U-value calculation

by BRE U-value Calculator version 2.04a Printed on 03 Nov 2017 at 09:59

Element type: Wall - Other external wall type

Calculation Method: BS EN ISO 6946

TPS ThermaPack Double Container U-value

Layer	d (mm)	<u>λ layer</u>	<u>λ bridge</u>	Fraction	R layer 0.130	R bridge	<u>Description</u> Rsi (Internal)
1	25	R-value ¹			0.670	0	Cavity Before Product
2	3.7	R-value			0.125	0	Thermapack Double
3	25	R-value ²	50.0	0.500	0.670	0.00050	Corrugation Cavity
4	1.5	50.0				0	Galvanized Steel
	55 mm	ı (total wall	thickness)		<u>0.040</u> 1.635		Rse (External)

¹Calculated with specified emissivity of 0.05

Total resistance: Upper limit: 1.214 Lower limit: 0.966 Ratio: 1.257 Average: 1.090 m²K/W

U-value (uncorrected) 0.917

U-value corrections

Air gaps in layer 2 $\Delta U = 0.000$ (Level 0)

Fixings in layer 2 $\Delta U = 0.004$ (2.50 per m², 80.0 mm² cross-section, $\lambda = 17.0$)

Total ΔU 0.004 (0.5% of U)

U-value (corrected) 0.917 (ΔU not added since it is less than 3% of U)

U-value (rounded) 0.92 W/m²K

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²Calculated with specified emissivity of 0.05