

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



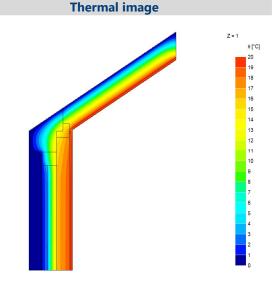
Certificate No	Date				
UI-CWP-E11-RF-03 V2	20-Sep-24				
General Constructio	n Specification (Wall)				
Plasterboard on dabs					
Air layer & plaster adhesive					
Concre	Concrete block				
Unilin Insulation XT/CWP T&G					
Residual cavity (50mm)					
Proprietary fire barrier					
Brick					
Table K1 reference					
E	<u> </u>				
U value range (Wall)					
0.15 W/m2K	- 0.21 W/m2K				

Unilin Insulation Technical Services				
General Construction Specification (Sloped roof)				
Tile/Slate				
Breathable membrane				
Air layer between rafters				
Unilin Insulation between rafters				
Unilin Insulation below rafters				
Vapour control layer				
Plasterboard				
Description				
Sloped roof and wall junction				
U value range (Sloped roof)				
0.11 W/m2K - 0.18 W/m2K				

Calculation prepared by

Concrete roof tiles Batten Counter batten Membrane Mineral Wool ulation pitched roof insulation Plasterboard pitched ceiling led wall plate on continuous mortar bed Plasterboard Plaster dabs

Junction detail



Notes

Cavity

Block inner leaf Unilin Insulation Thin R XT/CWF

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 BR 497 (Second Edition)

EN ISO 13370 2017 BR 443 2019 EN ISO 6946 2017 **BRE IP1/06**

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Disclaimer: The calculations have been completed in accordance with guidance documents as indicated above by Unilin Insulation. 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.



XT/CWP

Sloped roof insulation	Unilin Insulation between and under	rafters 100mm/25mm
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XT/CWP T&G	75mm		100mm	
	Ψ	f	Ψ	f
Inner block				
0.11	0.048	0.95	0.054	0.95
0.15	0.050	0.95	0.055	0.95
0.19	0.050	0.95	0.056	0.95
0.31	0.051	0.95	0.056	0.95
0.57	0.052	0.96	0.057	0.96
1.13	0.053	0.96	0.059	0.96

Sloped roof insulation Unilin Insulation between and under rafters 125mm/25mm

XT/CWP T&G	75mm		100mm	
	Ψ	f	Ψ	f
Inner block				
0.11	0.042	0.96	0.049	0.96
0.15	0.044	0.96	0.050	0.96
0.19	0.044	0.96	0.050	0.96
0.31	0.045	0.96	0.051	0.96
0.57	0.045	0.96	0.052	0.96
1.13	0.047	0.96	0.053	0.96

Sloped roof insulation Unilin Insulation between and under rafters 125mm/50mm

XT/CWP T&G	75mm		100mm	
	Ψ	f	Ψ	f
Inner block				
0.11	0.043	0.96	0.048	0.96
0.15	0.045	0.96	0.049	0.96
0.19	0.045	0.96	0.050	0.96
0.31	0.046	0.96	0.051	0.96
0.57	0.046	0.96	0.051	0.96
1.13	0.048	0.96	0.053	0.96

Sloped roof insulation Unilin Insulation between and under rafters 150mm/60mm

XT/CWP T&G	75mm		100mm	
	Ψ	f	Ψ	f
Inner block				
0.11	0.041	0.96	0.045	0.96
0.15	0.042	0.96	0.045	0.96
0.19	0.042	0.96	0.045	0.96
0.31	0.042	0.96	0.047	0.96
0.57	0.043	0.96	0.048	0.97
1.13	0.044	0.97	0.049	0.97

- Thermal transmittance value (W/m K)
- Temperature factor f

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