

SILENT FLOOR PUR

RESILIENT HIGH PERFORMANCE UNDERSCREED MEMBRANE MADE OF RECYCLED POLYMERS

CERTIFIED

The effectiveness of the underscreed membrane has been certified in the labs of the Centre for Industrial Research of the University of Bologna.

SUSTAINABILITY

Recycled and recyclable. The product intelligently reuses polyurethane from production waste that would otherwise have to be disposed of.

HIGH PERFORMANCE

The special composition offers excellent elasticity, reaching attenuation values over 30 dB.



COMPOSITION

polyethylene vapour barrier

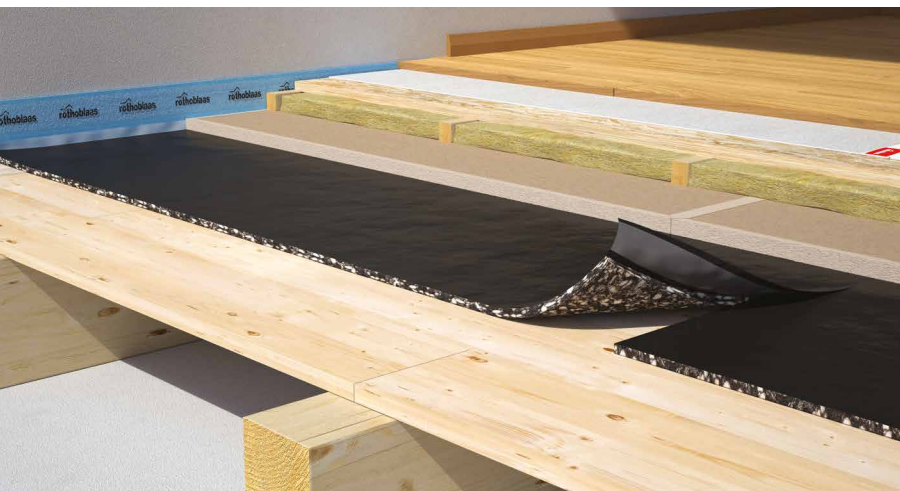
polyurethane agglomerate made from pre-consumer industrial waste

CODES AND DIMENSIONS

CODE	H ⁽¹⁾ [m]	L [m]	thickness [mm]	A _f ⁽²⁾ [m ²]	H ⁽¹⁾ [ft]	L [ft]	thickness [in]	A _f ⁽²⁾ [ft ²]	
SILFLOORPUR10	1,6	10	10	15	5' 3"	32' 9 3/4"	0.39	161	6
SILFLOORPUR15	1,6	8	15	12	5' 3"	26' 3"	0.59	129	6
SILFLOORPUR20	1,6	6	20	9	5' 3"	19' 8 1/4"	0.79	97	6

⁽¹⁾ 1.5 m of polyurethane agglomerate and vapour barrier + 0.1 m of vapour barrier for overlap with integrated adhesive strip (4' 11" + 3 7/8").

⁽²⁾ Without considering the overlap area.



SAFE

Polyurethane is a noble polymer that maintains elasticity over time, without subsidence or changes in performance.

VOC REQUIREMENTS

The membrane composition safeguards health and meets the recommended VOC limits.

TECHNICAL DATA

SILENT FLOOR PUR - 10-15-20 mm thick

Properties	standard	value	USC conversion
Resistance to airflow r	ISO 9053	< 10,0 kPa·s·m ⁻²	-
Compressibility class	EN 12431	CP2	-
CREEP Viscous sliding under compression X_{ct} (1,5 kPa)	EN 1606	7,50 %	-
Compression deformation stress	ISO 3386-1	17 kPa	-
Thermal conductivity λ	-	0,035 W/m·K	0.020 BTU/(h·ft ² ·°F)
Specific heat c	-	1800 J/kg·K	0.43 BTU/(lb·°F)
Water vapour transmission S_d	-	> 100 m	< 0.035 US perm
Reaction to fire	EN 13501-1	class F	-
VOC emission classification	French decree no. 2011-321	A+	-

SILENT FLOOR PUR - 10 mm thick

Properties	standard	value	USC conversion
Surface mass m	-	0,9 kg/m ²	0.18 lb/sft
Density ρ	-	80 kg/m ³	4.9 lb/ft ³
Apparent dynamic stiffness s'_t	EN 29052-1	12,5 MN/m ³	-
Dynamic stiffness s'	EN 29052-1	12,5 MN/m ³	-
Theoretical estimate of impact sound pressure level attenuation ΔL_w ⁽¹⁾	ISO 12354-2	32,5 dB	-
System resonance frequency f_0 ⁽²⁾	ISO 12354-2	50,6 Hz	-
Impact sound pressure level attenuation ΔL_w ⁽³⁾	ISO 10140-3	21 dB	-
Thermal resistance R_t	-	0,46 m ² K/W	-

⁽¹⁾ $\Delta L_w = (13 \lg(m')) - (14,2 \lg(s')) + 20,8$ [dB] con $m' = 125 \text{ kg/m}^2$ (25.60 lb/sft).

⁽²⁾ $f_0 = 160 \sqrt{(s'/m')}$ con $m' = 125 \text{ kg/m}^2$ (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.

SILENT FLOOR PUR - 15 mm thick

Properties	standard	value	USC conversion
Surface mass m	-	1,4 kg/m ²	0.29 lb/sft
Density ρ	-	90 kg/m ³	5.6 lb/ft ³
Apparent dynamic stiffness s'_t	EN 29052-1	8,8 MN/m ³	-
Dynamic stiffness s'	EN 29052-1	8,8 MN/m ³	-
Theoretical estimate of impact sound pressure level attenuation ΔL_w ⁽¹⁾	ISO 12354-2	34,6 dB	-
System resonance frequency f_0 ⁽²⁾	ISO 12354-2	42,5 Hz	-
Impact sound pressure level attenuation ΔL_w ⁽³⁾	ISO 10140-3	23 dB	-
Thermal resistance R_t	-	0,52 m ² K/W	-

⁽¹⁾ $\Delta L_w = (13 \lg(m')) - (14,2 \lg(s')) + 20,8$ [dB] con $m' = 125 \text{ kg/m}^2$ (25.60 lb/sft).

⁽²⁾ $f_0 = 160 \sqrt{(s'/m')}$ con $m' = 125 \text{ kg/m}^2$ (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.

SILENT FLOOR PUR - 20 mm thick

Properties	standard	value	USC conversion
Surface mass m	-	1,8 kg/m ²	0.37 lb/sft
Density ρ	-	90 kg/m ³	5.6 lb/ft ³
Apparent dynamic stiffness s'_t	EN 29052-1	7,4 MN/m ³	-
Dynamic stiffness s'	EN 29052-1	7,4 MN/m ³	-
Theoretical estimate of impact sound pressure level attenuation ΔL_w ⁽¹⁾	ISO 12354-2	35,7 dB	-
System resonance frequency f_0 ⁽²⁾	ISO 12354-2	38,9 Hz	-
Impact sound pressure level attenuation ΔL_w ⁽³⁾	ISO 10140-3	25 dB	-
Thermal resistance R_t	-	0,92 m ² K/W	-

⁽¹⁾ $\Delta L_w = (13 \lg(m')) - (14,2 \lg(s')) + 20,8$ [dB] con $m' = 125 \text{ kg/m}^2$ (25.60 lb/sft).

⁽²⁾ $f_0 = 160 \sqrt{(s'/m')}$ con $m' = 125 \text{ kg/m}^2$ (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.

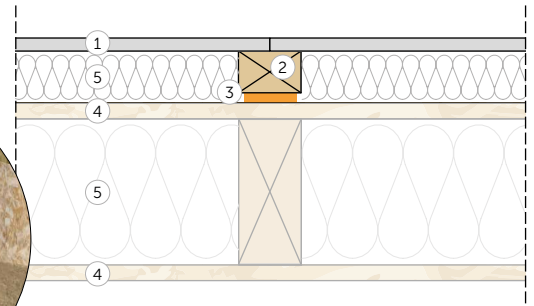


SILENT FLOOR PUR | Tests performed

SOUND REDUCTION INDEX LEVEL MEASUREMENTS

Tests carried out in the **Building Envelope Lab** of the **Free University of Bozen/Bolzano** in accordance with EN ISO 10140-2 have made it possible to measure the impact noise level of the construction assembly described below:

- ① plasterboard panel
- ② timber battens
- ③ strips of **SILENT FLOOR PUR** (s: 10 mm - 0.39 in)
- ④ OSB
- ⑤ insulation material such as rock wool



Add the supporting wall to the base frame and decouple it using strips of SILENT FLOOR PUR.

graphs and frequency values available

See the manual for more information on configuration

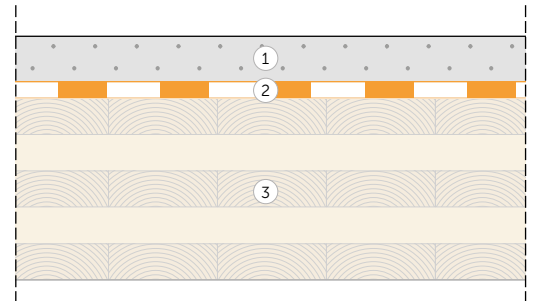
$$\Delta R_w = +6 \text{ dB}$$

$$\Delta STC = +7$$

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 - 1.95 in)
- ② **SILENT FLOOR PUR** (s: 20 mm - 0.79 in)
- ③ CLT panel (s: 200 mm - 7.8 in)



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

$$\Delta L_{n,w} = -25 \text{ dB}$$

$$\Delta IIC = +25$$

Use the QR-code to download the complete manual!

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Solutions for Building Technology

SILENT FLOOR TEX

UNDERSCREED MEMBRANE MADE OF RECYCLED TEXTILE FIBRE AND RECYCLED

RECYCLED

The bottom felt is composed of textile fibres derived from production waste, which are then carefully examined and selected.

ACOUSTIC PERFORMANCE

Tested at the University of Bologna according to international standards for acoustic characterisation.

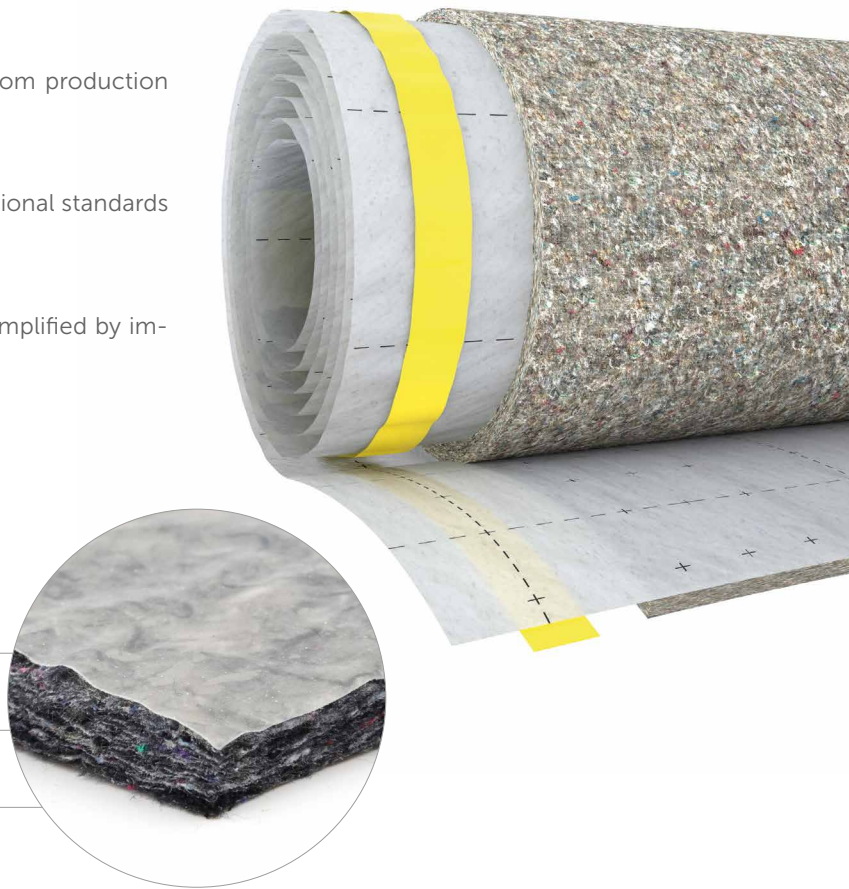
FAST INSTALLATION

Thanks to the integrated adhesive band, installation is simplified by immediately attaching the selvages to the overlaps.


COMPOSITION

polyethylene vapour barrier made from pre-consumer industrial waste

textile fibre felt made from pre-consumer industrial waste



CODES AND DIMENSIONS

CODE	H ⁽¹⁾ [m]	L [m]	thickness [mm]	A _f ⁽²⁾ [m ²]	H ⁽¹⁾ [ft]	L [ft]	thickness [in]	A _f ⁽²⁾ [ft ²]	
SILFLOORTEX6	1,10	10	6	10	3' 7 1/4"	32' 9 3/4"	0.24	108	12
SILFLOORTEX10	1,10	10	10	10	3' 7 1/4"	32' 9 3/4"	0.39	108	6
SILFLOORTEX15	1,10	5	15	5	3' 7 1/4"	16' 4 7/8"	0.59	54	12

⁽¹⁾1 m felt and vapour barrier + 0.10 m vapour barrier for overlap with integrated adhesive strip (3' 3 3/8" + 3 7/8")

⁽²⁾Without considering the overlap area.



WATERPROOF

Thanks to the polyethylene top layer, the product is perfectly impermeable to water and water vapour.

THE RANGE

Different thicknesses and thus technical specifications allow it to be used in different areas and for different screed thickness.