

Internal Wall Insulation (IWI) - Mechanically Fastened

Horley Town Hall

04/08/2025

U Value

0.21 W/(m².K)

Layer	Material	Thickness mm	Lambda W/(m.K)	R value m².K/W
Internal Surface Resistance				0.130
Internal Finish	PLASTER SKIM	3	0.180	0.017
Insulated Plasterboard	KOOLTHERM K118 92.5mm (12.5mm plasterboard internal finish)	92.5		4.276
Fixing Type	METAL FIXINGS		50.000	
		Number of Anchors per m² Diameter of Anchors (mm)	17 2.26 mm	
Timber Bridging	TIMBER BATTENS (47mm@600mm LOW-E)	25	0.130	0.192
Bridge percentage	12%			
Support/Lining System	TIMBER BATTEN CAVITY; U/V. (47mm@600mm LOW-E)	25		0.524
External Finish	BRICKWORK FACING	215	0.770	0.279
External Surface Resistance				0.040
Total Construction Thickness				335.5 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.

Kingspan Insulation reserves the right to amend product specifications and thicknesses without prior notice. The information, calculations, technical details and fixing instructions included in any documentation or advice including this calculation are given in good faith and apply only to uses described in this context.

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Furthermore, Kingspan Insulation does not guarantee a certain result.

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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