

## Cavity Wall - Partial Fill (total cavity 126 - 175mm)

Horley Town Council

04/08/2025

U Value

**0.16** W/(m<sup>2</sup>·K)

Layer	Material	Thickness mm	Lambda W/(m·K)	R value m <sup>2</sup> ·K/W
Internal Surface Resistance				0.130
Internal Finish	PLASTER (LIGHTWEIGHT)	13	0.180	0.072
Inner Leaf	AERATED BLOCK (k-value = 0.15 W/mK)	100	0.150	0.667
Mortar Bridging	MORTAR		0.800	0.000
Bridge percentage	7%			
Insulation	KOOLTHERM K108	90	0.019	4.737
Wall Ties	STAINLESS STEEL WALL TIES		17.000	
	Number of Anchors per m <sup>2</sup>	3		
	Diameter of Anchors (mm)	5.46 mm		
Residual Airspace	UNV. A/SPACE; (LOW-E)	50		0.664
Outer Leaf	BRICKWORK FACING	102.5	0.770	0.133
External Surface Resistance				0.040
Total Construction Thickness				355.5 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.

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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](http://www.kingspaninsulation.co.uk/fireregulations)