Heat Pump Suitability Survey

Choosing the right air source heat pump for your home has never been more complex, therefore homeowners need to make an informed choice when choosing the right model heat pump.

Our advice is based on the properties needs with the homeowner's requirements in mind.

The Heat Pump Suitability Survey cost include the following sections:
A home site visit, office-based calculations, including Heat Loss calculations, equipment selection and equipment location proposal, DNO application and regulations.

Detailed Specification of Heat Pump Suitability Survey

The Survey

1. During the survey we gather the following information. For the room-by-room heat loss calculations we measure each room L/W/D, windows size and type, doors type and size, Insulation values of walls, ceilings, and roof.
   A total heat loss of the building can be produced from this information.
2. Radiator sizes and type; we measure each existing radiator, the size and type and location, if the radiator requires increasing, we measure the available space to increase said radiator.
3. Hot water cylinder: what type of cylinder is currently in use, look at the space available to change the cylinder. Also look at the type of system required, and any flow or pressure issues.
4. Showers: we assess the type of existing showers and shower pumps.
5. Current boiler location, and work required to remove it.
6. Heating and hot water controls, including thermostats and time clocks
7. Mains power electrics, incoming fuse size, consumer fuse board, does this require an upgrade?
8. Discuss suitable locations for the Air Source Heat Pump outdoor unit, Indoor unit (if required) and hot water appliance
9. Noise calculations, to comply with MCS regulations and permitted development, check the location with neighbouring properties.
10. Take a series of photos to show the above items

Heat Loss

Room Name	Design Room Temperature (C)	Area (m2)	Volume (m3)	W/m2	Total Energy Consumption (kWh)	Total Heat Loss (W)
Lounge	21	16	35	41	1,239	663
Dining Room	21	11	24	106	2,351	1,140
GF WC	18	2	4	32	116	57
Landing GF hall	18	5	12	37	420	201
Kitchen	18	12	26	44	1,093	509
Bed 1	18	12	26	42	1,048	490
Bed 2	18	10	22	58	1,283	574
Ensuite 1	23	4	8	40	240	140
Ensuite 2	23	4	8	63	409	224
Bed 3	18	5	11	36	367	176
Ent Hall / landing	18	8	18	56	993	446
Bathroom FF	23	2	4	79	259	138
Total		91	198		9,818	4,758

DAIKIN STAND BY ME HEATING SOLUTIONS NAVIGATOR

Room	Heat load	Oversize factor	Ref. name	Brand / range	New / Existing	Panel type	Height	Width	Capacity	Added to list
Hall	128.56W	2.301	Radiator 1	StelradCompact	New	2 panels 1 convector	600 mm	500 mm	295.84W	V
Toilet	89.77W	1.928	Radiator 1	StelradCompact	New	1 panel 1 convector	600 mm	400 mm	173.12W	V
Kitchen/Diner	1033.73W	1.028	Radiator 1	StelradCompact	New	2 panels 2 convectors	600 mm	1400 mm	1062.88W	V
Living room	881.99W	1.034	Radiator 1	StelradCompact	New	2 panels 2 convectors	600 mm	1400 mm	911.99W	V
Master Bedroom	304.33W	1.555	Radiator 1	StelradCompact	New	2 panels 1 convector	600 mm	800 mm	473.35W	V
Bathroom	336.98W	1.097	Radiator 1	StelradCompact	New	2 panels 2 convectors	600 mm	600 mm	369.81W	V
Landing	181.76W	1.628	Radiator 1	StelradCompact	New	2 panels 1 convector	600 mm	500 mm	295.84W	V
Bedroom 2	346.66W	1.195	Radiator 1	StelradCompact	New	2 panels 1 convector	600 mm	700 mm	414.18W	V
Bedroom 3	390.35W	1.061	Radiator 1	StelradCompact	New	2 panels 1 convector	600 mm	700 mm	414.18W	V

Office Heat Loss Calculations

From the Information gathered on site we apply this information to Daikin product solutions software.

This will calculate the heat requirement for each room and offers a product selection against the heating requirements. The software also calculates the heat pump performance and running cost against your current energy cost.

Radiators are also sized using the Daikin software and a full report is produced, complete with schematic drawings and pipe work design.

DNO Approval

Some heat pumps require DNO approval pre-installation, if the heat pump requires a larger power supply than 16amp, permission to connect needs to be granted, heat pumps with 16amp supply and below can be installed by the connect and notify process following the installation.

Some homes may require additional works by the DNO to install your Heat pump, this could be a simple fuse change, or a larger mains power supply installed. The DNO will provide a quotation for this work following our application.

an application to the local DNO is included in the survey cost.

Radiator Sizing and specifications

We design the radiator system to operate at the maximum efficiency, legalisation is changing and in future all radiator systems will need to operate at a maximum flow temperature of 55dc.

We will recommend a suitable size radiator to replace the existing one, taking into consideration the available wall space.

Radiators are available in single, double or triple sizes.

Ecobubl ltd are MCS certificated and registered with the RECC (Renewable Energy Consumer code)

Total Estimated labour hours involved in the Survey

1. The survey, travel and time on site = 3-4 hours
2. Office Heat Loss calculations = 3-4 hours
3. Radiator Sizing = 1 hour
4. DNO Application = 1 hour

Total estimated hours = 8-10 Hours

If you need any further information regarding the details of the survey, please feel free to call anytime.

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