

VELAPHONE



SOUNDPROOFING SYSTEMS



SOPREMA

The problem of impact sounds

The sounds of steps, furniture being moved or objects falling on the floor are a continuous source of disturbance.

Soundproofing between floors is a key requirement for ensuring peace and comfort for occupants of collective buildings.

Some basics

Impact sound effectiveness

In compliance with the new European standard, the performances of impact soundproofing systems are expressed in dB (ISO standard).

ΔL_w shows the performance of the products treating impact sounds but not "in situ".

$L_n w$ shows the level impact sound transmission under a floating screed.

ΔL_w and $L_n w$ are expressed in dB. The greater the value of ΔL_w , the smaller the value of $L_n w$ and the greater the soundproofing efficiency.

Sound level

It is expressed in decibels and follows a logarithmic law.

For example:

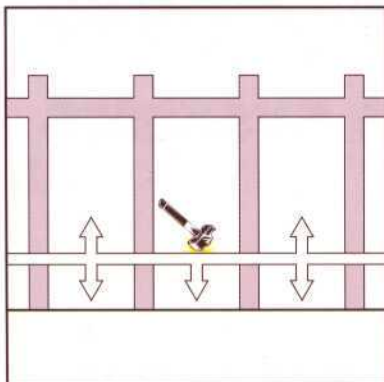
Sound intensity is halved when the sound level is decreased by 3 dB. (i.e. 65 dB + 65 dB = 68 dB).

Concrete flooring

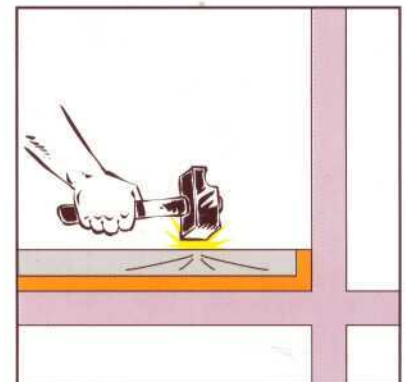
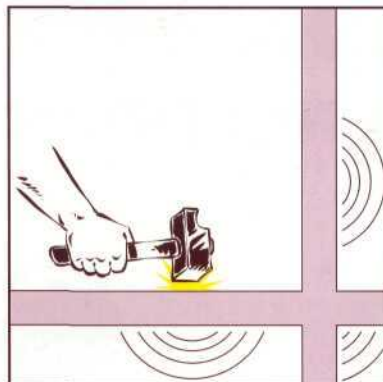
The thicker the slab, the better the soundproofing.

It is generally believed that each additional centimetre of thickness increases the soundproofing capacity by 1 dB.

Treating impact sounds



In order to prevent the transmission of impact sounds, a separation must be created.



The screed or flooring is separated from the structure of the building by adding a layer underneath it.

The solution : VELAPHONE

VELAPHONE 23 and VELAPHONE 26 are thin fibreglass layers which are bonded to a bitumen coated felt base for impact soundproofing of floors.

They are installed underneath a floating floor or directly under tiling mortar.

Use

VELAPHONE 23 and VELAPHONE 26 are intended for use underneath floating flooring or floors on joists.

Characteristics and soundproofing performance

	VELAPHONE 23	VELAPHONE 26
Thickness	2,5 mm	3,5 mm
Weight	1000 g/m ²	1070 g/m ²
Thermal resistance	R = 0,075 m ² ° K/W	R=0,1 m ² ° K/W
Impact soundproofing under a floating screed	ALw = 23 dB*	ALw = 26 dB*
Impact soundproofing under a floating floor	ALw = 18 dB**	-
Impact noise transmission under a floating screed	Ln w = 56 dB*	Ln w = 53 dB*

*CSTC report N° DE 74513 november 1th 1994

** CSTB report N° 713 960 0034 december 12th 1996

Packaging

20 x 1.07 m long rolls, i.e. 20 sq m effective coverage.
Pallets with 16 rolls.

Accessories

UPSTAND STRIP:

The upstand strip is made of a waterproof polyethylene foam with 6 mm wide adhesive strips on one side. It is added to the floor soundproofing material in order to separate the floating screed from the partitions, skirting boards and piping.

-100 mm wide strip in boxes containing 300 linear metres (6 x 50 m)

-145 mm wide strip in boxes containing 200 linear metres (4 x 50 m)

NB: low-temperature floor heating systems may give rise to considerable expansion.

We recommend using 5 mm thick and 145 mm wide RESILIENT STRIPS.

Packs containing 1000 linear metres (10 x 100 m).
No adhesive.



VELAPHONE installation under a floating screed.



VELAPHONE installation under a floating floor.

Specific precautions

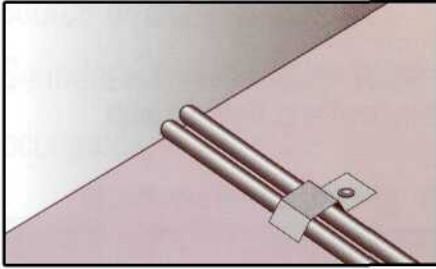
First sweep and level the substrate slab in order to remove any roughness.

Roll out the **VELAPHONE** material so that the fibrous side is in contact with the floor. Do not remove the dividing polyethylene film.

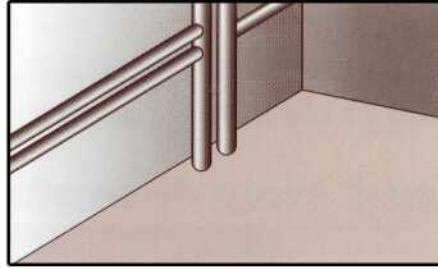
Turn down the tab so as to ensure continuous soundproofing and prevent the passage of concrete chalking.

In order to avoid any shearing effect while putting the screed in place, you will need to:

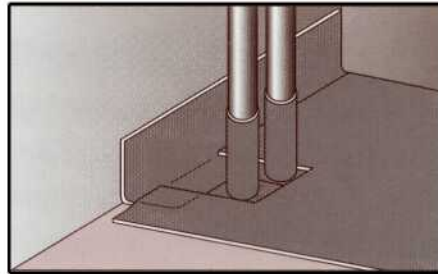
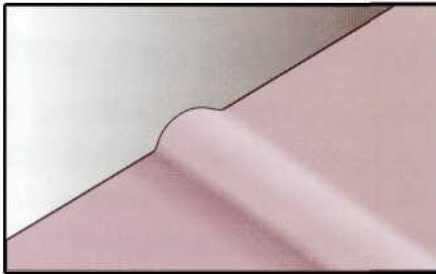
- place stabilised sand flashing on either side of cable tubes.
- separate any piping going through the floor by placing resilient sleeves made with the upstand strips..



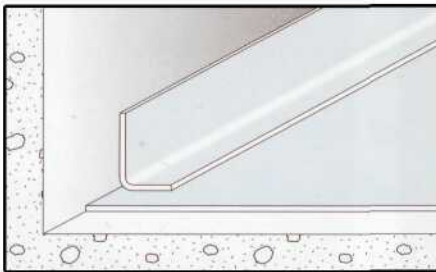
Stabilised sand flashing on either side of cable tubes.



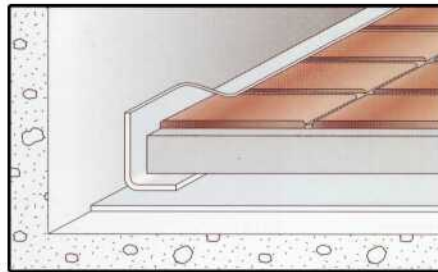
Separation of piping going through the floor via resilient sleeves made with the upstand strips.



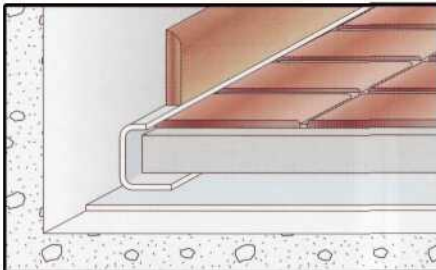
Details of installation



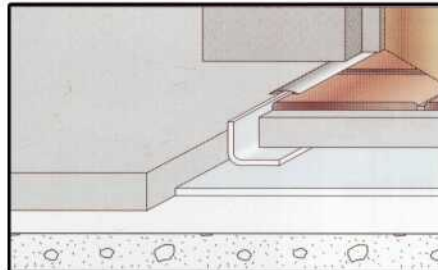
Place the upstand strip by gluing it to the soundproofing and pressing it against the vertical wall so that it forms a right angle.



Pour the floating screed and fold over the upstand strip



Place the skirting board on the upstand strip and fold and cut the upstand strip flush with the skirting board.



For door thresholds, use the same principle as for skirting boards.

SOPREMA reserve the right to modify the composition, conditions of use and therefore the prices of products without notice, depending upon the development of technology and techniques. As a result, orders shall be accepted on the basis of the terms and specifications applicable when they are received.

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