

Construction Specification for Part L1A Compliance			
Project: 2 new dwellings - L Apache, Westergate Street, Woodgate, Chichester, PO20 3SQ			
Client: Chris Moore, Sussex Building Consultancy Limited		End client: Randmere Limited	
SAP Assessor: Dominic Bibby	Date: 20th October 2021	Our ref: ZJ-22	Version: 1
NOTES: ASHP Timber framed construction – low thermal mass			
1. Construction and insulation			
Element			U-Value (W/m ² K)
<u>Ground floor</u> 65mm screed 100mm PIR insulation 100mm concrete			0.17
<u>Exposed wall – timber framed facing brick</u> 12.5mm plasterboard ((x 2 layers) 100mm PIR insulation (bridged) 50mm cavity (bridged) 18mm plywood 102.5mm Brickwork Outer Leaf			0.24
<u>Roof – Sloped (including GF sloped roof)</u> 37.5mm PL4000 (insulated plasterboard) 25mm Battens 25mm Cavity 100mm insulation (between rafters) 10mm tiles			0.21
<u>Roof - Flat ceiling</u> 12.5mm Plasterboard 25mm Battens 25mm cavity 200mm mineral wool insulation (bridged) 200mm mineral wool insulation (over)			0.11
<u>Roof – Flat roof (GF Bay)</u> 12.5mm Plasterboard 25mm Battens 100mm PIR insulation 18mm plywood 10mm tiles			0.2
<u>Glazing</u> Double glazed, UPVC/timber/metal framed, 16mm air gap (argon filled) + soft coat “low E” glass. Windows/Glazed doors/Roof lights. Doors. Note: A certificate stating the overall u-value of windows and doors is required from the supplier/manufacturer for the As Built SAP and EPC. (This is the overall u-value of the windows, not the glass or frame u-value).			1.6 1.8

Thermal Bridging Junctions

Thermal bridging junctions to be constructed in accordance with 'A Handbook of thermal bridging details incorporating aircrete blocks'.

Air tightness

A design air permeability of 5m³/h/m² to be confirmed by air pressure testing.

Note: An Air test certificate will be required for the As Built SAP and EPC.

Therm Energy offer a very competitive air leakage testing service (required upon completion). Please contact us if you would like a quote for this service.

2. Heating and Ventilation

Main Heating System

Air Source Heat Pump (ASHP) with minimum 170% efficiency. MCS certified. Heating system: Radiators. Under floor heating.

Water Heating – hot water cylinder

From main heating. 250 litre water cylinder with declared loss factor of 2.09. Cylinder in heated space, cylinderstat, fully insulated primary pipework, water heating timed separately.

Heating Controls

Time and temperature zone control by suitable arrangement of plumbing and electrical services.

Ventilation

System 1 natural ventilation including extract fans to wet rooms.

3. Other energy related issues

Lighting (internal)

100% Low-energy light fittings in accordance with Part L1A.

Electricity Tariff

Standard Tariff.