

Scope of Works & End User Agreement



Project	Local Authority Delivery or Home Upgrade Grant
Task	Air source heat pump and heating system

References in this document to 'homeowner', 'you' and 'your' are references to the owner of the property or, as the case may be the tenant of the property, with whom Aura Heating Limited (also referred to as 'Aura Heating') has a contract (and not, if applicable, any other occupier of the property).

Where the property is leasehold, by signing this document, you confirm to Aura Heating that the landlord/ultimate freeholder has consented to the work specified in the document being carried out or (in the alternative) that no such consent is required and acknowledge that Aura Heating is agreeing to carry out the work in reliance upon that confirmation.

Energy Efficient Measures may include Solar PV systems (with or without battery storage), Cavity Wall/Loft/Flat Roof/Roof in Roof Insulation, Air Source Heat Pumps, Hybrid Heat Pumps, Boilers, Heating Controls and Central Heating

Nothing in this document affects your statutory rights.

Survey

Aura Heating will complete a survey to determine the suitability of the property. A retrofit surveyor should previously have carried out a full retrofit assessment to confirm the eligibility of the property and this has been used to design the proposed energy efficient improvement measures to be installed. The proposed positions of the measures will be determined at the design stage; however, this may need to vary if there are unforeseen installation constraints. The position of the controls, ancillary equipment, electric extract fans, radiators and pipework will typically be determined on the day of installation.

Preparation

Aura Heating will remove furniture units such as kitchen wall units, shelving etc. where the customer was not asked to remove these beforehand, however they will NOT replace or make good any units removed to make way for the installation. Carpets that have been lifted by Aura Heating will be returned into position, however, laminate, and wooden flooring will not be put back in position. A professional carpet or flooring company may be needed to return the flooring to the original condition which is not part of the Aura Heating work and accordingly is at the expense of the homeowner and not Aura Heating.

Children and animals must be kept away from work areas – the operative will require a clear working area to avoid any non-operatives encountering risks.

Process of work

The operative will carry out safe isolation of all services including electrical, gas and water as necessary. Consideration will be taken to minimize disruption and interruption of amenities but there may be periods of time where residents will be without heating, water and/or electricity.

Any gas work will be carried out by qualified operatives, working to The Gas (Installation & Use) Regulations 1998 (GSIUR) and all relevant British Standards relating to domestic, Natural and Liquefied Petroleum Gas (LPG) central heating boilers used to provide central heating. (Including BS 6798, BS 5871 & BS 5440).

All electrical work will be carried out by qualified operatives, working to The Electricity at Work Regulations 1989, BS7671 Electrical wiring regulations, and all other relevant British Standards

All other relevant building regulations will be followed depending on the energy efficient measures(s) to be installed and the installation will then be registered with building control via the competent persons self-certification scheme.

All pipework will be run in accordance with approved codes of practice and in the most efficient route possible. The specification, size, location of the Energy Efficient Measures including any associated controls will be installed in line with manufacturer guidance. Our operative will endeavor to work with the 'Decision Maker' ('DM') who should be on site at the time of installation to achieve a mutually agreeable product location. Where the 'DM' is not on site, our operative will proceed as they believe to be the most suitable route/location and no responsibility can be accepted if post installation the 'DM' would have preferred an alternative option.

All intrusive work will be made good including masonry, timber and any external alterations including soak-away installations. Making good does not extend to the final decorative finish, the re-fitting of any furniture removed prior to installation, replacement of tile hanging on tile hung properties or "boxing in" of pipework and/or electrical trunking. We will only be held responsible for any unnecessary damage or loss caused directly by our negligence and not for indirect or consequential damage or loss.

In order to install energy efficient measures, if loft insulation is specified, it is the responsibility of the homeowner to clear the loft of all possessions and lift floor boarding that may be present.

Following installation, the energy efficient measures will be commissioned in line with manufacturer's guidance.

Asbestos

The installer will do a brief visual check for asbestos as part of the risk assessment. Any asbestos found on site before or during the works will be the responsibility of the homeowner to remove and where appropriate a clean air certificate provided before the install can take place or continue.

Access Equipment

The surveyor may specify the requirement for access equipment in order to provide access to certain parts of the property. This will be discussed with the homeowner prior to installation. and the details, proposed location and any preparation required will be explained. Costs will not usually be included in the project. Where not included, the cost will be agreed prior to the works commencing.

Appliance Warranties

The Air Source Heat Pump that may be fitted comes as standard with a 2-year warranty, which can be extended to 7 years subject to an Aura Heating service plan being taken out. You will also receive a warranty from Aura Heating for 2 years against defects with the installation work in general. These warranties will start from the day of the install, any warranty or quality issues must be reported to Aura Heating immediately and we accept no responsibility for any third-party costs you incur without our approval. If you sell your property within the 2-year period, the any owner will continue to receive the benefit of these warranties for the unexpired duration of this 2-year period.

Radiators

If applicable, radiators will be positioned to provide heating to cover the design heat loss of the building, this does not however mean that a radiator will be placed in every room. Rooms such as Bathrooms, Kitchens, Toilets,

Landings may have their heat loss requirements met by radiators in adjacent spaces The exact placement of radiators within a room will be determined by the installation operative on the day of installation. The radiator sizes and location have been calculated to conform to the requirements of MIS 3005D and MIS3005I. Relocating radiators to a different space within the property will not be possible.

Oil and LPG Storage tanks

If applicable, storage tanks will be isolated, but the tank will not be drained of the remaining fuel or the tank itself removed from the property. It will be the responsibility of the property owner to arrange for the tank to be drained and removed with their supplier.

Existing boiler flues

If applicable, our installation operative will “make good” any horizontal flue holes, however the “making good” will be carried out with material readily available from a plumber’s merchant. You may wish to consider employing at your own expense the services of professional builder should you require finish to exactly match the existing structure. Vertical flues will be “made good internally”, but the flue terminal will be left in place. You may therefore wish to consider employing (at your own expense) a professional roofer to remove the terminal “make good” the roof exterior.

Insulation Measures

If applicable and we are installing an insulation measure as part of the overall project, we may need to install separate items to ensure that the project will meet the requirements of PAS2035:2019/PAS2025:2023. These items may include, but are not limited to, window trickle vents and continuous electro-mechanical extractor fans. In some instances, we may also need to ‘trim’ internal doors to provide undercuts to ensure sufficient air flow between rooms. These works would form part of the ventilation strategy. By acceptance of the terms of this Scope of Works and End User Agreement you confirm that you have previously received a copy of the ventilation strategy, if insulation measures are being installed and are happy to proceed with the works within the strategy.

Cavity Wall Insulation

We ask you to please remove delicate items and ornaments from both sides of walls we drill to prevent damage caused by vibration and we are not liable for any damage caused by you failing to move items. We shall fill any holes drilled with mortar that closely matches the existing colour but cannot guarantee an exact match, particularly to rendered finishes. Should there be any hidden defects not apparent at survey stage they are not covered by any warranty or guarantee provided by us, nor are we liable for any exacerbation of, or consequential damage, due to the defects.

Solar PV

We develop a customised system design that considers roof type, panel orientation, shading, and energy needs. All materials, including high-quality solar PV panels, inverters, mounting equipment, and wiring, will meet industry standards. Solar panels will be securely attached to the designated roof area. Inverter(s) and other necessary electrical components will be mounted and connected, with cabling and conduits routed for both safety and minimal visual impact. The solar PV system will be connected to the property’s electrical system, integrating with existing power meters and backup systems if applicable. We will perform testing to ensure effective operation and expected performance levels. No guarantee can be given as to the integrity or suitability of any of your existing components that our engineer may connect to during the course of the installation. Any roof penetrations made during the installation will be sealed to prevent water ingress, but if extensive roofing repairs are required, we recommend engaging a professional roofer at your own expense. Upon completion of the installation, we will remove all debris and materials related to our work, leaving the site clean and orderly. Structural modifications, extensive roof repairs, or maintenance beyond standard weatherproofing around penetrations are outside the scope of this project. Any structural enhancements required to support the solar PV system, such as roof reinforcement, are also excluded. Tree trimming or obstruction removal is the responsibility of the customer if it impacts the system’s performance.

Permitted Development Planning and/or Title Consent

In order to comply with the MCS Standards, we are required to ensure that the Heat Pump location meets some conditions. This allows the installation to proceed without the requirement to submit a planning application because it would meet the ‘Permitted Development’ (PD) Standard. If the PD standard is not met, then further consideration would need to be given to the heat pump location by the local planning authority. This will include considering any potential noise nuisance to your neighbours and the closeness to your boundary.

A wooden enclosure can be fitted over the heat pump which reduces the noise emitted and ensures that the installation meets the permitted development standard in some cases.

If you choose not to have the wooden enclosure fitted, or any part of the heat pump is located less than 1m from the property boundary then it is likely that the installation will require a planning application in the future. If planning permission is not sought, then there is a risk that enforcement action may be taken by the council against the homeowners or other occupiers of the property. Any planning application and/or subsequent action would need to be managed by the homeowner, not Aura Heating and/or another Microgeneration Certificate Scheme accredited contractor (if applicable). It is our responsibility to advise you in these situations that permitted development requirements may not been met and you are aware of the details above.

It is also your responsibility to ensure that the proposed location for the heat pump units and pipework or ancillary items will meet any other title requirements for the property, and by acceptance of the terms of this Scope of Works and End User Agreement, you accept responsibility for obtaining at your own expense any retrospective consent, if required.

MCS Compliance

In accordance with Microgeneration Installation Standard there must be a contract in place between the Microgeneration Certification Scheme ("MCS") Contractor, which is us, and the End User for whom the microgeneration installation will be carried out, which is you. As an MCS Accredited Contractor, we assume full responsibility for the full scope of work, including design, supply, installation, set to work and commissioning of the heat pump system. By acceptance of the terms of this Scope of Works and End User Agreement, you confirm that you understand our role as the MCS Contractor, and that you have read the MCS Performance Estimate and understand the limitations of such.

NOTICE OF RIGHT TO CANCEL

You may cancel, without giving any reason, your contract with Aura Heating for the services described in this document ('the Contract') at any time within the period of 14 days starting with the date on which you receive a copy of Aura Heating's Installation Terms and Conditions which set out in detail how you may exercise this right to cancel.

If you request Aura Heating to commence providing the services before the expiry of the 14-day cancellation period, and those services are fully completed within that cancellation period, you acknowledge that in that event you will lose your right to cancel. If we do not fully complete those services within the cancellation period, you may still cancel the contract, but Aura Heating then has the right to recoup the cost of any goods and related services delivered until the point of cancellation.

Works to be carried out (Subject to Change)

Site Address: Mill Studio, Old Hollow Lane, Rowfant, Crawley, RH10 4TB		
Decision Maker:	Mr Michael Woolford	
Property Relationship:	Owner Occupier	
E-mailed address:	mikejwoolford@gmail.com	
Appliance: Mitsubishi 14kW ASHP	Appliance Position: Back of property	
PD Standard Met: No	Enclosure Required: Yes	Enclosure Accepted/Declined: Declined
Number of Solar Panels: Zero	Solar Panels will be 200mm below roofline: NA	Property is listed or within a conservation area: NA
Location of Radiators:	Bedrooms, Landing, Bathrooms, 4x Kitchen/Living room/Diner area	
Total New Radiators:	Five radiators in total, and Four fan convectors in total.	
Things to be moved/done by the Homeowner or other occupier:	Property needs to be clear enough of belonging to allow the installation to proceed unhindered.	
Measures Declined with Reasons:	Solar PV - roof structure unsuitable for solar	
Facilities Lost:	Oil boiler, Hot water cylinder will be installed that is compatible with an ASHP.	
	Oil tank will not be drained or removed from the property	
Parking: If the property is in a restricted parking area, such as residents only, parking permits must be provided for the installation operative vehicle for the duration of the installation.		

Project Funding

By acceptance of the above scope of works, I agree to the work being completed. I acknowledge some flexibility may be required for unforeseen circumstances that may arise as part of the works. All details and information provided regarding my property and personal circumstances are confirmed and correct to ensure that Aura Heating can claim any grants directly on my behalf.

TOTAL COST TO PAY - Zero

Sign Mr Michael Woolford Print Mr Michael Woolford Date 09/12/2024

Agreement to commence the installation confirms your acceptance of this scope of works and the terms within.

****Power showers will not work if an unvented cylinder is installed and so will need replacing before install by the customer or will be left redundant.**

Please note that in acceptance of the heating grant you must provide reasonable access post installation for auditing, remedial work and/or other contractors to complete the project. Failure to allow access will result in the grant becoming void and the full value being liable to you. Full installation terms and conditions are also available on online or via these links

[Aura Heating Limited Terms and Conditions](#)

Aura Heating Limited – Ground Floor Suite, Bridgwater House, Unit 2 Haywards Business Centre, Havant, Hampshire PO9 2NL– hello@auraheating.co.uk

Aura Heating Limited – MCS NUMBER – NIC600161

Proposed ASHP position.

Note: This position may be subject to change due to site or installation constraints that become apparent at the time of installation



Heat Pump System Performance Estimate



MCS Version Number: MIS 3005-D ISSUE 1.0
Designed By: Alto Energy Limited
MCS Scope: MCS Accredited for Design and Installation
Certification Number: NIC-5693
Project Reference: AURWL-MillStudio-RH10
Date: 14 October 2024

Heat Loss

Total Area to be Heated	92 m ²
Total Design Heat Losses	12.66 kW

Equipment Selection

Heat Pump	Mitsubishi Ecodan 14kW 1P
Model Number	PUZ-HWM140VHA
MCS Product Code	MCS 037-0035-20-01
DHW Cylinder	Standard 3M Coil 200L
Cylinder Volume	200 ltrs

System Information

Design Flow Temperature for Heating System	55 °C
MCS Seasonal Coefficient of Performance (SCoP)	3.26
Output of Heat Pump at Design Flow Temp	14.00 kW
% Coverage - Peak Load Annual Energy	100% 100.0%
Design Hot Water Temperature Reheat Time	55 °C 00 h : 44 m

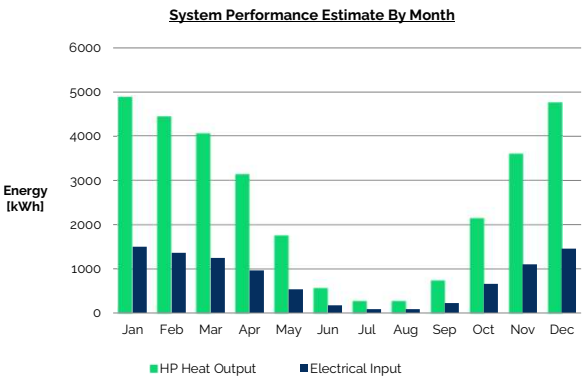
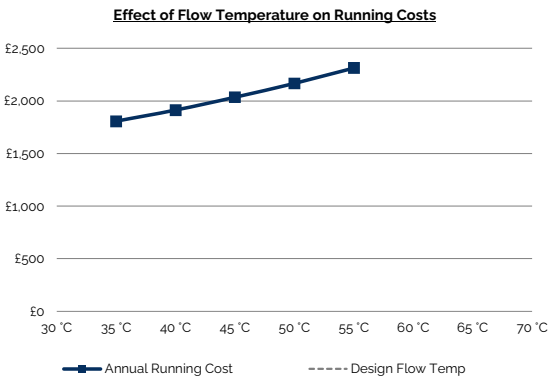
Energy Performance Certificate (EPC) Information

Is this Heat Pump System Performance Estimate based on EPC Data:	NO
If not, how has this estimate been calculated:	MIS 3005-D
EPC No. for building:	N/A

Design Energy Requirements

Energy Requirement	Total Energy	Heat Pump Output	SPF	Heat Pump Input
Space Heating	27312 kWh	27312 kWh	3.26	8378 kWh
Domestic Hot Water	3275 kWh	3275 kWh	3.26	1005 kWh
Additional Energy Consumption (Pasteurisation)				60 kWh

Total Design Energy Output from Heat Pump	30587 kWh
Combined Seasonal Performance Factor (SPF)	3.24
Total Estimated Energy Input	9443 kWh



Annual Running Costs

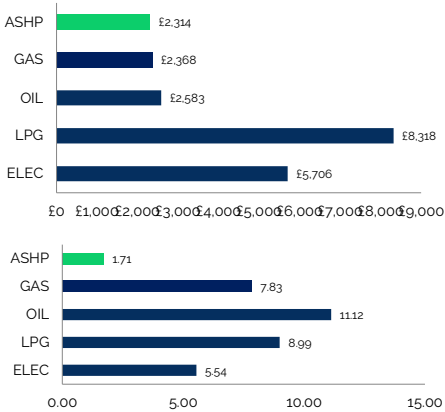
Technology	ASHP	GAS	OIL	LPG	ELEC
Total Heat Energy Output	30587	30587	30587	30587	30587
SPF	3.24	0.82	0.82	0.82	1.00
Total Energy Input	9443	37301	37301	37301	30587
Daily Standing Charge	0.00p	31.43p	0.00p	0.00p	0.00p
Indicative Fuel Cost	24.50p	6.04p	6.93p	22.30p	17.62p
Estimate Annual Running Cost	£2,314	£2,368	£2,583	£8,318	£5,706

Fuel costs based on price cap rates UK average from 01/04/24. Oil price from Boiler Juice on 04/03/24. LPG price from LPG-save.co.uk. Elec. Heating comparison based on 85% night rate; 15% day rate. Tariffs are subject to change.

Annual Carbon Emissions

Technology	ASHP	GAS	OIL	LPG	ELEC
Total Energy Input	9443	37301	37301	37301	30587
Carbon Dioxide Emissions Factor [g/kWh]	181	210	298	241	181
Total Carbon Dioxide Emissions [kg]	1709	7833	11116	8990	5536
Total Carbon Dioxide Emissions [tonnes]	1.71	7.83	11.12	8.99	5.54

Emissions factor for electricity based on 2020 grid average. Emissions factors for gas, oil and LPG taken from latest SAP figures.



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KEY FACTS ABOUT YOUR HEAT PUMP SYSTEM PERFORMANCE ESTIMATE

Predicting the heat demand of a building, and therefore the performance running costs of heating systems, is difficult to predict with certainty due to the variables discussed here. These variables apply to all types of heating systems, although the efficiency of heat pumps is more sensitive to good system design and installation. For these reasons your estimate is given as guidance only and should not be considered as a guarantee.

Seasonal Coefficient of Performance

MCS Seasonal Coefficient of Performance (SCoP) is derived from the EU ErP labelling requirements, and is a theoretical indication of the anticipated efficiency of a heat pump over a whole year using standard (i.e. not local) climate data for 3 locations in Europe. It is used to compare the relative performance of heat pumps under fixed conditions and indicates the units of total heat energy generated (output) for each unit of electricity consumed (input). As a guide, a heat pump with a MCS SCoP of 3 indicates that 3 kWh of heat energy would be generated for every 1 kWh of electrical energy it consumes over a 'standard' annual cycle.

Energy Performance Certificate

An Energy Performance Certificate (EPC) is produced in accordance with a methodology approved by the government. As with all such calculations, it relies on the accuracy of the information input. Some of this information, such as the insulating and air tightness properties of the building may have to be assumed and this can affect the final figures significantly leading to uncertainty especially with irregular or unusual buildings.

Identifying the uncertainties of energy predictions for heating systems

We have identified 3 key types of factor that can affect how much energy a heating system will consume and how much energy it will deliver into a home. These are 'Fixed', 'Variable' and 'Random'. Most factors are common to ALL heating systems regardless of the type (e.g. oil, gas, solid fuel, heat pump etc.) although the degree of effect varies between different types of heating system as given in the following table.

The combined effect of these factors on energy consumption and the running costs makes overall predictions difficult however an accuracy $\pm$ 25-30% would not be unreasonable in many instances. Under some conditions even this could be exceeded (e.g. considerable opening of windows). Therefore it is advised that when making choices based on mainly financial criteria (e.g. payback based on capital cost verses net benefits such as fuel savings and financial incentives) this variability is taken into account as it could extend paybacks well beyond the period of any incentives received, intended occupancy period, finance agreement period etc.

Factor	Impact
'Fixed' which include:	
Equipment Selection Performance figures (SCoP) from ErP data	System Efficiency
Energy Assessment via the EPC (e.g. assumptions as to fabric construction and levels of insulation; the variation in knowledge and experience of Energy Assessors)	Energy Required
'Variable' which are affected by the system design and include	
Accuracy of sizing of heat pump- i.e. closeness of unit output selection (kW) to demand heat requirement (kW)	System Efficiency
Design space and ambient (external) temperatures	Energy Required
Design flow /return water temperatures, and weather compensation	System Efficiency
Type of Heat emitter (e.g. Under-floor; natural convector (e.g. 'radiator'), fan convector etc.)	System Efficiency
'Random' which cannot be anticipated and include:	
User behaviour	
- Room temperature settings	Energy Required
- Hot water usage and temperature settings	Energy Required
- Occupancy patterns/times	Energy Required
- Changing the design HP flow temperatures	System Efficiency
- Ventilation (i.e. opening windows)	Energy Required
Annual climatic variations (i.e. warmer and colder years than average)	Energy Required

Key

The statement at the end of each item indicates the major factor affected as follows:

Energy Required: the heat energy output requirement of the system which directly impacts on running costs. This requirement exists regardless of the heating system chosen as it is the heat required to keep the space comfortable. Opening windows or increasing room temperatures will demand more heat output, which means more energy input but this would NOT directly affect the efficiency. Thus increased energy demand does NOT automatically mean reduced efficiency.

System Efficiency: the efficiency of the system has been directly affected and will therefore demand more input energy to achieve the same heat output thus increasing running costs. However, increased energy input does NOT necessarily mean lower system efficiency (see above).

Additional Information About Your Heat Pump System Performance Estimate

Drying Out

With a new build property, or any property that has undergone extensive renovation works, there will be a significant amount of drying out during the first 6 – 12 months after construction is finished. This drying out can lead to running costs being significantly higher in the first year of operation as the moisture in the construction materials evaporates, especially if the building is completed in winter.

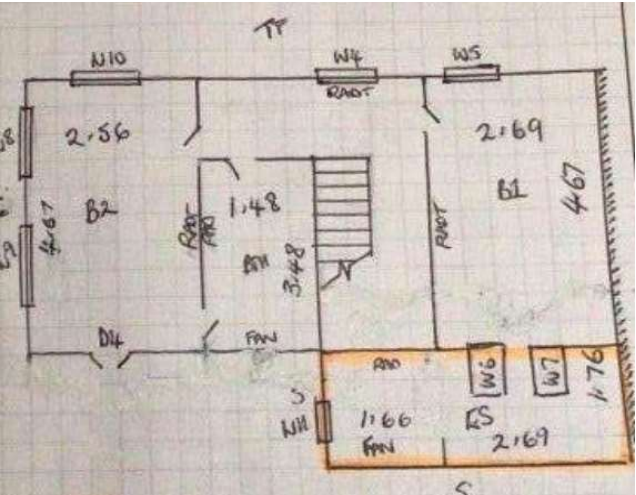
Winter Consumption

As heating devices, naturally heat pumps will consume more electricity in winter. Around 75% of your annual running costs will occur from October through to March, with nearly 50% of your running costs occurring just in December, January and February.



Address

Mill Studio, Old Hollow Lane Rowfant, Crawley RH10 4TB



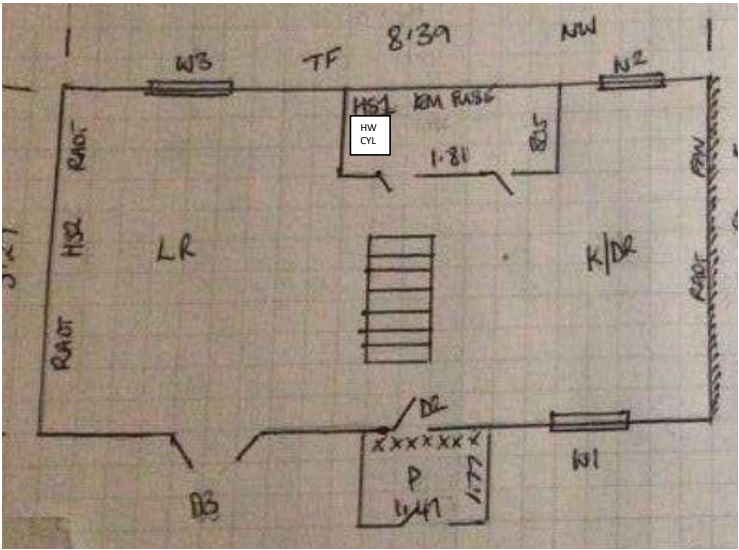
ALL POSSIBLE POSITIONS FOR AIR LOCKS MUST BE FITTED WITH AIR VENTS .
AS A MINIMUM, AAV'S IN PIPEWORK CROSSING THE LOFT, THUMB VENT ABOVE THE VOLUMISER AND HOT WATER CYLINDER COIL IF FITTED

Ground Floor Rooms	Designed heat loss for room at design flow temperature of 55c	Radiators						TRV Required
		Existing radiators		New Radiator		Replace existing radiator		
		Qty	Size	Qty	Size	Qty	Size	
Bedroom 1	521	1	7 x 8 K2			1	6 x 14 K2	Yes
Bedroom 2	1229	1	7 x 8 K2			1	6 x 14 K2	Yes
Bathroom	434	1	TR					No
Landing	363	1	7 x 5 K2			1	6 x 14 K2	No
Ensuite	1481	1	TR					No

The heating system is designed allowing for the levels of insulation (post measure install if insulation measures are being installed).
The sizing and location of heating components will be subject to change depending on site constraints
radiator designation height x length configuration i.e 6 x 12 K2 600mm high 1200mm long
K1 single panel single convector, P+ double panel single convector, K2 double panel double convector

Address

Mill Studio, Old Hollow Lane Rowfant, Crawley RH10 4TB



First floor Rooms	Designed heat loss for room at design flow temperature of 55c	Radiators						TRV Required
		Existing radiators		New Radiator		Replace existing radiator		
		Qty	Size	Qty	Size	Qty	Size	
Kitchen/Living/Dinin	8383	3	7 x 11 K2			3	Lol 19-15	No
Store room	245							No
Living room				1	Lol 19-15			No