

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

Wall Basement wall

Wall Type: Basement Wall

Floor Area = 27.79 m², Floor Perimeter = 21.89 m

Floor Resistance = 0.120 m²K/W

Depth of floor below ground level = 2.10 m

Soil= Unknown

Earth Conductivity = 2.00 W(m.K)

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				0.0400			
Layer 1	Concrete, reinforced (2% steel)						
	Main construction	300	2.5000	0.1200	100.00		
Layer 2	PIR insulation between studs						
	Main construction	100	0.0220	4.5455	86.18		
	Main construction	100	0.1300	0.7692	13.82		
	Corrections - Air Gap: Level 1, Fasteners: None or plastic						
Layer 3	Plasterboard, standard						
	Main construction	12.5	0.2100	0.0595	100.00	950	840
Int surface				0.1300			

Total resistance: Upper limit = 3.048 m² K/W Lower limit = 2.887 m² K/W Average = 2.968 m² K/W

Total correction = 0.0083 m² K/W

U-value (unrounded) = 0.21 W/m² K

Unheated space: None

Total thickness: 413 mm

U-value: 0.21 W/m² K

Kappa: 10.37 kJ/m² K