U-value calculation
by BRE U-value Calculator version 2.03
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Element type: Wall - Structural insulated panel
Calculation Method: BS EN ISO 6946

Wall Type 2 - 169mm SIP

Layer	d (mm)	λ layer	λ bridge	Fraction	R layer	R bridge	Description
					0.130		Rsi
1	12.5	0.160			0.078		Vapourcheck plasterboard
2							Protect VC Foil Ultra Insulating AVCL
Membrane							
3	22	R-value[1]	0.130	0.125	0.780	0.169	Cavity unventilated
4	11	0.130			0.085		SIP - OSB
5	147	0.030			4.900		SIP - Lambdatherm EPS
6	11	0.130			0.085		SIP - OSB
7							Protect TF200 Breather Membrane
8	12	0.210			0.057		Magnesium Oxide Board
9	5	0.570			0.009		Render
					0.040		Rse
	221 mm (total wall thickness)				6.163		

[1]Specified thermal resistance
Total resistance: Upper limit: 6.080   Lower limit: 5.921   Ratio: 1.027   Average: 6.000 m²K/W

U-value   0.167
U-value (rounded)   0.17 W/m²K

The U value result has been determined as follows:

Bridging:

A thermal bridge percentage for the timber studs of 12.5% has been used in accordance with BR 443: 2006 Conventions for U values (section 4.5.1 (ii)).
Correction level:
A correction level of 0 has been used in accordance with Table F1 of BS EN ISO 6946: 2017 Building components and Building elements - Thermal transmittance - Calculation methods.
Please check to confirm and advise if any amendments are required.

Calculated by Protect Technical Services