

Magdalen Road, Oxford



Option	External Wall	Sheltered Wall	Pitched Roof (Joists)	Ground Floor	Windows & Glazed Doors	Composite Door	Main Heating	Heat Emitters	HW Cylinder	Renewables (PV)	Diverter	WWHR	Mechanical Ventilation	Air-Permeability	DER vs TER Improvement	DfEE vs TfEE Improvement	DPER vs TPER Improvement
Type	U Value	U Value	U Value	U Value	U Value	U Value	Make	Type	(litres)	(kWp)	Y/N	Y/N	Type	m3/hr/m2	%	%	%
Sample Units	0.16	0.19	0.10	0.13	1.00	1.20	Panel Heater + Edel Dimplex	Radiators	210.00	-	-	Y	MVHR	3.00	65.74	2.11	32.22

Element	U Values	Description							
External Wall (Masonry outer)	0.16	102.5mm Brick outer leaf, 25mm Air gap, 120mm Kingspan K108 - or equiv (0.019 W/mK), plastic wall ties, 100mm concrete blockwork, 12.5mm plasterboard							
Ground Wall (Concrete outer)	0.16	100mm concrete outer leaf, 25mm Air gap, 120mm Kingspan K108 - or equiv (0.019 W/mK), plastic wall ties, 100mm concrete blockwork, 12.5mm plasterboard							
Sheltered Wall	0.20	12.5mm plasterboard, 100mm concrete, 190mm Mineral Wool Quilt - or equiv (0.04 W/mK), 100mm concrete blockwork, 12.5mm plasterboard							
Pitched Roof (Insulation at Joists)	0.10	Zinc façade, well ventilated air space + timber battens, 100mm Kingspan K107 - or equiv (0.018 W/mK), 100mm Kingspan K107 - or equiv (0.018 W/mK) + timber battens, plasterboard							
Ground Floor	0.13	65mm Screed, 110mm Kingspan K110 - or equiv (0.018 W/mK), 200mm beam and block concrete							
Party Walls	0.00	Plasterboard, concrete blockwork, cavity, concrete blockwork, plasterboard							
Internal Walls	0.00	Timber frame with plaster either side							
Windows and Glazed Doors	1.00	Triple Glazed windows with a G-value of 0.4							
Doors	1.20	Solid Door							
Construction Details (PSI values)	-	Notional Psi Values used - Thermal Bridges to be independently assessed at detailed design stage							
Main Heating	-	Space Heating - Electric Panel Heaters, Hotwater Heating - Edel Dimplex							
Controls	-	Programmer and appliance thermostats							
HW Cylinder	-	210L, 1.6 kWh heat loss							
Secondary Heating	-	n/a							
Mechanical Ventilation	-	Balanced MVHR (Modelled as Titon HRV4 Q Plus Eco), SFP 0.42, Efficiency 91%							
Pressure Test Method	-	3 m3/hr/m2							
Lighting	-	10W light fittings with a capacity of 1000lm							
Electrical Tariff	-	Standard Electricity Tariff							
Cold Water Supply	-	Mains water supply							
Shower Type	-	Unvented Shower connected the to WWHR							
Waste Water Heat Recovery	-	Baxi Assure or equiv							
Renewables	-	-							
Battery Storage	-	-							
Notes									
Sign Off of details	Name	PP M Maclean	Date	25.08.2023	Client Sign Off	Name		Date	
	Sign	(on behalf of SRE)				Sign			