



U-Value Calculator

Thermal transmittance (U-value) according to BS EN ISO 6946:2017

Project Address

R-Wall Ltd
Gwel Teg, Week Orchard
Marhamchurch
Bude
Cornwall
EX230HT

Project Reference

R-Wall Standard125

Building Use

Domestic

Build Type

New Build

Element Type: External Wall

Max U-Value $U = 1/R_T = 0.18 \text{ W/m}^2\text{K}$

Material	Conductivity W/mK	Percent %	Thickness mm	Resistance m ² K/W
Internal Surface (Rsi)				0.1300
Plaster **	0.18	100	3	0.0167
Plasterboard Standard **	0.21	100	12.5	0.0595
XPS **	0.03	100	75	2.5000
Concrete **	1.93	100	159	0.0824
XPS **	0.03	100	125	4.1667
Airspace, heat flow horizontal, 25 mm thick **	0.18	100	25	0.1389
Cladding **	0.13	100	18	0.1385

External Surface (Rse) 0.0400

** denotes a custom material and/or values entered by the user and cannot be verified as to its accuracy.

Total thickness: 417.5 mm (actual)

Total resistance: $RT = R_{si} + R + R_{se} = 7.273 \text{ m}^2\text{K/W}$

U-Value (uncorrected): $U = 1/R_T = 0.137 \text{ W/m}^2\text{K}$

Total ΔU: 0.010

U-Value (corrected): $U = 1/R_T + \Delta U = 0.147 \text{ W/m}^2\text{K}$



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U-Value Calculator Version 3.70

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