.24 0.24	0.0051 0.0051 0.198 0.198 0.74 0.74 0.24 0.24 0.24	3312.36 2364.768 21364.768 24136.2 24136.2 24136.2 24136.2 24136.2 24136.2 24136.2 24136.2 24136.2 2056.64	332.96 2364.768 24136.2 24136.2 24136.2 25522.664 3333.44 3038 645.12 2096.64	3312.96 2364.768 2732.4 24136.2 125.775 23528.064 3133.44 1008 645.12 2096.64
N O A B C D E F G H A B C D E F G H I J A B C D E F G H A B C D E F G H A B C D E F G H A B C D E F G H A D E F G G H A D E F S O D E F S O D E F S O D E S O S O D E S O D E S O D E S O D E S O D E S O D E S O D E S O D E S O D E S O D E S O D E S O D E S O D E S O D E S O D E S O D E S O D E S O S O D E S O S O S O D E S O S O S O S O S O S O S O S O S O S	not exceeding 200m exceptibile Grandra material (inter naise up level), eGaudra material (inter naise up level), eGaudra material (inter naise up level), eGaudra material (inter naise), eGaudra (int	290 2007 2002 6 53 37 53 37 828 13 801 113 85 28 91 64 2 1 1 518 518 518 518 518 518 51	m3 m3 m3 m3 m3 m2 m2 m2 m2 m2 m2 m2 m2 m2 m2 m2 m2 m2	642.13 642.13 60.76 6178.24 623.77 614.04 64.42 64.42 659.41 64.62 659.41 648.61 6	L12,217.76 (15,51,51,51,51,51,51,51,51,51,51,51,51,5	100 100 20 47 50 22 22 22 22 22 22 22 22	300 300 30 35 70 23 23 34 34 34 34 34 34 34	500 500 45 110 100 32 46 46 46 46 46 46 46	7.95 49.68 0.975 64.08 6.8 0.5 1.4 4.55	2240 2240 2300 2300 180 1920 1920 2880 1920	0.051 0.051 0.198 0.19 0.74 0.24 0.24 0.24	0.0551 0.0551 0.198 0.198 0.74 0.24 0.24 0.24 0.24	0.0051 0.0051 0.198 0.198 0.74 0.74 0.24 0.24 0.24	3312.36 2364.768 21364.768 24136.2 24136.2 24136.2 24136.2 24136.2 24136.2 24136.2 24136.2 24136.2 2056.64	332.96 2364.768 24136.2 24136.2 24136.2 25522.664 3333.44 3038 645.12 2096.64	3312.96 2364.768 2732.4 24136.2 125.775 23528.064 3133.44 1008 645.12 2096.64
N O A B C D E F G H A B C D E F G H I J A B C D E F G H A B C D E F G H A B C D E F G H A B C D E F G H A D E F G G H A D E F S O D E F S O D E F S O D E S O S O D E S O D E S O D E S O D E S O D E S O D E S O D E S O D E S O D E S O D E S O D E S O D E S O D E S O D E S O D E S O D E S O D E S O S O D E S O S O S O D E S O S O S O S O S O S O S O S O S O S	not excerning 200m serveg thick Grandra material (init on have up level), ever 300m serveg thick. Concerning 200m serveg thick Concerning 200m serveg thick Served thick served concerning 200m serveg the day, or a creating 200m serveg the day, or a creating 200m serveg the day, or a creating 200m serveg the day of a creating 20	290 2007 2002 6 3 37 37 828 83 37 37 828 831 13 851 851 851 8 518 518 518 518 518 518 5	m3 m3 m3 m3 m3 m2 m2 m2 m2 m2 m2 m2 m2 m2 m2 m2 m2 m2	642.13 642.13 60.76 6178.24 623.77 614.04 64.42 64.42 659.41 64.62 659.41 648.61 6	L12,217.76 (15,51,51,51,51,51,51,51,51,51,51,51,51,5	100 100 20 47 50 22 22 22 22 22 22 22 22	300 300 30 35 70 23 23 34 34 34 34 34 34 34	500 500 45 110 100 32 46 46 46 46 46 46 46	7.95 49.68 0.975 64.08 6.8 0.5 1.4 4.55	2240 2240 2300 2300 180 1920 1920 2880 1920	0.051 0.051 0.198 0.19 0.74 0.24 0.24 0.24	0.0551 0.0551 0.198 0.198 0.74 0.24 0.24 0.24 0.24	0.0051 0.0051 0.198 0.198 0.74 0.74 0.24 0.24 0.24	3312.36 2364.768 21364.768 24136.2 24136.2 24136.2 24136.2 24136.2 24136.2 24136.2 24136.2 24136.2 2056.64	332.96 2364.768 24136.2 24136.2 24136.2 25522.664 3333.44 3038 645.12 2096.64	3312.96 2364.768 2732.4 24136.2 125.775 23528.064 3133.44 1008 645.12 2096.64

н	Softwood close boarded fencing, comprising of softwood feather edge														
	boards 100 x 25mm; three 75 x 50mm rails and 100 x 100mm posts at 2.40m centres;														
I.	timber gravel boards; 1800mm high Softwood close boarded fencing,	17	m	£34.72	£590.24	11	19	31							
	comprising of softwood feather edge boards 100 x 25mm; three 75 x 50mm rails														
	and 100 x 100mm posts at 2.40m centres; timber gravel boards; 2000mm high,	43	m	£38.96	£1,675.28	11	19	31							
1	Close boarded Fencing, single leaf gates, complete with additional posts and														
A	ironmongery, 1800mm high Set of approved cast iron gates; including	5	Nr	£197.49	£987.45	17	27	40 steel fencing							
	posts, foundations, ironmongery and the like; assumed to be 1200mm high;														
в	nominally 1800mm wide Set of approved cast iron gates; including	1	Nr	£2,000.00	£2,000.00	17	27	40 steel fencing							
	posts, foundations, ironmongery and the like; assumed to be 1200mm high; gate														
	nominally 1200mm wide, with two sets of fencing to match nominally 300mm long	1	Nr	£1,200.00	£1,200.00	17	27	40							
с	external seat, assumed to be of timber construction on galvanised steel frame;														
A	generally All works identified within the appended	1	Nr	£662.04	£662.04	10	15	20 personal estimation							
	Drainage Standard Bill; which includes for all attendances, site surveys and														
в	investigations, generally Possible repairs to the existing drainage	1	ITEM	£216.05	£216.05	1	1	1							
	lines including revamping existing manholes to suit, generally	1 1	ITEM	£216.05	£216.05	1	1	1							
C D	rock concrete	0	m3 m3	£0.00 £0.00	£0.00 £0.00										
F	reinforced concrete brickwork, blockwork or stonework	0	m3 m3	£0.00 £0.00	£0.00 £0.00										
G	excavating soft spots; disposal of surplus material and filling with approved fill to														
	formation level of trench - to be priced as rate only per cubic metre	0	m3	£0.00	£0.00										
н	next existing service - to be priced as rate only per metre	0	m3	£0.00	£0.00										
i.	around existing service crossing excavation to be priced as rate only per crossing	0	m3	£0.00	£0.00										
A	Excavating trenches for drainage pipes; complete with the disposal of surplus														
	materials; for pipes; not exceeding 200mm nominal diameter, average depth 500 to														
в	750mm Excavating trenches for drainage pipes;	114	m	£32.41	£3,694.74	41	63	84 14.25	2050	0.024	0.024	0.024	701.1	701.1	701.1
	complete with the disposal of surplus materials; beds and surrounds, to suit														
с	100mm diameter pipe Below ground drainage pipe, approved PVC	114	m	£25.93	£2,956.02	41	63	82 0.57	2050	0.024	0.024	0.024	28.044	28.044	28.044
D	/ Clay pipes, 100mm nominal size Below ground drainage pipe, bends,	114 38	m Nr	£11.88 £30.25	£1,354.32 £1,149.50	35 35	53 53	70 0.1145472 70	37	3.23	3.23	3.23	13.6895359	13.6895359	13.6895359
E	Below ground drainage pipe, rocker pipes, 100mm; to manholes	19	Nr	£30.25	£574.75	35	53	70							
F	Below ground drainage pipe, rest bends, 100mm; complete with concrete base	19	Nr	£34.57	£656.83	35	53	70							
G	Below ground drainage pipe, connection to soil pipes	19	Nr	£37.81	£718.39	35	53	70							
н	Marker tape, non degradable; red with black lettering, laid in trench 450mm above	114	m	£1.08	£123.12	1	1	1							
A .	Remove existing drainage installations, cap off and seal existing pipework	1 1	ITEM	£59.41	£59.41	1	1	1							
в	Remove existing drainage installations, remove manholes; assumed to be masonry														
	construction, assumed to be not exceeding 2.00m deep	1	Nr	£448.30	£448.30	1	1	1							
с	Excavating trenches for drainage pipes; average depth 750 to 1000mm - outside of			<i>c</i>											<i></i>
D	site boundary Excavating trenches for drainage pipes;	25	m	£34.57	£864.25	500	750	1000 5.0625	2050	0.024	0.024	0.024	249.075	249.075	249.075
E	average depth 1000 to 1250mm Excavating trenches for drainage pipes;	18	m	£38.89	£700.02	500	750	1000 4.55625	2050	0.024	0.024	0.024	224.1675	224.1675	224.1675
F	average depth 1250 to 1500mm Excavating trenches for drainage pipes;	24	m	£42.13	£1,011.12	500	750	1000 7.56	2050	0.024	0.024	0.024	371.952	371.952	371.952
G	average depth 1500 to 1750mm Excavating trenches for drainage pipes;	17	m	£47.53	£808.01	500	750	1000 6.215625	2050	0.024	0.024	0.024		305.80875	
н	average depth 1750 to 2000mm Excavating trenches for drainage pipes;	19	m	£51.85	£985.15	500	750	1000 8.015625	2050	0.024	0.024	0.024		394.36875	
1	beds and surrounds, to suit 225mm UltraRib Twinwall plastic pipes , 225mm	103	m	£11.88	£1,223.64	500	750	1000 1.15875	2240	0.0051	0.0051	0.0051		13.23756	13.23756
J	nominal size Below ground drainage pipe, bends,	103 10	m Nr	£17.28 £30.25	£1,779.84 £302.50	35 35	53 53	70 0.2328624 70	37	3.23	3.23	3.23	27.8293854	27.8293854	27.8293854
к	Below ground drainage pipe, rocker pipes, 225mm; to manholes	16	Nr	£30.25	£484.00	35	53	70							
L	Below ground drainage pipe, junction 100 x 225 x 225mm	1	Nr	£37.81	£37.81	35	53	70							
м	Below ground drainage pipe, junction 150 x 225 x 225mm	1	Nr	£37.81	£37.81	35	53	70							
N	Marker tape, non degradable; red with black lettering, laid in trench 450mm above	103	m	£1.08	£111.24	1	1	1							
A	Concrete manhole 1200mm diameter manhole; depth not exceeding 1250mm;														
в	assumed D400 recessed cover Concrete manhole 1200mm diameter	1	Nr	£1,528.54	£1,528.54	50	50	50 0.7065	850	0.242	0.242	0.242	145.32705	145.32705	145.32705
	manhole; depth not exceeding 1500mm; assumed D400 recessed cover	2	Nr	£1,701.38	£3,402.76	50	50	50 1.6956	850	0.242	0.242	0.242	348.78492	348.78492	348.78492
с	Concrete manhole 1200mm diameter manhole; depth not exceeding 1750mm;														
D	assumed D400 recessed cover Concrete manhole 1200mm diameter	2	Nr	£1,824.53	£3,649.06	50	50	50 1.9782	850	0.242	0.242	0.242	406.91574	406.91574	406.91574
	manhole; depth not exceeding 2000mm; assumed D400 recessed cover	1	Nr	£1,993.05	£1,993.05	50	50	50 1.1304	850	0.242	0.242	0.242	232.52328		232.52328
E	works to existing manhole; remove exit pipes and install new 225mm pipe;													232.52328	
	manhole construction unknown; assumed to be masonry, depth to invert not													232.52328	
F															
	exceeding 1000mm works to existing manhole; remove exit	1	Nr	£1,420.52	£1,420.52	50	50	50					D	232.52328	0
	works to existing manhole; remove exit pipes and install new 225mm pipe; manhole construction unknown; assumed	1	Nr	£1,420.52	£1,420.52	50	50	50					٥		
	works to existing manhole; remove exit pipes and install new 225mm pipe; manhole construction unknown; assumed to be masonry, depth to invert not exceeding 2000mm			£1,420.52 £1,636.57		50	50	50 50					0		
A	works to existing manhole; remove exit pipes and install new 225mm pipe; manhole construction unknown; assumed to be masonry, depth to invert not exceeding 2000mm works to existing pipework, at location of existing manhole, connect existing entry													0	0
A	works to existing manhole; remove exit pipes and install new 235mm pipe; manhole construction unknown; assumed to be masonry, depth to invert not exceeding 2000mm works to existing pipework, at location of existing manhole; connect existing entry pipework to new pipework for manhole to be abandoned and removek; pipe													0	0
A	works to existing manhole; remove exit pipes and install new 235mm pipe; manhole construction unknown; assumed to be masonry, depth to invert not esceeding 2020mm works to existing pipework; at location of existing manhole; connect existing entry pipework to new pipework for manhole to be abandoned and removed; pipe nominally 2.00m to invert, existing 25mm diameter pipe													0	0
A	works to existing mathelic; remove eith pipes and institution was a summariant mathelic construction unknown; assumed to be manacore, depth to invert not exceeding 2000mm works to existing eithy pervent, at location of existing mathelic, connect existing entry be abandored and emover, figure to be abandored and emover, figure to be abandored and emover, figure nominally 200m to invert, existing 225mm diameter pipe Executing tenches for damage pipes; average depth 500 to 730mm	1	Nr	£1,636.57	£1,636.57	50	50	50	2050	0.024	0.024	0.024	٥	0	0
A A B	works to existing matholicy remove est pipes and intally new 23mm pipes and intally new 23mm pipes to be maxamy, depth to invest next exceeding 2000mm works to existing pipework, at location of be abandoned and removed, pipe nominally 2,00m to invert, existing 23mm diameter pipe Exceeding tendence to following pipers; Exceeding tendence to following Exceeding tendence to following Exceeding tendence to following Exceeding tendence to following Exceeding tendence to following	1	Nr Nr	£1,636.57 £837.19	£1,636.57 £837.19	50	50	50 70	2050 2050	0.024			0	0	0
A B C	works to existing matholicy remove eith pipes and intall new 25mm piper; matholic construction unknown; assumed exceeding 2000mm works to existing pipework, at location of existing matholic, connect existing entry pipework to inser pipework for matholic to community 2000 to insert pipe Recavating trenches for damage piper; average depth 500 to 750mm Executing trenches for damage piper; average depth soft to to barry piper.	1 1 4	Nr Nr m	£1,636.57 £837.19 £32.41	£1,636.57 £837.19 £129.64	50 35 500	50 53 750	50 70 1000 0.5			0.024	0.024	0 24.6	0 0 24.6	0 0 24.6
A A B C D	works to existing matholicy remove eith pipes and install new 25mm pipes; matholic construction unknown; assumed exceeding 2000mm works to existing pipework, at location of the abandood and removed; pipe existing matholic, connect existing entry pipework to new pipework for matholic to be abandood and removed; pipe durater pipe Excertaing tenches for dranage pipes; average depth 500 to 750mm Excavating tenches for dranage pipes; average depth 500 to 100mm Excavating tenches for dranage pipes; becavating tenches for dranage pipes;	1 4 29	Nr Nr m	£1,636.57 £837.19 £32.41 £34.57	£1,636.57 £837.19 £129.64 £1,002.53	50 35 500 500	50 53 750 750	50 70 1000 0.5 1000 5.075	2050	0.024	0.024	0.024	0 24.6 249.69	0 0 24.6 249.69	0 0 24.6 249.69
	works to existing matholicy remove eith pipes and institution unknown, assumed ascereting 2000mm works to existing pipework, at location of existing matholic, connect existing entry pipeworks to new pipeworks for mathole to be abandond and removed; pipe nominally 200m to invert, easting 250mm Excavating threaholis for damage pipes; average depth 500 to 750mm Excavating threaholis for damage pipes; average depth 500 to 150mm Excavating threaholis for damage pipes; bedra sa auromatic, is suit 300mm	1 4 29 28 28 34	Nr m m m	£1,636.57 £837.19 £32.41 £34.57 £38.89 £11.88 £25.93	£1,636.57 £837.19 £129.64 £1,002.53 £1,088.92 £332.64 £881.62	50 35 500 500 500 500 500	50 53 750 750 750 750 750	50 1000 0.5 1000 5.075 1000 6.3 1000 0.14 1000 0.17	2050 2050 2240 2240	0.024 0.024 0.0051 0.0051	0.024 0.024 0.024 0.0251	0.024 0.024 0.024 0.0251	0 24.6 249.69 309.96 1.59936 1.94208	0 0 24.6 249.69 309.96 1.59936 1.94208	0 0 24.6 249.69 309.96 1.59936 1.94208
D E F G	works to existing matholicy remove esti piers and insite new 25mm pipes and insite new 25mm pipes to be maxony, depth to invert net exceeding 2000mm works to existing pipework, all location of be abandoned and removed, pipe nominally 2000 to lower, existing 25mm diameter pipe to any 2000 to 10mm (assign pipes; average depth 2000 to 70mm Exceeding temches for damage pipes; average depth 2000 to 70mm Exceeding temches for damage pipes; becausting temches for damage pipes; bed an unrounds, to suit 200mm becausting temches for damage pipes; bed an unrounds, to suit 200mm	1 4 29 28 28	Nr m m	£1,636.57 £837.19 £32.41 £34.57 £38.89 £11.88	£1,636.57 £837.19 £129.64 £1,002.53 £1,088.92 £332.64	50 35 500 500 500	50 53 750 750 750 750	50 1000 0.5 1000 5.075 1000 6.3 1000 0.14	2050 2050 2240	0.024 0.024 0.0051	0.024 0.024 0.024 0.025	0.024 0.024 0.024 0.025	0 24.6 249.69 309.96 1.59936	0 0 24.6 249.69 309.96 1.59936 1.94208	0 0 24.6 249.69 309.96 1.59936 1.94208
D E F	works to existing matholicy remove esti pipes and insist new 23mm pipes and insist new 23mm pipes to be maximy, depth to invest new exceeding 2000mm works to existing pipework, at location of be abnoloned and removed, pipe nominally 2000m to invest, essing estimation in a standard and removed, pipe nominally 2000 to invest, essing 25mm diameter pipe Exceeding tenchos for dramage pipes; average depth 2000 to 1000mm Exceeding tenchos for dramage pipes; bedra aurraunds, to suit 300mm Exceeding tenchos for dramage pipes; bedra aurraunds, to suit 300mm (average depth 2000 to 1000mm escenting tenchos for dramage pipes; bedra aurraunds, to suit 300mm (b) C/L (2000 to 1000mm c); bedra aurraunds, to suit 300mm (b) C/L (2000 to 1000mm c); bedra aurraunds, to suit 300mm (b) C/L (2000 to 1000mm c); bedra aurraunds, to suit 300mm (b) C/L (2000 to 1000mm c); bedra aurraunds, to suit 300mm (b) C/L (2000 to 1000mm c); bedra aurraunds, to suit 300mm (b) C/L (2000 to 1000mm c); bedra aurraunds, to suit 300mm (b) C/L (2000 to 1000mm c); bedra aurraunds, to suit 300mm c); bedra pipes; bedra pipes; b	1 4 29 28 28 34 62	Nr m m m	£1,636.57 £837.19 £32.41 £34.57 £38.89 £11.88 £25.93 £11.88	£1,636.57 £837.19 £129.64 £1,002.53 £1,088.92 £332.64 £881.62 £736.56	50 35 500 500 500 500 500 35	50 53 750 750 750 750 750 53	50 1000 0.5 1000 5.075 1000 6.3 1000 0.14 1000 0.17 70 0.05276	2050 2050 2240 2240	0.024 0.024 0.0051 0.0051	0.024 0.024 0.024 0.0251	0.024 0.024 0.024 0.0251	0 24.6 249.69 309.96 1.59936 1.94208	0 0 24.6 249.69 309.96 1.59936 1.94208	0 0 24.6 249.69 309.96 1.59936 1.94208
D E F G	works to existing matholicy remove eith pipes and intall new 25mm piper; matholic construction unknown; assumed a secreting 2000m works to existing pipework, at location of existing matholic, connect existing entry pipework to new pipework for mathole to nominally 2000 to interf, existing e25mm diameter pipe Executing tenches for dranage piper; average depth 500 to 75mm Executing tenches for dranage piper; average depth 500 to 125mm Executing tenches for dranage piper; average depth 500 to 125mm Executing tenches for dranage piper; bed as an arrumatic, to suit 20mm Executing tenches for dranage piper; bed as an arrumatic, to suit 20mm Executing tenches for dranage piper; bed as an arrumatic, to suit 20mm Executing tenches for dranage piper; bed as an arrumatic, to suit 20mm Executing tenches for dranage piper; bed as an arrumatic, to suit 20mm Executing tenches for dranage piper; bed as an arrumatic, to suit 20mm Executing tenches for dranage piper; bed as an arrumatic, to suit 20mm	1 4 29 28 34 62 11 16	Nr m m m Nr	£1,636.57 £837.19 £32.41 £34.57 £38.89 £11.88 £25.93 £11.88 £30.25 £30.25	£1,636.57 £837.19 £129.64 £1,002.53 £1,088.92 £332.64 £881.62 £736.56 £332.75 £484.00	50 35 500 500 500 500 35 35 35	50 750 750 750 750 750 53 53 53	50 70 1000 0.5 1000 6.3 1000 6.3 1000 0.14 1000 0.17 70 0.052376	2050 2050 2240 2240	0.024 0.024 0.0051 0.0051	0.024 0.024 0.024 0.0251	0.024 0.024 0.024 0.0251	0 24.6 249.69 309.96 1.59936 1.94208	0 0 24.6 249.69 309.96 1.59936 1.94208	0 0 24.6 249.69 309.96 1.59936 1.94208
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DE FGH I J KLABCDEA BABC DE F	works to existing mathole; remove etc pipes and intally new 23mm pipes and intally new 23mm pipes and intally new 23mm pipes to be maximy, dight in invest not exceeding 2000mm works to existing pipework, at location of pipes and intally pipework, at location of the analysis of the second second pipes intervention of the second second second second pipe second second second second second pipe second second second second second pipe second second second second second second	1 4 29 28 34 62 11 16 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Nr m m m m m m m m nr r nr m m m m m m m	E1,636.57 E357.19 E2241 E457 E458 E1188 E023 E1266 E126 E1266	E1,636.57 E87.19 E133.64 E102.54 E1	50 35 500 500 500 500 35 35 1 1 1 1 1 1 1 1 50 50 50 50 50 50 50 50 50 50	50 53 750 750 750 750 33 53 53 53 53 1 1 1 1 1 1 1 1 1 1 1 1	50 1000 0.5 1000 0.5 1000 0.4 1000 0.4 1000 0.4 1000 0.5 100 0.5 10	2050 2050 2240 2240 37 37 2050 2050	0.024 0.034 0.0051 0.0051 3.3.33 0.024 0.024	0.024 0.024 0.0251 0.0551 3.23	0.024 0.024 0.051 3.23	0 24.6 1.9936 1.94208 7.44518618 7.44518618	0 0 24.6 1.59936 1.59936 1.54208 3.05.9618 1.54208 3.05.9618 1.97169 2.54.61 9.20.64	0 0 246 1.9995 1.9995 1.9926 1.9926 1.9926
DE FGH I J KLABCDEA BABC DE F	works to existing matholicy remove etc piece and matholicy meet 25mm piper and matholicy 25mm piper to be maxony, depth to invert, net exceeding 2000mm works to existing pipework, at location of the beamdoned and removed, piper nominally 2001 to lower, existing 225mm duranter pipe to be beamdoned and removed, piper nominally 2004 to lower, existing 225mm duranter pipe average depth 500 o 720mm Exceeding tenches for damage piper; average depth 500 to 720mm Exceeding tenches for damage piper; bears and tenches for damage piper; feasible registro to all bealtime; mentally and guilty, complete with trap; parting and cover, bead and tenches and parting and tenches to the assisting damage feasible registro the existing damage feasible. To all the tenches for damage piper, for parting and tenches for damage piper, for parting and the tenches for damage piper, for parting and tenches for damage piper, for parting and tenches for damage piper, for pare; tenches and parting and tenches	1 4 29 28 34 62 3 5 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Nr Mr	E1,636.57 (1877.19 (122.41 (143.77 (138.89 (11.88 (12.18 (13.18) (13.18)	E1,636.57 (887.19 (173.64 (102.34) (102.34) (50 35 500 500 500 500 500 500 1 1 1 1 1 1 1 50 50 50 50 50 50 50 50 50 50	50 53 750 750 53 53 53 53 1 1 1 1 1 1 1 1 1 1 1 1 1 1	50 70 1000 0.5 1000 0.4 1000 0.4 1000 0.4 1000 0.5 1 1 1 1 1 1 1 1 1 1 1 1 1	2059 2050 2240 2240 37 37 2050	0.024 0.035 0.035 0.035 1.3.23	0.024 0.024 0.025 0.025 1.3.23	0.024 0.024 0.051 3.23	0 24.6 1.9936 1.94208 7.44518618 7.44518618	0 0 246 259.69 303.66 1.59916 1.59916 1.4208 1.59216 1.4208 1.59216 1.4208 1.59216 1.4208 1.59216 1.59	0 0 246 1.9995 1.9995 1.9926 1.9926 1.9926
DEFGHI J KLABCDEA BA BC DEF	works to existing matholicy remove esti ppers and insite re-25mm ppers of the re-25mm pperson to be maxony, depth to invert, net exceeding 2000mm works to existing prevent, at location of be abandoned and emoved, pipe nonisally 2000 to lower, existing 200mm damater pipe and a strange prevent, pipe nonisally 2000 to lower, existing 200mm damater pipe average depth 2000 to 700mm Exceeding tenches for damage piper, average depth 7000 to 1000mm Exceeding tenches for damage piper, bed an surrounds, to suit 300mm Exceeding tenches for damage piper, bed an surrounds, to suit 300mm Exceeding tenches for damage piper, bed an surrounds, to suit 300mm Exceeding tenches for damage piper, bed an surrounds, to suit 300mm Exceeding tenches for damage piper, bed an surrounds, to suit 300mm Exceeding tenches for damage piper, bed an surrounds, to suit 300mm Exceeding tenches for damage piper, bed an surrounds, to suit 300mm Exceeding tenches for damage piper, bed an surrounds, to suit 300mm Exceeding and an age pipe, necker piper, bed an surrounds, to suit 300mm Exceeding and damage pipe, necker piper, bed an surrounds in concrete Marker tape, non degradable; red with black tetraing, an tengent Beack steering and the tengent Admine tape, non degradable; red with Beack tetraing and the agenetical and the surround and the surround and the surround and the surround and the surround and the surround and the surround and the surround and the	1 4 29 28 34 62 11 16 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Nr m m m m m m m m nr r nr m m m m m m m	E1,636.57 (2877.19 422.44 41.457 41.48 41.457 41.48 41.457 41.45	E1,636.57 E87.19 E133.64 E102.54 E1	50 35 500 500 500 500 35 35 1 1 1 1 1 1 1 1 50 50 50 50 50 50 50 50 50 50	50 53 750 750 750 750 33 53 53 53 53 1 1 1 1 1 1 1 1 1 1 1 1	50 1000 0.5 1000 0.5 1000 0.4 1000 0.4 1000 0.4 1000 0.5 100 0.5 10	2050 2050 2240 2240 37 37 2050 2050	0.024 0.034 0.0051 0.0051 3.3.33 0.024 0.024	0.024 0.024 0.0251 0.0551 3.23	0.024 0.024 0.051 3.23	0 24.6 1.9936 1.9936 7.4513618 7.4513618 197169 197169 29204 319.6425	0 0 24.6 1.59936 1.59936 1.54208 3.05.9618 1.54208 3.05.9618 1.97169 2.54.61 9.20.64	0 0 246 249,89 19936 19936 19936 19936 19936 254,61 9204

1	Excavating trenches for drainage pipes; For pipes; 300mm nominal diameter, average depth 1250 to 1500mm	4		£57.25	£229.00	500	750	1000	1.65	2050	0.024	0.024	0.024	81.18	81.18	81.18
к	depth 1250 to 1500mm Excavating trenches for drainage pipes; For pipes; 300mm nominal diameter, average	4	m	£57.25	£229.00	500	750	1000	1.65	2050	0.024	0.024	0.024	81.18	81.18	81.18
	depth 1500 to 1750mm Excavating trenches for drainage pipes;	12	m	£62.65	£751.80	500	750	100	5.85	2050	0.024	0.024	0.024	287.82	287.82	287.82
м	Beds and surrounds, to suit 100mm Excavating trenches for drainage pipes;	7	m	£11.88	£83.16	500	750	1000	0.035	2240	0.0051	0.0051	0.0051	0.39984	0.39984	0.39984
N	Beds and surrounds, to suit 150mm Excavating trenches for drainage pipes;	83	m	£14.04	£1,165.32	500	750	1000	0.6225	2240	0.0051	0.0051	0.0051	7.11144	7.11144	7.11144
0	Beds and surrounds, to suit 225mm Excavating trenches for drainage pipes;	89	m	£16.20	£1,441.80	500	750		1.00125	2240	0.0051	0.0051	0.0051	11.43828	11.43828	11.43828
А	Beds and surrounds, to suit 300mm Storm drainage, beds and surrounds, to suit 100mm diameter pipe	16 194	m	£20.52 £25.93	£328.32 £5.030.42	500	750	1000	0.24	2240	0.0051	0.0051	0.0051	2.74176	2.74176	2.74176
в	Storm drainage, beds and surrounds, to suit 150mm diameter pipe	34	m	£23.95	£955.06	500	750	1000								
с	Below ground drainage pipe, PVC / Clay pipes, 100mm nominal size	202	m	£11.88	£2,399.76	35	53		2029696	37	3.23	3.23	3.23	24.2568969	24.2568969	24.2568969
D	Below ground drainage pipe, PVC / Clay pipes, 150mm nominal size	117	m	£14.04	£1,642.68	35	53	70 0.	1763424	37	3.23	3.23	3.23	21.0746802	21.0746802	21.0746802
E	Below ground drainage pipe, PVC / Clay pipes, 225mm nominal size	89	m	£17.28	£1,537.92	35	53	70 0.	2012112	37	3.23	3.23	3.23	24.0467505	24.0467505	24.0467505
F	Below ground drainage pipe, PVC / Clay pipes, 300mm nominal size Below ground drainage pipe, bends,	16 130	m Nr	£25.93 £27.01	£414.88 £3.511.30	35 35	53 53	70 0. 70	.0482304	37	3.23	3.23	3.23	5.7640151	5.7640151	5.7640151
н	Below ground drainage pipe, bends, Below ground drainage pipe, bends, Below ground drainage pipe, bends,	65 24	Nr	£30.25 £32.41	£1,966.25 £777.84	35 35 35	53 53	70 70								
J	Below ground drainage pipe, bends, Below ground drainage pipe, rocker pipes,	3	Nr	£41.05	£123.15	35	53	70								
L	100mm; to manholes Below ground drainage pipe, rocker pipes,	27	Nr	£27.01	£729.27	35	53	70								
м	150mm; to manholes Below ground drainage pipe, rocker pipes,	18	Nr	£30.25	£544.50	35	53	70								
N	225mm; to manholes Below ground drainage pipe, rocker pipes, 300mm; to manholes	14 6	Nr Nr	£32.41 £38.89	£453.74 £233.34	35 35	53 53	70 70								
0	Below ground drainage pipe, junctions, 100 x 100 x 100mm	14	Nr	£37.81	£529.34	35	53	70								
Ρ	Below ground drainage pipe, junctions, 100 x 150 x 150mm	2	Nr	£37.81	£75.62	35	53	70								
Q	Below ground drainage pipe, junctions, 100 x 225 x 225mm	12	Nr	£41.05	£492.60	35	53	70								
R	Below ground drainage pipe, junctions, 100 x 300 x 300mm Below ground drainage pipe, junctions, 150	1	Nr	£49.69	£49.69	35	53	70								
т	x 150 x 150mm Below ground drainage pipe, junctions, 150	7	Nr	£37.81	£264.67	35	53	70								
U	x 225 x 225mm Below ground drainage pipe, external yard	5	Nr	£41.05	£205.25	35	53	70								
	gully, complete with trap, grating and cover, bed and surround in concrete;	5	Nr	£237.65	£1,188.25	35	53	70								
v	Below ground drainage pipe, rodding eye, complete with frame and cover, bed and															
w	surround in concrete; 100mm outlet Below ground drainage pipe, connection to rainwater pipes	2	Nr Nr	£118.83 £48.61	£237.66 £1,798.57	35	53 53	70 70								
х	Below ground drainage pipe, rest bend, complete with concrete bed and surround:	3,		240.01	22,750.57	33	55	,0								
Y	100mm Pre cast concrete road gully; to suit 150mm	37	Nr	£31.33	£1,159.21	35	53	70								
A	diameter outlet Marker tape, non degradable; red with	10	Nr	£253.86	£2,538.60	500	750	1000								
в	black lettering; laid in trench 450mm Concrete manhole; 1200mm diameter	62	m	£1.08	£66.96	1	1	1								
c	manhole; depth not exceeding 1250mm; assumed D400 recessed cover Concrete manhole; 1200mm diameter	1	Nr	£1,528.54	£1,528.54	50	50	50	0.7065							
	manhole; depth not exceeding 1500mm; assumed D400 recessed cover	2	Nr	£1,701.38	£3.402.76	50	50	50	1.6956							
D	Concrete manhole; 1200mm diameter manhole; depth not exceeding 1750mm;															
E	assumed D400 recessed cover Concrete manhole; 1200mm diameter	2	Nr	£1,824.53	£3,649.06	50	50	50	1.9782							
	manhole; depth not exceeding 2000mm; assumed D400 cover Athlon precast concrete headwall; 150mm	2	Nr	£1,993.05	£3,986.10	50	50	50	2.2608							
r	diameter pipe outlet; depth to invert not exceeding 1.50m	1	Nr	£324.07	£324.07											
G	Athlon precast concrete headwall; 300mm diameter pipe outlet; depth to invert not	-														
н	exceeding 1.75m manhole not exceeding 1000mm deep	1 10	Nr Nr	£378.08 £480.71	£378.08 £4,807.10	50	50	50								
1	manhole not exceeding 1250mm deep manhole not exceeding 1500mm deep	3 1	Nr Nr	£556.32 £658.95	£1,668.96 £658.95	50 50	50 50	50 50								
A	manhole not exceeding 1750mm deep 3.00 Nr CCTV inspection to all pipelines, generally	0	ITEM	£0.00 £810.18	£0.00 £810.18	1	1	1								
B	Testing of manholes and pipelines, Cleaning of pipelines, as required	1	ITEM	£378.08 £324.07	£378.08 £324.07	1	1	1								
D	Operating and maintenance manuals, as required		ITEM	£270.06	£270.06	1	1	1								
E A	Record drawings, as required rock	0	ITEM m3	£199.84 £0.00	£199.84 £0.00	1	1	1								
B C D	concrete reinforced concrete brickwork, blockwork or stonework	0	m3 m3 m3	£0.00 £0.00 £0.00	£0.00 £0.00 £0.00											
E	excavating soft spots; disposal of surplus material and filling with approved fill to	0	1115	20.00	20.00											
	formation level of trench - to be priced as rate only per cubic metre	0	m3	£0.00	£0.00											
F	next existing service - to be priced as rate only per metre	0	m	£0.00	£0.00											
G	around existing service crossing excavation to be priced as rate only per crossing	0	Nr	£0.00	£0.00											
A B C	to the site area and surrounding generally Excavating trenches for Water, services not	1	ITEM ITEM	£0.00 £0.00	£0.00 £0.00											
	exceeding 200mm; depth not exceeding 1250mm - Provisional Quantity	116	m	£38.89	£4,511.24	500	750	1000	29	2050	0.024	0.024	0.024	1426.8	1426.8	1426.8
D	Excavating trenches for Water, extra over for excavation in highways, including all															
	works to breakout existing surfaces, make good and reinstate on completion of															
E	works, temporary fencing, diversions and Excavating trenches for Gas, services not exceeding 200mm; depth not exceeding	12	m	£156.64	£1,879.68	500	750	1000								
F	1250mm - Provisional Quantity Excavating trenches for Gas, extra over for	136	m	£38.89	£5,289.04	500	750	1000	34	2050	0.024	0.024	0.024	1672.8	1672.8	1672.8
	excavation in highways, including all works to breakout existing surfaces, make good															
	and reinstate on completion of works, temporary fencing, diversions and the like	7	m	£156.64	£1,096.48	500	750	1000								
G	Surface water; including the treatment of the water to remove all sediment; pollutants and the like before leaving the															
н	site perimeters, generally Bed and surround; to water pipes, to suit	1	ITEM	£199.84	£199.84	1	1	1								
	one pipes nominal size not exceeding 100mm diameter - Provisional Quantity	116	m	£12.96	£1,503.36	500	750	1000	1.16	2050	0.024	0.024	0.024	57.072	57.072	57.072
A	Bed and surround; to gas pipes, to suit one pipe nominal size not exceeding 100mm dimension. Description	17														
в	diameter - Provisional Quantity MDPE or Puriton ducts for Water supplies, 32mm diameter; or similar	136 116	m	£12.96 £8.64	£1,762.56 £1,002.24	500 18	750 24	1000	1.36	2050	2.54	2.54	2.54	66.912 273.942719	66.912	66.912
с	MDPE or Puriton ducts for Gas supplies, 63mm diameter: or similar	116	m	£8.64	£1,002.24 £1,175.04	18	24		.1147356	940	2.54	2.54	2.54	321.174222		
D	Excavate pit for connection of water pipes; generally - Provisional Quantity	7	Nr	£51.85	£362.95	500	750	1000				*				
E	Excavate pit for connection of gas pipes; generally	7	Nr	£51.85	£362.95	500	750	1000								
FG	Meters, gas - Provisional Quantity Meters, water - Provisional Quantity Site isolation valve and utility governor, gas	10 10	Nr Nr	£0.00 £0.00	£0.00 £0.00											
н	- Provisional Quantity Identification tapes - ' WATER PIPE	1	Nr	£0.00	£0.00											
	BELOW', generally - Provisional Quantity Identification tapes - ' GAS PIPE BELOW',	116	m	£1.08	£125.28	1	1	1								
A	generally - Provisional Quantity Excavating trenches for BT, services not	136	m	£1.08	£146.88	1	1	1								
	exceeding 200mm; depth not exceeding 1250mm - Provisional Quantity; assumed								a							
в	to be two ducts Excavating trenches for BT, attendance on the relocation of telegraph pole	149	m Nr	£38.89 £297.07	£5,794.61 £297.07	500 500	750 750	1000	37.25	2050	0.024	0.024	0.024	1832.7	1832.7	1832.7
с	the relocation of telegraph pole Excavating trenches for data, services not exceeding 200mm; depth not exceeding	1	нГ	2297.07	227.0/	200	/3U	1000								
D	1250mm - Provisional Quantity Excavating trenches for power supplies,	149	m	£38.89	£5,794.61	500	750	1000	37.25	2050	0.024	0.024	0.024	1832.7	1832.7	1832.7
	services not exceeding 200mm; depth not exceeding 1250mm - Provisional Quantity	256	m	£38.89	£9,955.84	500	750	1000	64	2050	0.024	0.024	0.024	3148.8	3148.8	3148.8
E	Excavating trenches for power supplies, services not exceeding 200mm; depth not															
F	exceeding 1250mm - Provisional Quantity - connections to buildings Excavating trenches for power supplies,	48	m	£38.89	£1,866.72	500	750	1000	12	2050	0.024	0.024	0.024	590.4	590.4	590.4
	excavating trencnes for power supplies, services not exceeding 200mm; depth not exceeding 1250mm - Provisional Quantity	208	m	£38.89	£8,089.12	500	750	1000	52	2050	0.024	0.024	0.024	2558.4	2558.4	2558.4
G	Excavating trenches for street lighting, services not exceeding 200mm; depth not															
н	exceeding 1250mm - no details Disposal, surface water, generally	89 1	m ITEM	£38.89 £199.84	£3,461.21 £199.84	500 1	750 1	1000 1	22.25	2050	0.024	0.024	0.024	1094.7	1094.7	1094.7
A	Bed and surround; to electrical cables, to suit single duct nominal size not exceeding 200mm diameter	304	m	£11.88	£3,611.52	500	750	1000	12.16	2050	0.024	0.024	0.024	598.272	598.272	598.272
в	Bed and surround; to BT ducts, to suit single duct nominal size not exceeding	304	'n													
	200mm diameter	298	m	£11.88	£3,540.24	500	750	1000	11.92	2050	0.024	0.024	0.024	586.464	586.464	586.464

с	Bed and surround; to communications ducts, to suit single duct nominal size not															
	exceeding 200mm diameter	298	m	£11.88	£3,540.24	500	750	1000	11.92 2050	n	0.024	0.024	0.024	586.464	586.464	586.464
D	Bed and surround; to street lighting cables,									-						
	to suit single duct nominal size not															
	exceeding 200mm diameter - no details	89	m	£11.88	£1,057.32	500	750	1000	3.56 2050	D	0.024	0.024	0.024	175.152	175.152	175.152
E	Ducts for Power supplies, 100mm diameter, or similar	304	m	£8.64	£2.626.56	18	24	34	0.47728 94	-	2.54	2.54	2.54	1139.55373		
F	Ducts for BT supplies, 100mm diameter, or	504		E0.04	12,020.30	10	24	34	0.4/728 54	5	2.34	2.34	2.34	1155.55575	1155.55575	1155.55575
	similar	298	m	£8.64	£2,574.72	18	24	34	0.46786 940	D	2.54	2.54	2.54	1117.06254	1117.06254	1117.06254
G	Ducts for communication supplies, 100mm															
	diameter, or similar	298	m	£8.64	£2,574.72	18	24	34	0.46786 940	D	2.54	2.54	2.54	1117.06254	1117.06254	1117.06254
н	Ducts for street lighting supplies, 50mm diameter, or similar	89	m	£8.64	£768.96	18	24	34	0.069865 940		2.54	2.54	2.54	166.809674	166 800674	100 000074
	Excavate pit for connection of services;	89	m	18.64	£768.96	18	24	34	0.069865 940	U	2.54	2.54	2.54	166.809674	166.809674	166.809674
	electrical - Provisional Quantity	22	Nr	£51.85	£1.140.70	500	750	1000								
1	Excavate pit for connection of services; BT -															
	Provisional Quantity	3	Nr	£51.85	£155.55	500	750	1000								
к	Excavate pit for connection of services; communications - Provisional Quantity															
	Excavate pit for connection of services:	3	Nr	£51.85	£155.55	500	750	1000								
L	street lighting - no details	6	Nr	£51.85	£311.10	500	750	1000								
м	Meters, power - Provisional Quantity	11	Nr	£0.00	£0.00											
A	Excavate pit for base to lighting standard;															
	lighting standards - no details	6	Nr	£59.41	£356.46	1	1	1								
в	Identification tapes - 'POWER CABLE BELOW', generally	394	m	£1.08	£425.52	1	1	1								
с	Identification tapes - 'COMMUNICATION	334		E1.06	E423.32	1	1	1								
-	DUCTS BELOW', generally	592	m	£1.08	£639.36	1	1	1								
D	Utility Company costs for the provision of															
	new gas supply, connecting from existing gas supplies to meter locations adjacent															
	gas supplies to meter locations adjacent buildings as required		ITEM	£0.00	£0.00											
E	Utility Company costs for the provision of	1	TIEN	£0.00	20.00											
	new water supply, connecting existing															
	mains water supply to meter locations for															
	buildings supplies as required Utility Company costs for the provision of	1	ITEM	£0.00	£0.00											
F	new electrical supply, connecting from															
	existing electrical supply to meter locations															
	for buildings supplies as required;	1	ITEM	£0.00	£0.00											
G	Utility Company costs for the provision of															
	new electrical supply, works to existing substation, including all diversion works		ITEM													
н	Utility Company(ies) costs for the provision	1	TIEM	£0.00	£0.00											
	of new telephone/data supplies,															
	connecting from existing telephone/data															
	supplies to connection points within the															
	buildings as required Utility Company(ies) costs for the provision	1	ITEM	£0.00	£0.00											
	of new telephone/data supplies, allow for															
	all works to relocate telegraph poles and															
	associated diversion works	1	ITEM	£0.00	£0.00											
1	Utility Company(ies) costs for the provision															
	of new communication/data supplies, connecting from existing															
	communication/data supplies to															
	connection points within the buildings as	1	ITEM	£0.00	£0.00											
	Bathrooms: toilets	10	ITEM	£150.00	£1,500.00	10	20	30		https://www.sciencedirect.cc	84.75	0.7			593.25	
	Bathroom shower bath	10	ITEM	£150.00	£1,500.00	10	15	20		https://www.wickes.co.uk https://www.wickes.co.u	1.6	3.42			54.72	
	Bathroom sink	10	ITEM	£60.00	£600.00	15	20	25		https://www.wickes.co.u k/Wickes-Single-Bowl-	18.5	0.7			129.5	
	Bathroom mirror	10	ITEM	£20.00	£200.00	10	15	20								
	cupboards		ITEM	£260.00	£2.600.00	10	20	30			29	0.74			214.6	
	formaldehyde, 0.5															
	stainless steel each Boiler		ITEM	£20.00	£200.00 £5.000.00	3	5	7		https://www.sciencedirect.cc https://www.sciencedirec	3.25	3.42			111.15	
	Electrical Installations;															
	Switches and sockets. 6	10	ITEM	£30.00	£300.00	20	30	40		0.178	0.607 2.	64+3.1			23.5162	
	capsule, spotlights & traditional shapes), all	10	ITEM	£14.00	£140.00	0.6	2	4.2		http://researcharchive.vuw.ac.nz/xm	hi/handle/10053/5500					
	Extractor fans (bathrooms)	10	ITEM	£40.00	£400.00	9	13	18		http://researcharchive.vuw.ac.nz/xn		46+9.16+3.31			30.635	
	Kitchen cupboards		ITEM	£100.00	£1,000.00	10	15	25						518.813109	518.813109	518.813109
	Kitchen worktop	10	ITEM	£50.00	£500.00	5	10	15			104.86	0.86			901.796	
	Kitchen sink									https://www.wickes.co.u k/Wickes-Single-Bowl-						
		10	ITEM	£60.00	£600.00	15	20	25		Kitchen, Steinless, Steel,	18.5	0.7			129.5	
	Kitchen tap		ITEM	£20.00	£200.00	10	20	30		https://www.wickes.co.u	1.27	2.64			33.528	
	Dishwasher Oven	10	ITEM	£160.00 £120.00	£1,600.00	7	10	13 20		see BOM see BOM				1453.46082		
	Oven	10	ITEM	£120.00	£1,200.00	12	15	20		see BOM				1453.46082	1481.80032	1498.2792
	Gas hob, 4 ring	10	ITEM	£70.00	£700.00	15	17	19		https://www.sciencedirect.com/	cience/article/pii/S2213	138822003071				
										http://researcharchive.vuw. ac.nz/xmlui/handle/10063/6						
	Cooker hood	10	ITEM	£50.00	£500.00	10	14	18		ac.nz/xmlui/handle/10053/6 590						
		10		2.50.00	1.300.00	10		10		-						
										http://researcharchive.vuw.						
	Toaster	10	ITEM	£15.00	£150.00	2	4	6		ac.nz/xmlui/handle/10053/6 590				69 8496	70.0553	70.1763
	i Gaster	10	TTEM	£15.00	£150.00	2	4	ь		ac.nz/xmlui/handle/10063/6				69.8496	/0.0553	/0.1/63
						3	4.4	9							76.3651	76.5741
	Kettle	10	ITEM	£10.00	£100.00	3	4.4			590				76.0098		
	Kettie	10	ITEM	£10.00	£100.00	3	4.4	-		_				76.0098	10.3031	
	Kettie	10	ITEM	£10.00	£100.00	3	**			http://researcharchive.vuw.				76.0098	10.3031	
										_						1383.4318
	Kettle Fridge		ITEM	£10.00 £100.00	£100.00 £1,000.00	10	12.5	15		http://researcharchive.vuw. ac.nz/xmlui/handle/10063/6 590 http://researcharchive.vuw.				76.0098	1353.4548	1383.4318
	Fridge	10	ITEM	£100.00	£1,000.00	10	12.5	15		http://researcharchive.vuw. ac.nz/xmlui/handle/10053/6 590 http://researcharchive.vuw. ac.nz/xmlui/handle/10053/6				1301.8858	1353.4548	
		10								http://researcharchive.vuw. ac.nz/xmlui/handle/10063/6 590 http://researcharchive.vuw.						1383.4318 67.1952
	Fridge	10	ITEM	£100.00	£1,000.00	10	12.5	15		http://kesearcharchive.vuw. ac.nz/xmlui/handie/10063/6 590 http://kesearcharchive.vuw. ac.nz/xmlui/handie/10063/6 590				1301.8858	1353.4548	
	Fridge Iron	10 10	ITEM ITEM	£100.00 £20.00	£1,000.00 £200.00	10	12.5	15 7		http://researcharchive.vuw. ac.nzxmlu/handle/10063/6 590 http://researcharchive.vuw. ac.nzxmlu/handle/10063/6 590 http://reb.ml.edu/ebm/www				1301.8858	1353.4548 66.6452	
	Fridge Iron Washing machine	10 10 10	ITEM ITEM ITEM	£100.00 £20.00 £250.00	£1,000.00 £200.00 £2,500.00	10	12.5	15 7 10		http://researcharchive.vuw. ac.nz/miu/handle/10063/6 590 http://researcharchive.vuw. ac.nz/xmiu/handle/10063/6 590 http://web.mit.edu/ebm/www //Publications ¹⁹ _Paper.pdf	201001856mbc4	srau-pageded-la	e-me-snfa/	1301.8858 65.7102	1353.4548 66.6452 1493.323	
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