



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-E7-IF-02 V1 **03-Jan-23**

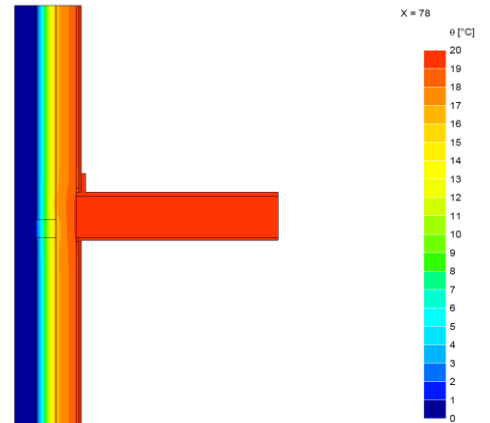
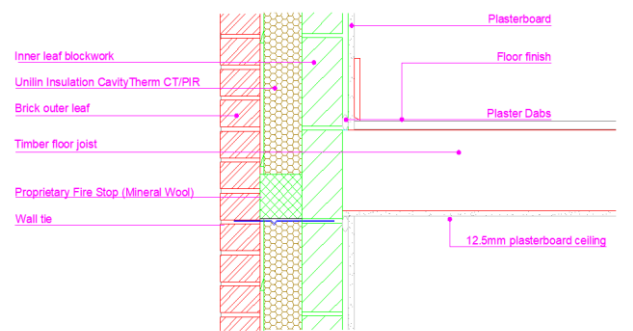
Calculation prepared by
Unilin Insulation Technical Services

General Construction Specification (Wall)
Plasterboard on dabs
Air layer & plaster adhesive
Concrete block
Unilin Insulation CavityTherm CT/PIR
Proprietary fire barrier
Residual cavity (5mm)
Brick
Table K1 reference
E7
U value range (Wall)
0.12 W/m ² K - 0.21 W/m ² K

General Construction Specification (Floor)
Timber flooring
Air layer between timber joists
Plasterboard
Description
Intermediate floor with timber joists (between dwellings)
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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CavityTherm	100mm		110mm		125mm		150mm	
	ψ	f	ψ	f	ψ	f	ψ	f
Inner block								
0.11	0.028*	0.97	0.026*	0.98	0.023*	0.98	0.020*	0.98
0.15	0.028*	0.97	0.026*	0.97	0.024*	0.98	0.020*	0.98
0.19	0.029*	0.97	0.027*	0.97	0.024*	0.98	0.020*	0.98
0.31	0.030*	0.97	0.027*	0.97	0.024*	0.98	0.021*	0.98
0.57	0.031*	0.97	0.028*	0.97	0.025*	0.98	0.021*	0.98
1.13	0.031*	0.97	0.029*	0.97	0.026*	0.98	0.022*	0.98

ψ Thermal transmittance value (W/m K)

f Temperature factor

*Psi (ψ) applied to each dwelling

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