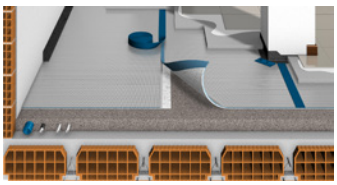
SILENS STA 10

Interior flooring

Soundproofing fabric for impact noise



Composition

Closed cell, chemically cross-linked, expanded polyethylene coupled with polyester fibre non-woven fabric.

Supply

- 25x1.5 m rolls

Use

Soundproofing floors against impact noise in compliance with Italian PM Decree of 05/12/97, by creating a floating screed intended for subsequent laying of ceramic, wood, stone, resilient and fabric floor coverings.
Floating flooring, if developed correctly, isolates the top layer of the floor (i.e. the impact surface) from the other structures of the building, thus preventing the transmission of vibrations to the latter.

Substrate preparation

SILENS STA 10 must be applied on a subfloor surface that is smooth and level; before starting application, the subfloor surface must be carefully cleaned, paying special attention to the strip along the base of the wall and all the elements in elevation. Any system pipelines or conduits must be levelled. Remove any foreign bodies from the floor, making sure it is dry and stable.

Warnings

- The index for determining reduction in impact sound level, used to estimate the acoustic performance of products for impact sound insulation between rooms, according to the EN 12354-2:2002 standard (ΔL_w) has been calculated based on a mass of 80 kg/m²; a lower mass means the index will also be lower.
- Before making the floor screed, ensure complete separation from the rest of the structure.
- Any holes in the insulation must be repaired using the special SILENS NA 1 tape.
- The thickness of the screed must not be less than 4 cm.
- Only cut SILENS STA 10 using scissors, so as to not damage the polyester fibre non-woven fabric.
- For screeds that are to be laid with coverings that are sensitive to rising damp (wood, resilient flooring, vinyl, etc.), after applying SILENS STA 10 you must lay a sheet of 0.15 mm polyethylene.
- Before starting application of SILENS STA 10, the subfloor surface must be carefully cleaned, paying special attention to the strip along the base of the wall and all the elements in elevation.
- Cut SILENS GP 1 only after laying the floors, so as to prevent the covering being coupled to any vertical element. Special care must be paid to make sure that there is:
  - separation at access thresholds and balconies;
  - separation between ceramic coverings of walls and the covering of the floor;
  - separation at shower trays, bathtubs and water drains.
- Leave a few millimetres between the skirting and the floor covering so as to avoid rigid connections.

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Technical Data

Total rated thickness	10 mm
Thickness of the cross-linked expanded polyethylene layer	5 mm ± 10%
Polyethylene density	30 kg/m³
Polyester fibre grammage	200 g/m²
Dynamic stiffness for calculation	20 MN/m³
Compressive strength (EN ISO 3386/1) 10%	13.6 KPa
Water absorption after 28 days	< 3% by weight
Water vapour diffusion resistance μ (EN 12086)	> 2,000
Thermal conductivity coefficient at 10°C (EN 12667)	0.0367 W/mK
Roll size	25x1.5 m
Index for determining reduction in impact noise level in the frequency band between 100 Hz and 3150 Hz (EN ISO140-8:1999 and EN ISO 717-2:2007). Standardised index can be used for estimating the acoustic performance of products for impact sound insulation ΔL_w as per harmonised standard EN 12354-2:2002	21 dB (Certificate) on normalised sample of 10.65 m²

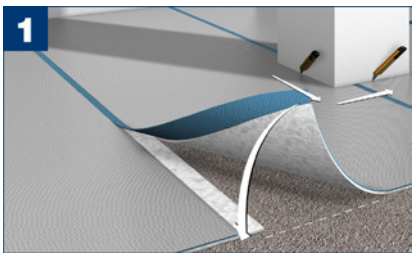
Estimate calculation

The mass of the uncovered floor slab; this then gives the level of impact sound pressure on the uncovered floor slab and then you must subtract from this the reduction due to the floating floor ΔL_w

Mass of the load-bearing floor screed in kg/m²	Index for determining reduction in impact noise for uncovered floor: Ln,w,eq = 164 - 35 log m' (dB) m' = mass of the floor screed in kg/m²	Mass of the screed kg/m²	Index for determining reduction in impact noise level for estimating the acoustic performance of products for impact sound insulation between rooms as per EN 12354-2:2002 (ΔL_w)	K Correction factor due to the contribution of lateral transmission	Index for determining impact sound pressure level L'n,w = Ln,w,eq - ΔL_w + K (dB)
280	78.3	80	21	3	60.3
300	77.3	80	21	3	59.3
320	76.3	80	21	3	58.3
340	75.4	80	21	3	57.4
360	74.5	80	21	3	56.5
380	73.3	80	21	3	55.7
400	72.9	80	21	3	54.9

Application

Apply SILENS STA 10 with the fibre layer (white part) facing downwards, placing the sheets alongside one another at the corresponding overlapping flaps.



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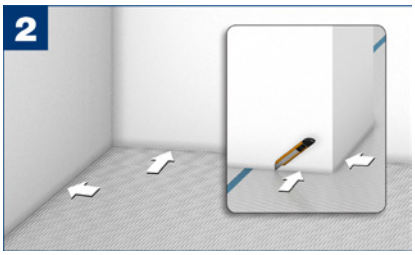
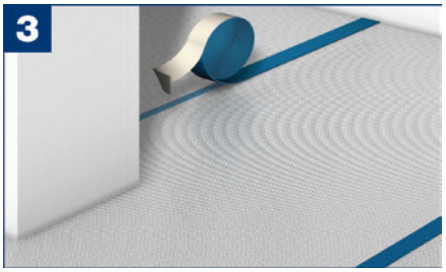
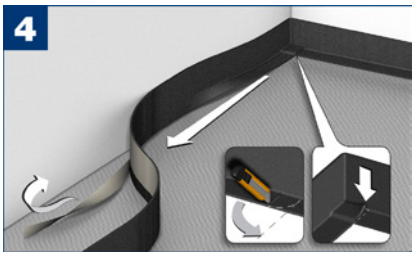
The insulation must be applied right up to the base of the vertical wall or any elevation elements (columns, pillars, etc.).



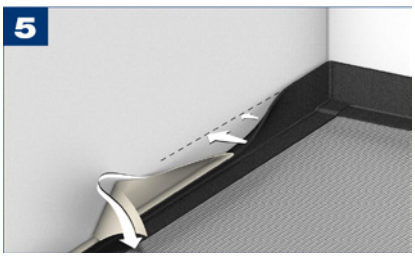
All joints must be sealed with SILENS NA 1.



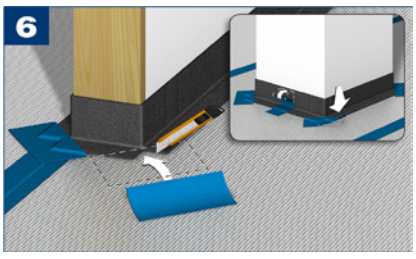
After laying the insulation across the entire surface, start applying SILENS GP 1, the preformed L-shaped perimeter separation joint. Only remove the adhesive strip on the short side (bottom part) and then stick it around the entire perimeter to the previous insulation, making sure to leave a 90° fold. Only cut the bottom of SILENS GP 1 at any points where the direction of application changes. SILENS GP 1 must be uninterrupted right up to the same point where application started. If the roll runs out and a new one needs to be started, the joint must be sealed with FASSA SILENS NA 1.



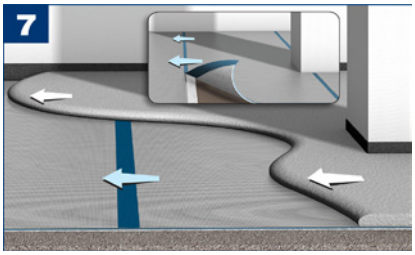
Remove the other adhesive strip, on the longer side, and attach it to the wall. Special care must be taken at the corners and the edges: the adhesive must be attached perfectly to the wall so as to simplify the subsequent laying of the covering.



Apply SILENS GP 1 at all points of the surface in elevation, so as to ensure complete isolation of the subsequent floor screed from the rest of the structure. At all points where SILENS GP 1 needed to be cut in order to ensure correct cornering, continuity of the insulation must be restored using FASSA SILENS NA 1 tape.



Start applying the screed in the direction that the sheets overlap.



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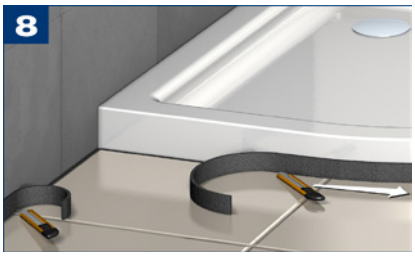

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