

# Internal Wall Insulation (IWI) - Mechanically Fastened

53-54 Swanley Centre

26/06/2025

U Value

0.26 W/(m².K)

| Layer                        | Material   | Thickness<br>mm                                      | Lambda<br>W/(m.K) | R value<br>m².K/W |
|------------------------------|--|--|-------------------|-------------------|
| Internal Surface Resistance  |  |  |                   | 0.130             |
| Internal Finish              | PLASTER SKIM   | 3  | 0.180             | 0.017             |
| Insulated<br>Plasterboard    | KOOLTHERM K118 72.5mm (12.5mm<br>plasterboard internal finish) | 72.5   |                   | 3.224             |
| Fixing Type                  | METAL FIXINGS  |  | 50.000            |                   |
|                              |  | Number of Anchors per m²<br>Diameter of Anchors (mm) | 17<br>2.26 mm     |                   |
| Timber Bridging              | TIMBER BATTENS (47mm@600mm LOW-E)                              | 25   | 0.130             | 0.192             |
| Bridge<br>percentage         | 12%  |  |                   |                   |
| Support/Lining<br>System     | TIMBER BATTEN CAVITY; U/V. (47mm@600mm<br>LOW-E)               | 25   |                   | 0.524             |
| External Finish              | BRICKWORK FACING   | 215  | 0.770             | 0.279             |
| External Surface Resistance  |  |  |                   | 0.040             |
| Total Construction Thickness |  |  |                   | 315.5 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)