

Core U-Value



OFP Timber Frame

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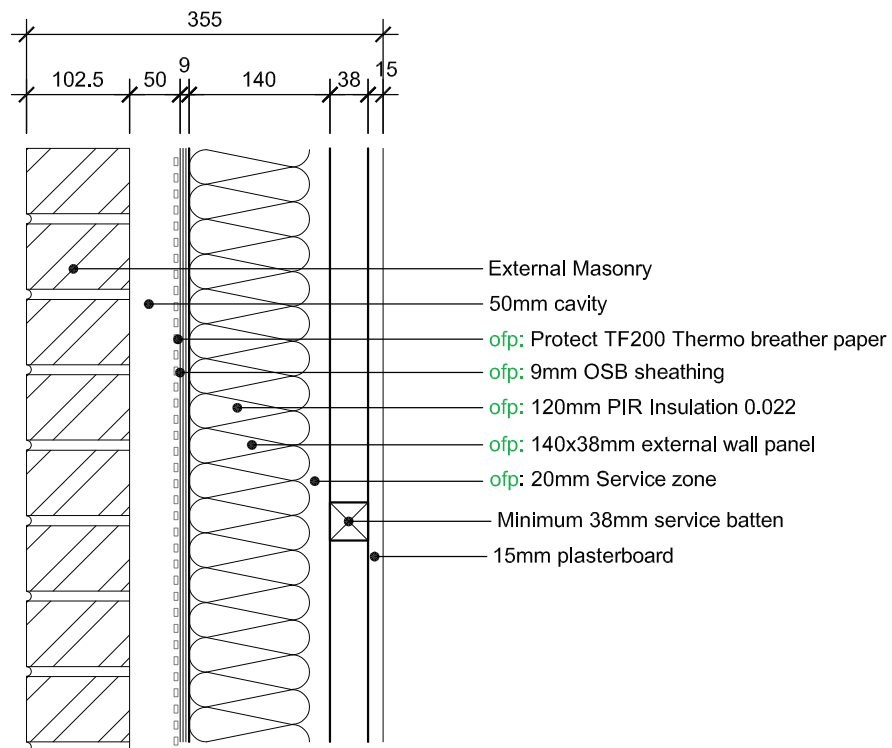
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Wall Makeups

OFP PIR Masonry (120mm) - 0.16m²K

Based on STA Detail "TF-120PIR-SZ"



For U-Values requested outside the STA Pattern Book, any required fire certification to be provided by the Principle Designer.

Project Information

Reference
 Date 2 April 2024

Construction Type

Element : Wall - Masonry external

Internal surface emissivity : High External surface emissivity : High

	Thickness (mm)	Thermal Conductivity (W/mK)	Thermal Resistance (m ² K/W)	Pitch (°)	Bridge details Air gaps (Level, Delta U")
Outside surface resistance	-	-	0.040		
Brick outer leaf	102.5	0.770	0.133		
Airspace, heat flow horizontal, 50 mm thick	50.0	-	0.770		
Protect TF200 Thermo 0.48mm	-	-	-		
Oriented strandboard (OSB)	9.0	0.130	0.069		
PIR	120.0	0.022	5.450		15.000% Prefabricated panels (120.0mm) L:1 0.010W/m ² K
Airspace, heat flow horizontal, low e surface (BR 443)	20.0	-	0.665		15.000% Prefabricated panels (20.0mm)
Protect VC Foil Ultra 0.48mm	-	-	-		
Airspace, heat flow horizontal, low e surface (BR 443)	38.0	-	0.810		9.500% Softwood (38.0mm)
Gypsum plasterboard (700 kg/m ³)	15.0	0.210	0.071		
Inside surface resistance	-	-	0.130		
Total thickness	354.5mm				

U-value = 0.16W/m²K

U-value, Combined Method : 0.164W/m²K (upper/lower limit 6.536 / 5.635m²K/W, dUf 0.0000, dUg 0.0045, dUp0.0000, dUr0.0000, dUrc1 0.0000, dUrc2 0.0000)

Correction factors

Air gaps, Delta Ug = 0.004W/m²K

(Based on the combined method for determining U-values of structures containing repeating thermal bridges)