



Technical competency: The Psi value (Ψ) analysis indicated below has been undertaken by a BRE accredited competent person to EN 10211 2017 and BR497 (Second Edition). Members of the Unilin Insulation Technical team are qualified under the BBA Competency Scheme CS/1006 to produce thermal and condensation risk calculations



Certificate No **Date**

UI-CTPIR-E2-WDC-03 V2 **30-Jun-23**

General Construction Specification (Wall)

- Plasterboard on dabs
- Air layer & plaster adhesive
- Concrete block
- Unilin Insulation CavityTherm CT/PIR
- Residual cavity (5mm)
- Brick
- Keystone Hi-Therm lintel

Table K1 reference

E2

U value range (Wall)

0.12 W/m²K - 0.21 W/m²K

Calculation prepared by

Keystone Lintels Technical

General Construction Specification

-
-
-
-
-
-
-

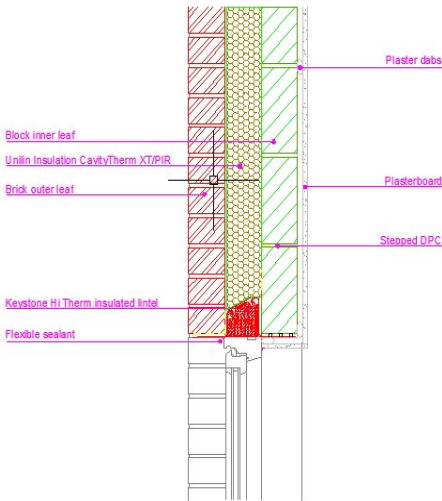
Description

Other lintels including steel lintels
(Checked) (Keystone Hi-Therm)

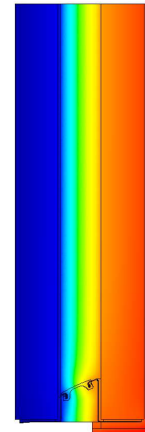
U value range

N/A

Junction detail



Thermal image



Notes

The U values indicated on this certificate are the actual U values for the proposed construction. The Psi values are calculated using the modelled U value in accordance with the guidelines set out in BR497 and ISO 10211. Contact Unilin Insulation technical support for further guidance

Ψ and f are only valid for the detail drawn and described above

Calculations have been carried out in accordance with the following standards and guidance documents were relevant

- EN ISO 10211 2017
- EN ISO 13370 2017
- EN ISO 6946 2017
- BR 497 (Second Edition)
- BR 443 2019
- BRE IP1/06

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Disclaimer: The calculations have been completed in accordance with guidance documents as indicated above by Keystone Lintels. Any change to the materials specified would alter the results achieved and would invalidate the information contained herein. Specification and results should be verified before installation. To this extent the information and/or specification is to the best of our knowledge accurate, however Unilin Insulation specifically exclude any liability for errors, omissions or otherwise arising therefrom.



CAVITYTHERM

Linear Thermal Transmittance (ψ)
& Temperature Factor (f)



| CavityTherm | 100mm | | 110mm | | 125mm | | 150mm | |
|--------------------|--------|------|--------|------|--------|------|--------|------|
| | ψ | f | ψ | f | ψ | f | ψ | f |
| Inner block | | | | | | | | |
| 0.11 | 0.029 | 0.96 | 0.031 | 0.97 | 0.034 | 0.97 | 0.037 | 0.97 |
| 0.15 | 0.028 | 0.96 | 0.030 | 0.97 | 0.033 | 0.97 | 0.036 | 0.97 |
| 0.19 | 0.028 | 0.96 | 0.029 | 0.97 | 0.033 | 0.97 | 0.036 | 0.97 |
| 0.31 | 0.027 | 0.96 | 0.029 | 0.97 | 0.032 | 0.97 | 0.035 | 0.97 |
| 0.57 | 0.026 | 0.96 | 0.028 | 0.97 | 0.032 | 0.97 | 0.035 | 0.97 |
| 1.13 | 0.026 | 0.96 | 0.028 | 0.97 | 0.032 | 0.97 | 0.035 | 0.97 |

ψ Thermal transmittance value (W/m K)

f Temperature factor

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