

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

Floor Kitchen floor - Floor - suspended beam-and-block floor

Floor Type: Suspended Floor

Area = 14.23 m², Perimeter = 12.77 m, Wall thickness = 300.00 mm, Soil: Clay

Depth of underfloor space below ground: 0.200 m Floor wind shielding: Average (suburban)

Floor height above ground: h = 0.500 m

U-value of walls above ground: U_w = 0.180 m

Ventilation openings per perimeter length: e = 0.0015 %

Mean wind speed: v = 5.000 m/s

Resistance on solum: R_g = 0.000 m²K/W

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				0.1700			
Layer 1	beam and block floor						
	Main construction	100	1.2800	0.0781	86.30		
	Main construction	100	1.3500	0.0741	13.70		
Layer 2	Celotex XR4000						
	Main construction	150	0.0220	6.8182	100.00	30	1400
	Corrections - Air Gap: Level 1, Fasteners: None or plastic						
Layer 3	Polythene, 500 gauge						
	Main construction	0.2	0.0000	0.0000	100.00		
Layer 4	Screed						
	Main construction	65	1.1500	0.0565	100.00	1200	840
Int surface				0.1700			

Total resistance:	Upper limit = 7.292 m ² K/W	Lower limit = 7.292 m ² K/W	Average = 7.292 m ² K/W
	Total correction = 0.0087 m ² K/W	U-value (unrounded) = 0.12 W/m ² K	

Unheated space: None

Total thickness: 315 mm

U-value: 0.12 W/m² K

Kappa: 65.52 kJ/m² K