

Specification Summary

New build – 19% reduction



Project Address – 71 Oak Tree Rd, Tilehurst, Reading, RG31 6LA	
Thermal Mass Parameter (TMP)	Low
Orientation (When stood facing out of the front door)	East
Dwelling designed to achieve a water use target of not more than 125 Litres per person per day	Yes

General Construction (Please confirm)	Calculated U-Value (W/m^2K)
Ground floor – Beam and block 65mm screed on 150mm Celotex on 150 beam and block deck.	0.11
External Wall 1 – Facing brick 102.5mm brick, 125mm Dritherm 32, 100mm Celcon standard block ($k: 0.15 W/mK$), 12.5mm plasterboard on dabs, skim finish.	0.21
Party Wall Construction	N/A
Roof 1 – Flat ceiling 140mm Hybris insulation between 150 x 50 timber joists @ 400 cc, 45mm Hcontrol Hybrid, 12.5mm plasterboard on timber battens.	0.17
Roof 2 – Flat roof insulation (balcony) 100mm Rockwool roll between 47 x 150 timber joists plus 170mm on top, 12.5mm plasterboard under joists, skim finish.	0.16

Openings (Please confirm & provide U value certificates)	g-value	U-value
Windows/Rooflights –	0.63	≤ 1.40
Doors – Half glazed door	0.63	≤ 1.40

*Window U-value – This value must reflect the 'whole' window rather than just the centre pane

Heating and Ventilation	Specification
Main Heating System	Mains gas system boiler to radiators and underfloor, Efficiency > 89.5% (Worcester Greenstar 8000 Style used for calculations) (Please confirm make and model).

Secondary Heating System	HETAS approved log burner. Efficiency > 65% <i>Please provide make and model</i>
Water Heating	From main heating: 250l cylinder – Standing loss: 1.78 kWh/day. <i>Cylinder size assumed – please confirm</i>
Heating Controls	Time and temperature zone control.
Ventilation	Natural, extractor fans to wet rooms.

Other	Specification
Lighting	100% low energy lighting
Air Tightness and Infiltration	< 5.00 m ³ /m ² h
Renewables	2.00kWp PV system. (1kWp per unit) South facing, 30° pitched, overshadowing: None or Little.
Thermal Bridging	Accredited Construction Details to be used. Insulated lintels (catnic or similar) to be used, Psi value: 0.050
Summer Overheating	In order to avoid overheating in the summer it is assumed that the dwelling is specified with the following: • Cross ventilation on most floors is possible • Windows can be fully opened (Security provision may need to be in place to allow ground floor flats etc to have windows open at night) • Windows can be fitted with 'White-coloured curtains or roller blinds that can be fully closed when required.