# Linear Thermal Transmittance (Ψ) and Temperature Factor (ƒ)

| Certificate No: | Project Ref - Isotex Blocks | Issued: | 18 December 2024 |
|---|---|---|---|

| Description: | Isotex Lintel Block | |
|---|---|---|
| Reference: | E2 | Other lintels (including other steel lintels) |

**Junction Detail**

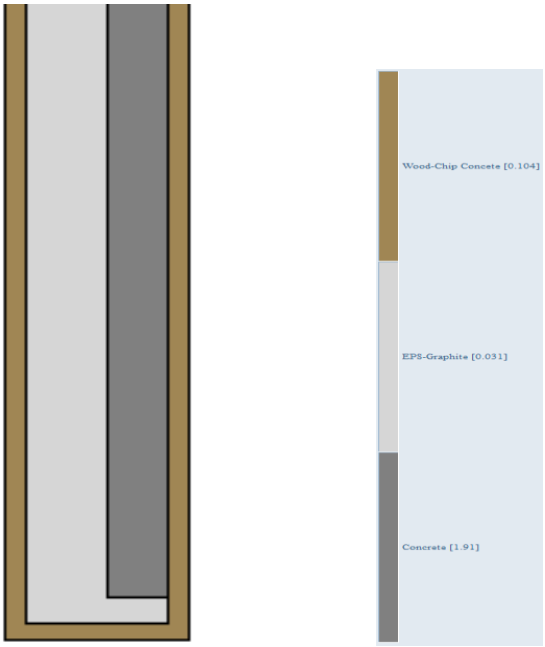


**Fig. 1.0** Two-dimensional annotated detail

**Fig. 2.0** Two-dimensional temperature distribution

| SAP 2012 Default (Ψ) | 1.000 W/m.K |
|---|---|

| SAP 10 Default (Ψ) | 1.000 W/m.K |
|---|---|

| Calculated Psi (Ψ) | 0.029 W/m.K |
|---|---|

| Temperature Factor (ƒ) | 0.80 |
|---|---|

**Calculated by:** Sam Townsend

**Standards**

BR 497:2016 '*Conventions for calculating linear thermal transmittance and temperature Factors* ' Second Edition
BR 443:2019 '*Conventions for U-value calculations* '
BS EN ISO 6946:2007 '*Building components and building elements - Thermal resistance and thermal transmittance - Calculation method (ISO 6946:2007)* '
BS EN ISO 10211:2007 '*Thermal bridges in building construction - Heat flows and surface temperatures - Detailed calculations (ISO 10211:2007)* '
BS EN ISO 13370:2007 '*Thermal performance of buildings - Heat transfer via the ground - Calculations methods (ISO 13370:2007)* '
*BRE Information Paper IP 1/06*

**Notes**

- Only applicable where the detail above is followed and the specified lambda (thermal conductivity) values are achieved.
- The above detail has been modified from that provided, in accordance with BR497 and to reflect data specified - figures are only valid for this detail.
- To limit the risk of surface condensation and mould growth in dwellings, BRE IP 1/06 Table 1 stipulates the temperature factor must be ≥ 0.75.

**Energytest Ltd.**
**Unit 10 Westbrook Court, Sharrow Vale Road, Sheffield, S11 8YZ**

**Tel: 0114 230 2812**
**Web: www.energy-test.co.uk**