

U-VALUE CALCULATOR REPORT

Property Reference	7358-0001-GF-80MP	Issued on Date	04/09/2024
Assessment Reference	Proposed	Prop Type Ref	
Project	Proposed dwelling adjacent, 80 Mount Pleasant, Reading, RG1 2DT		
Calculation Type	New Build (As Designed)		

SAP Rating	0	DER	N/A	TER	N/A
Environmental	0	% DER<TER	N/A		
CO ₂ Emissions (t/year)	0.00	DFEE	N/A	TFEE	N/A
General Requirements Compliance	N/A	% DFEE<TFEE	N/A		

Assessor Details	Mr. James Turner, J E Turner, Tel: 01437710954, jim.thinkinggreen@gmail.com	Assessor ID	7358-0001
Client	Greg Farrell, 052		

Building Elements

Roof Kitchen roof - Pitched roof, insulated slope

Roof Type: Pitched Roof, insulated sloping ceiling

Layer	Description	Thickness (mm)	Conductivity (W/m ² K)	Resistance (m ² K/W)	Fraction (%)	Density (kg/m ³)	Heat Cap. (J/kgK)
Ext surface				0.1000			
Layer 1	Tiles						
	Main construction	10	1.0000	0.0000	100.00		
Layer 2	airspace/timber battens						
	Main construction	25	0.0000	0.0000	89.63		
	Main construction	25	0.1563	0.0000	10.37		
	Corrections - Cavity Ventilated, Emissivity: Normal						
Layer 3	Breather membrane						
	Main construction	1	0.0000	0.0000	100.00		
Layer 4	air gap between rafters						
	Main construction	50	0.0000	0.0000	88.89		
	Main construction	50	0.1300	0.0000	11.11		
	Corrections - Cavity Ventilated, Emissivity: Normal						
Layer 5	Rigid Insulation between rafters						
	Main construction	120	0.0220	5.4545	88.89		
	Main construction	120	0.1300	0.9231	11.11		
	Corrections - Air Gap: Level 0, Fasteners: None or plastic						
Layer 6	Rigid insulation						
	Main construction	60	0.0220	2.7273	100.00		
	Corrections - Air Gap: Level 0, Fasteners: None or plastic						
Layer 7	Plasterboard, standard						
	Main construction	12.5	0.2100	0.0595	100.00	950	840
Layer 8	Plaster, standard						
	Main construction	3	0.4000	0.0075	100.00	600	1000
Int surface				0.1000			

Total resistance:	Upper limit = 7.487 m ² K/W	Lower limit = 6.524 m ² K/W	Average = 7.005 m ² K/W
	Total correction = 0.0000 m ² K/W	U-value (unrounded) = 0.14 W/m ² K	

Unheated space: None

Total thickness: 282 mm

U-value: 0.14 W/m² K

Kappa: 12.17 kJ/m² K