





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

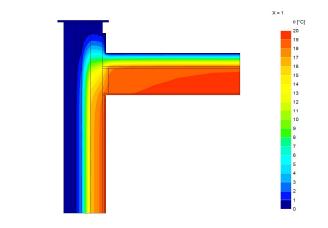


Certificate No	Date					
UI-CWP-E15-RF-02 V2	20/90/2024					
General Construction Specification (Wall)						
Plasterbo	oard on dabs					
Air layer &	Air layer & plaster adhesive					
Conci	Concrete block					
Unilin Insulat	Unilin Insulation XT/CWP T&G					
Residual cavity (50mm)						
Proprietary fire barrier						
Brick						
Table K1 reference						
E15						
U value range (Wall)						
0.15 W/m2K - 0.21 W/m2K						
Junction detail						

Nagara da Maria					
WPB plywood	[77.77AV	~~~~			
roprietary Fire Stop (Mineral Woo	n ////////////////////////////////////		11	Impervious cladding	
	7//			Proprietary flashing	
est a la company	7///			1	
nner leaf blockwork		20000	\checkmark	Unitin Insulation Perimeter FR/ALU	Roof Finish
Initin Insulation Thin-R XT/CWP			//		10011110
Brick outer leaf	7//				
	2///				Unilin Insulation FR-MG/FR-BGM
					Vapour control layer
			7/	V	WPB plywood
	777		//	Y	Flat roof joist
	11/1/			Λ	
					A
	7//		7/		Plasterboard
	777		//		
			1/1		
				Plasterboard	
	7///		7		
	7///				
			//	Plaster dabs	
	1/	1000	11	aster data	

Calculation prepared by **Unilin Insulation Technical Services General Construction Specification (Flat roof)** Waterproofing membrane Unilin Insulation FR-MG or FR-BGM Vapour control layer Plywood deck Air layer between joists Plasterboard





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

FN ISO 10211 2017 BR 497 (Second Edition)

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

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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.



THIN-R PLUS Linear Thermal Transmittance (ψ) & Temperature Factor (f)

XT/CWP

Flat Roof Insulation		Unilin Insulation FR-MF/FR-BGM 120mm			
XT/CWP T&G	75r	nm	100		
	Ψ	f	Ψ	f	
Inner block					
0.11	0.084	0.95	0.078	0.95	
0.15	0.091	0.94	0.085	0.95	
0.19	0.098	0.94	0.091	0.95	
0.31	0.115	0.93	0.109	0.94	
0.57	0.146	0.92	0.140	0.93	
1.13	0.210	0.90	0.205	0.91	

Flat Roof Insulation

Unilin Insulation FR-MF/FR-BGM 140mm

XT/CWP T&G	75n	nm	100mm		
	Ψ	f	Ψ	f	
Inner block					
0.11	0.084	0.95	0.077	0.95	
0.15	0.091	0.95	0.084	0.95	
0.19	0.097	0.94	0.090	0.95	
0.31	0.114	0.94	0.108	0.94	
0.57	0.144	0.92	0.138	0.93	
1.13	0.207	0.90	0.202	0.91	

Flat Roof Insulation Unilin Insulation FR-MF/FR-BGM 160mm

XT/CWP T&G	75r	nm	100mm		
	Ψ	f	Ψ	f	
Inner block					
0.11	0.083	0.95	0.077	0.96	
0.15	0.090	0.95	0.083	0.95	
0.19	0.097	0.94	0.089	0.95	
0.31	0.113	0.94	0.106	0.94	
0.57	0.142	0.93	0.136	0.93	
1.13	0.204	0.90	0.199	0.91	

Flat Roof Insulation

Unilin Insulation FR-MF/FR-BGM 220mm

XT/CWP T&G	75n	nm	100mm		
	Ψ	f	Ψ	f	
Inner block					
0.11	0.082	0.95	0.075	0.96	
0.15	0.089	0.95	0.081	0.96	
0.19	0.095	0.95	0.087	0.95	
0.31	0.111	0.94	0.103	0.95	
0.57	0.138	0.93	0.130	0.94	
1.13	0.195	0.91	0.190	0.92	

Thermal transmittance value (W/m K)

f Temperature factor

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