SILENT FLOOR PE

RESILIENT UNDERSCREED MEMBRANE MADE OF CLOSED CELL PE

CLOSED CELL
Thanks to the grid of closed cell polyethylene, the foil will not permanently deform and remains effective over time.

COST-PERFORMANCE
Composition of the mixture optimised to provide both good performance and low cost.

VERSATILE
This product is a versatile solution in any application where a light and flexible resilient product is required.

COMPOSITION

closed cell expanded polyethylene

CODES AND DIMENSIONS

CODE	H [m]	L [m]	thickness [mm]	A [m²]	*H [ft]*	*L [ft]*	*thickness [in]*	*A [ft²]*	
SILFLOORPE6	1,55	50	5	77,5	*5' 1''*	*164' 1/2''*	*0.20*	*834*	4
SILFLOORPE10	1,30	50	10	65	*4' 3 1/8''*	*164' 1/2''*	*0.39*	*700*	2

SEVERAL USES
The format and composition offer various uses in the construction field, also as under floor.

STABLE
The grid of polyethylene foam is durable and does not suffer from issues associated with chemical actions or incompatibility of materials.

TECHNICAL DATA

SILENT FLOOR PE - 5-10 mm thick

Properties	standard	value	*USC conversion*
Density ρ	-	30 kg/m³	*1.9 lb/ft³*
Resistance to airflow r	ISO 9053	> 100.0 kPa·s·m⁻²	-
Thermal conductivity λ	-	0,038 W/m·K	*0.022 BTU/(h·ft²·°F)*
VOC emission classification	French decree no. 2011-321	A+	-

SILENT FLOOR PE - 5 mm thick

Properties	standard	value	*USC conversion*
Thickness	-	5 mm	*ca. 0.20 in*
Surface mass m	-	0,15 kg/m²	*0.03 lb/sft*
Apparent dynamic stiffness s'_t	EN 29052-1	43 MN/m³	-
Dynamic stiffness s'	EN 29052-1	43 MN/m³	-
Theoretical estimate of impact sound pressure level attenuation ΔL_w (1)	ISO 12354-2	24,9 dB	-
System resonance frequency f_0 (2)	ISO 12354-2	93,8 Hz	-
Impact sound pressure level attenuation ΔL_w (3)	ISO 10140-3	19 dB	-
Thermal resistance R_t	-	0,13 m²K/W	-
Water vapour transmission Sd	-	24,1 m	-
Water vapour resistance factor μ	EN 12086	5000	*125 MN·s/g*

SILENT FLOOR PE - 10 mm thick

Properties	standard	value	*USC conversion*
Thickness	-	10 mm	*ca. 0.39 in*
Surface mass m	-	0,30 kg/m²	*0.06 lb/sft*
Apparent dynamic stiffness s'_t	EN 29052-1	41 MN/m³	-
Dynamic stiffness s'	EN 29052-1	41 MN/m³	-
Theoretical estimate of impact sound pressure level attenuation ΔL_w (1)	ISO 12354-2	25,2 dB	-
System resonance frequency f_0 (2)	ISO 12354-2	91,6 Hz	-
Impact sound pressure level attenuation ΔL_w (3)	ISO 10140-3	-	-
Thermal resistance R_t	-	0,26 m²K/W	-
Water vapour transmission Sd	-	48,2 m	-
Water vapour resistance factor μ	EN 12086	5000	*250 MN·s/g*

(1) ΔL_w= (13 lg(m'))-(14,2 lg(s'))+20,8 [dB] with m'= 125 kg/m² (*25.60 lb/sft*).
(2) f_0= 160 √(s'/m') with m'= 125 kg/m² (*25.60 lb/sft*).
(3) Measured in the laboratory on 200 mm (*7 7/8''*) CLT floor. See the manual for more information on configuration.

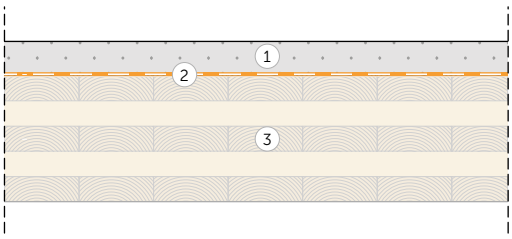
IMPACT NOISE LEVEL MEASUREMENTS

Tests carried out in the **Building Envelope Lab** of the **Free University of Bozen/Bolzano** in accordance with EN ISO 10140-3 measured the impact noise level of the construction assembly described below:

1. concrete slab (s: 50 mm - *2.0 in*)
2. **SILENT FLOOR PE** (s: 5 mm - *0.2 in*)
3. CLT panel (s: 200 mm - *8.0 in*)

- 19 dB

compared to the basic configuration



Thanks to the addition of the floating screed system on the raw CLT.

graphs and frequency values available

See the manual for more information on configuration

$L_{n,w}$ = **- 19 dB**

IIC_{ASTM} = **+ 19 dB**

Use the QR-code to download the complete manual!

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