Back to Earth SW Ltd
7 Tuns Lane
Silverton
Exeter
EX5 4HY

Project Information
Reference
Date 22 November 2023

Construction Type
Element : Solid ground floor - Floor-Solid
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		
Softwood (BR 443)	18.0	0.130	0.138		
Lithotherm Tiles	45.0	0.890	0.051		
Ampatex Solero	-	-	-		
UdiTOP	22.0	0.046	0.450		L:0 0.000W/m²K
Cemwood CW2000	30.0	0.075	0.350		L:0 0.000W/m²K
Foamglas Aggregate	300.0	0.080	3.750		L:0 0.000W/m²K
Ground	-	-	0.040		
Total thickness	**415.0mm**				

Ground Floor Details
Floor type : Solid floor
Calculation method : EN ISO 13370:2007
P/A : 0.900 Characteristic dimension, B' : 2.222
Thermal conductivity of ground: : 1.500 W/mK Width of walls, w: : 0.300 m
Edge insulation position : Vertical
Edge insulation material : Cork board
Insulation depth : 100mm
Insulation thickness : 40mm Insulation conductivity : 0.040W/mK
Foundations : Perimeter Insulation

U-value = 0.17W/m²K

U-value, Combined Method : 0.170W/m²K (upper/lower limit 4.949 / 4.949m²K/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

© JPA Technical Literature Dec 2023

Project Information
Reference
Date 22 November 2023

Thermal Mass Details

	Thickness assessed (actual) (mm)	Density (kg/m³)	Specific heat capacity (J/kgK)	Heat capacity (kJ/m²K)
Softwood (BR 443)	18.0 (18.0)	500.0	1600.0	14400000.0
Lithotherm Tiles	45.0 (45.0)	1500.0	1000.0	67500000.0
Ampatex Solero	0.0 (-)	280.0	850.0	0.0
UdiTOP	0.0 (22.0)	240.0	2100.0	0.0
Cemwood CW2000	0.0 (30.0)	370.0	1400.0	0.0
Foamglas Aggregate	0.0 (300.0)	200.0	1000.0	0.0
Total				81900000.0
kappa value				81.9000
Limiting condition:	insulation			

Admittance : 1.05 W/m²K Decrement : 0.00 factor Decrement delay : 0.00 hours

JPA Designer Version 6.05.071 071
Licensed to Back to Earth (SW) Ltd
C:\Users\chrisbrookman\OneDrive - Back to Earth SW Ltd\BTE Specification Generator - CRA.JDP
© JPA Technical Literature Dec 2023