Quinn Building Products
U-Value Calculator

QUINN BUILDING PRODUCTS

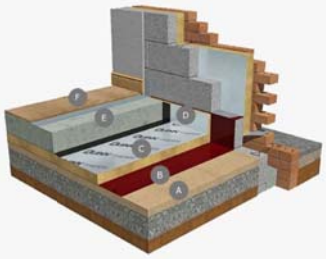
U-Value

0.13

W/m 2·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 below 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 below groundbearing slab (Quinn Therm QF)

1. Sand blinding and hardcore
2. Radon barrier / DPM
3. Quinn Therm QF PIR insulation boards
4. Quinn Therm edge insulation
5. Concrete slab 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.

QUINN Building Products
235 Ballyconnell Rd
Derrylin
Co. Fermanagh. BT92 9GP

Project Information

Reference
Date 2 April 2020

Construction Type

Element : Solid ground floor - insulated below 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		
Concrete, dense (BS5250)	125.0	1.701	0.073		
Polythene, 500 gauge (0.12mm) (BS5250)	-	-	-		
Quinn Therm QF	125.0	0.022	5.682		L:0 0.000W/m²K
DPM/Radon barrier	-	-	-		
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

JPA Designer Version 6.04a1 024
Licensed to QUINN Building Products

© JPA Technical Literature Apr 2020

...