

Flat Roof - Timber Deck - Adhered

Horley Town Council

02/06/2025

U Value

0.15 W/(m²·K)

Layer	Material	Thickness mm	Lambda W/(m·K)	R value m ² ·K/W
External Surface Resistance				0.040
Waterproofing	EPDM MEMBRANE (ADHERED)	1.5	0.160	0.009
Insulation	THERMAROOF TR27 (≥ 120MM)	150	0.024	6.250
Vapour Barrier	VAPOUR CHECK BITUMINOUS	3	0.230	0.013
Roof Deck	PLYWOOD DECKING	22	0.140	0.157
Bridging	TIMBER JOISTS (47mm@600mm)	150	0.130	1.154
Bridge percentage	9%			
Air Cavity	TIMBER JOIST CAVITY; U/V. (47mm@600mm)	150		0.174
Plasterboard	PLASTERBOARD	12.5	0.190	0.066
Internal Finish	PLASTER SKIM	3	0.180	0.017
Internal Surface Resistance				0.100
Total Construction Thickness				342 mm

U-values calculated to BS EN ISO 6946:2017 or BS EN ISO 13370:2017 depending on application. For floor calculations the u-value result is dependent on the exposed perimeter and area entered into the calculator for each individual floor calculation. Soil type thermal conductivity taken as 1.5 W/mK, relevant to Clay/Silt. The physical and chemical properties of the products of Kingspan Insulation represent average values obtained by testing in accordance with generally accepted standards and are subject to standard tolerances.

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For wall applications (excluding K-roc)

There are potential restrictions placed upon this product which vary dependant on building type, height, construction and location. For guidance regarding the routes to compliance for meeting the fire safety requirements of the Building Regulations /Standards, refer to the relevant Technical Bulletins and links to Government websites at www.kingspaninsulation.co.uk/fireregulations