Celotex
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Project Information

Date	2 April 2020		
Client	Grahame White, OWLarchitecture.com 25 Crescent View Leeds LS17 7QF	Project	test test

Construction Type

Element : Suspended ground floor - Ground Floor - Suspended Concrete

Ground Floor - Suspended Concrete

Internal surface emissivity : High External surface emissivity : High

	Thickness (mm)	Thermal Conductivity (W/mK)	Thermal Resistance (m²K/W)	Pitch (º)	Bridge details Air gaps (Level, Delta U")
Inside surface	-	-	0.170		
Screed	65.0	1.401	0.046		
Polythene, 500 gauge separating layer	-	-	-		
Celotex XR4000	130.0	-	5.909		
Floor deck 150mm Concrete	-	-	0.088		
Void - ventilated	-	-	0.000		
Deck underside surface resistance			0.170		

Ground Floor Details

Floor type	: Suspended floor		
Calculation method	: EN ISO 13370:2007		
P/A	: 0.500	Characteristic dimension, B'	: 4.000
Thermal conductivity of ground:	: 1.500 W/mK	Width of walls, w:	: 0.300 m
Height of floor above ground, h:	: 0.225 m	U-value of sub-floor walls, Uw:	: 1.700 W/m²K
Average wind speed, V:	: 5.000 m/s	Wind shielding factor, fw:	: 0.050
Ventilation opening area, E:	: 0.0015 m²/m	Subfloor ground resistance, Rs	: 0.170 m²K/W
Resistance of insulation on ground, Rg	: 0.000 m²K/W	External surface resistance, Rse	: 0.170 m²K/W
Deck resistance	: 0.088m²K/W		
Description	: 150mm Concrete		
Edge insulation position	: None		

Perimeter Upstand Insulation: Celotex TB4000

As detailed in Accredited Construction Details, for all ground floors where a screed or concrete slab is above the insulation layer, a perimeter up-stand insulation with a minimum R Value of 0.75 m²K/W is required for the depth of the screed or concrete slab.
This is achieved with using a minimum thickness of 20mm Celotex TB4000.

U-value = 0.13W/m²K

U-value, Combined Method : 0.135W/m²K (upper/lower limit 6.383 / 6.383m²K/W, dUf 0.0000, dUg 0.0000, dUp0.0000, dUr0.0000, dUrc1 0.0000, dUrc2 0.0000)

Correction factors
Air gaps, Delta Ug = 0.000W/m²K

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