



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-E5-GF-01 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
Residual cavity (5mm)
Brick

General Construction Specification (Floor)
Screed
Separating layer
Unilin Insulation Hyfloor XT/HYF T&G
Unilin Insulation perimeter strip XT/STR
Concrete
DPM

Table K1 reference
E5

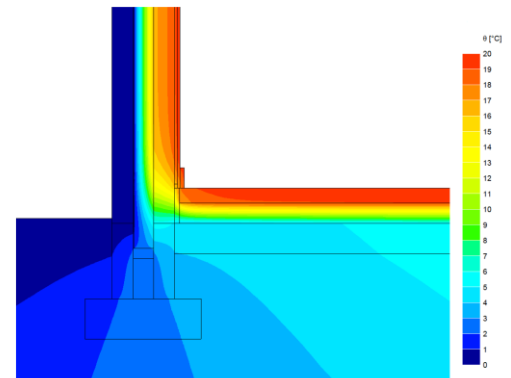
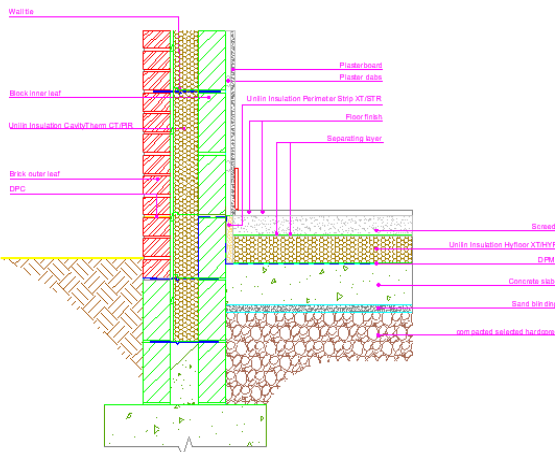
Description
Wall floor junction with insulation under screed

U value range (Wall)
0.12 W/m²K - 0.21 W/m²K

U value range
0.10 W/m²K - 0.18 W/m²K

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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Floor insulation Unilin Insulation Hyffloor XT/HYF T&G 100mm

CavityTherm	100mm		110mm		125mm		150mm	
	ψ	f	ψ	f	ψ	f	ψ	f
Inner block								
0.11	0.054	0.87*	0.053	0.87*	0.053	0.88*	0.052	0.88*
0.15	0.059	0.86*	0.059	0.86*	0.058	0.87*	0.057	0.87
0.19	0.064	0.86*	0.063	0.86*	0.063	0.87*	0.063	0.87*
0.31	0.080	0.84*	0.080	0.84*	0.079	0.85*	0.079	0.86*
0.57	0.108	0.83*	0.108	0.83*	0.108	0.84*	0.109	0.84*
1.13	0.167	0.80*	0.168	0.81*	0.168	0.81*	0.168	0.82*

Floor insulation Unilin Insulation Hyffloor XT/HYF T&G 125mm

CavityTherm	100mm		110mm		125mm		150mm	
	ψ	f	ψ	f	ψ	f	ψ	f
Inner block								
0.11	0.053	0.87*	0.052	0.87*	0.052	0.88*	0.052	0.88*
0.15	0.059	0.86*	0.059	0.86*	0.057	0.87*	0.057	0.87*
0.19	0.063	0.86*	0.063	0.86*	0.063	0.87*	0.063	0.87*
0.31	0.079	0.84*	0.079	0.85*	0.079	0.85*	0.079	0.86*
0.57	0.108	0.83*	0.108	0.83*	0.108	0.84*	0.109	0.84*
1.13	0.167	0.80*	0.169	0.81*	0.169	0.81*	0.170	0.82*

Floor insulation Unilin Insulation Hyffloor XT/HYF T&G 150mm

CavityTherm	100mm		110mm		125mm		150mm	
	ψ	f	ψ	f	ψ	f	ψ	f
Inner block								
0.11	0.052	0.87*	0.052	0.87*	0.052	0.88*	0.051	0.88*
0.15	0.058	0.86*	0.058	0.86*	0.057	0.87*	0.057	0.87*
0.19	0.063	0.86*	0.063	0.86*	0.063	0.87*	0.062	0.87*
0.31	0.079	0.84*	0.079	0.85*	0.079	0.85*	0.079	0.86*
0.57	0.108	0.83*	0.108	0.83*	0.108	0.84*	0.109	0.84*
1.13	0.168	0.80*	0.169	0.81*	0.170	0.81*	0.170	0.82*

ψ Thermal transmittance value (W/m K)

f Temperature factor

*Temperature factor calculated using 3D model as per the guidance in BR497 (Second edition)

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