

U-value calculation

by BRE U-value Calculator version 2.04a
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Element type: Wall - Other external wall type

Calculation Method: BS EN ISO 6946

TPS EcoQuilt Container U-value

<u>Layer</u>	<u>d (mm)</u>	<u>λ layer</u>	<u>λ bridge</u>	<u>Fraction</u>	<u>R layer</u>	<u>R bridge</u>	<u>Description</u>
					Rs _i		
1	25	R-value ¹			0.670	0	Cavity Before Product
2	15	R-value			1.370	0	EcoQuilt
3	25	R-value ²	50.0	0.500	0.670	0.00050	Corrugation Cavity
4	1.5	50.0				0	Galvanized Steel
<hr/>					0.040		
<hr/>					2.880		R _{se}
<hr/>				<u>67 mm</u> (total wall thickness)			

¹Calculated with specified emissivity of 0.05

²Calculated with specified emissivity of 0.05

Total resistance: Upper limit: 2.501 Lower limit: 2.211 Ratio: 1.131 Average: 2.356 m²K/W

U-value (uncorrected) 0.424

U-value corrections

Air gaps in layer 2

$\Delta U = 0.000$ (Level 0)

Fixings in layer 2

$\Delta U = 0.041$ (2.50 per m², 80.0 mm² cross-section, $\lambda = 17.0$)

Total ΔU 0.041 (9.7% of U)

U-value (corrected) 0.465

U-value (rounded) 0.47 W/m²K

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