Quinn Building Products
U-Value Calculator

QUINN BUILDING PRODUCTS

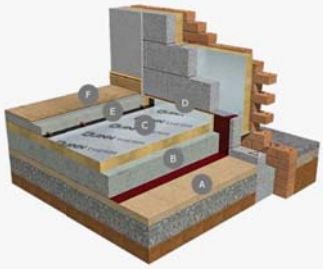
U-Value

0.13

W/m²·K

Email my U-Value

Construction Type:	Floors | Walls | Pitched Roof | Flat Roof
Construction Type Layer 2:	Ground floor
Insulation Solution:	Solid ground floor: insulated above groundbearing slab
PA Ratios: ?	0.5
Slab Thickness:	125 mm
Insulation Thickness:	125mm (20mm, 30mm, 50mm, 70mm, 80mm, 100mm, 120mm, 130mm, 150mm)



Solid ground floor: insulated above groundbearing slab (Quinn Therm QF)

1. Sand blinding and hardcore
2. Concrete slab / DPM
3. Quinn Therm QF PIR insulation boards
4. Quinn Therm edge insulation
5. Screed with u/f heating pipes on separating layer
6. Timber flooring on polyethylene slip sheet

Whilst the information and/or specification contained here is to the best of our knowledge true and accurate, we specifically exclude any liability for errors, omissions or otherwise arising therefrom. Details, practices, principles, values and calculations should be verified as to accuracy and suitability for the required purpose for use.

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Project Information

Reference
Date 2 April 2020

Construction Type

Element : Solid ground floor - insulated above groundbearing slab (Quinn Therm QF)
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		
Quinn Therm QF	125.0	0.022	5.682		L:0 0.000W/m²K
DPM/Radon barrier	-	-	-		
Concrete, dense (BS5250)	125.0	1.701	0.073		
Ground	-	-	0.040		

Ground Floor Details

Floor type	: Solid 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
Edge insulation position	: Vertical		
Edge insulation material	: Quinn Therm QF		
Insulation depth	: 150mm		
Insulation thickness	: 20mm	Insulation conductivity	: 0.022W/mK

U-value = 0.13W/m²K

U-value, Combined Method : 0.134W/m²K (upper/lower limit 5.965 / 5.965m²K/W, dUf 0.0000, dUg 0.0000, dUp0.0000, dUr0.0
dUrc1 0.0000, dUrc2 0.0000)

Correction factors

Air gaps, Delta Ug = 0.000W/m²K

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