



# Mapesilent Roll

**Dry soundproofing system formed by sheets for floating screeds**



## WHERE TO USE

Dry soundproofing system with a reduced thickness (8 mm), to reduce noise transmitted by footsteps between adjacent housing units. Applied on floating screeds before laying all kinds of flooring material (ceramic tiles, stone, resilient and fabric floor coverings, wooden floors, etc.).

**Mapesilent Roll** is applied between the structure and the floating screed.

## Some application examples

Soundproofing all types of floor slabs.

## TECHNICAL CHARACTERISTICS

**Mapesilent Roll** sheets are made up of a bitumen and special polymer-based elasto-plastomeric membrane sandwiched together with a resilient layer of polyester fibre and a surface coated with a layer of blue non-woven polypropylene fabric.

Each roll has a 5 cm wide border used for overlapping adjacent sheets to avoid infiltrations from the fresh screed and, therefore, rigid contact points with the substrate which could form acoustic bridges.

Because of its low thickness, **Mapesilent Roll** has no effect on the final project dimensions and elevations. Also, its high resistance to

footsteps and tools dropped accidentally on the layer prevents it being damaged and reducing its soundproofing capacity.

**Mapesilent Roll** offers a simple, reliable and efficient method to form an isolating floating screed which is perfectly insulated from the support structure (floor slab + separating walls). By sandwiching the polymer bitumen membrane with polyester fibres, noises are absorbed and reduced so that various types of floor slab, including those in the table below, meet the requirements according to current norms and standards regarding acoustic insulation against footstep noise.

In order to avoid the formation of acoustic bridges, a soundproofing system using **Mapesilent Roll** also requires the use of other products from the range: **Mapesilent Band R** and **Mapesilent Tape**, as described below.

## RECOMMENDATIONS

- Do not use **Mapesilent Roll** not be used for soundproofing purposes directly below the final coating (in this case, use **Mapesonic CR**).
- The thickness and, where required, reinforcement of screeds installed on top of **Mapesilent Roll**, must be calculated according to the stresses on the surface when in service and on the type of coating laid on the floor.

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Unroll the sheets of Mapesilent Roll, place it against the bottom of the wall and start laying it with the fibre side (the light-coloured side) underneath, following the longer side of the room. Lay the second sheet at the bottom of the wall, making sure to remove the protective film from the back of the border used to overlap with the adjacent sheet (approximately 5 cm), to guarantee the continuity of the fiber side



After checking that the sheets of Mapesilent Roll overlap perfectly, seal all overlaps using Mapesilent Tape

## TECHNICAL DATA (typical values)

Test method	Technical characteristics	Unit of measure	Value
EN 29073-2	Thickness	mm	8.0 (before sandwiching)
EN 1849-1	Weight	kg/m <sup>2</sup>	1.8
EN 12311-1	Longitudinal tensile strength	N/50 mm	700
EN 12311-1	Transversal tensile strength	N/50 mm	500
EN 12691	Resistance to impact	mm	900
EN 12730	Resistance to static loading	kg	15
EN 1928	Watertightness	kPa	≥ 100
EN 13501-1	Reaction to fire		F
EN 12667	Thermal resistance	m <sup>2</sup> K/W	0.145
EN 29052-1	Apparent dynamic stiffness (S')	MN/m <sup>3</sup>	9 <sup>(1)</sup>
	Dynamic stiffness for calculation purposes (S')	MN/m <sup>3</sup>	21 <sup>(1)</sup>
EN ISO 12354-2	Estimated calculation of impact sound reduction (ΔL <sub>w</sub> )	dB	28 <sup>(2)</sup>
Sound level measurement	Impact sound reduction (ΔL <sub>w</sub> ) measured on site	dB	up to 37 <sup>(3)</sup>

<sup>(1)</sup> Certified by an independent laboratory - n. 033-2019-IND

<sup>(2)</sup> Simplified calculation method valid for 100 kg/m<sup>2</sup> floating screeds with ceramic flooring

<sup>(3)</sup> Sound level measurements taken in situ on a brick-cement floor slab were carried out by a qualified Environmental Acoustics Technician

## PREPARATION OF THE SUBSTRATE

Make sure the substrate is flat and strong and that there are no rough spots. Any excess material which makes the surface uneven must be removed.

Uneven surfaces and areas where fittings pass through (such as electric cables and pipework) must be evened out before laying **Mapesilent Roll**.

To make screeds and even out laying surfaces please refer to the catalogues of MAPEI products for the preparation of substrates or contact the MAPEI Technical Service.

## APPLICATION PROCEDURE

Lay out the rolls of **Mapesilent Roll** with the polyester fibre (the lighter-coloured side) towards the screed. Carry out the same procedure with the other rolls, making sure to overlap the entire 5 cm wide border to guarantee continuity of the underlying fibre layer. When overlapping the borders, remove the protective film from the back.

Seal all the joints between the rolls of **Mapesilent Roll** with **Mapesilent Tape** (closed-cell polyethylene foam adhesive sealing tape).

If better insulation or soundproofing are required, the efficiency of the insulating material may be increased by laying a double layer with the white sides laid against each other, by applying the first layer white side up.

The perimeter of the room to be soundproofed must be insulated using **Mapesilent Band R** (closed-cell polyethylene foam adhesive tape applied around the perimeter of walls and elements which pass through the screed, to avoid the formation of acoustic bridges).

**Mapesilent Band R** is available in 100 and 160 mm wide rolls. The 160 mm version is used mainly on heated floors.

Seal all the joints between the various pieces of **Mapesilent Band R** and between **Mapesilent Band R** and **Mapesilent Roll**.

Once the final floor covering has been laid, and immediately before attaching the skirting boards, cut the excess pieces of **Mapesilent Band R**, seal the spaces between the skirting boards and the floor with a suitable flexible sealant.

Do not install the system if the temperature is too high or too low, and in all cases, do not carry out any operations which could perforate the soundproofing system.

### PACKAGING

10 x 1 m long rolls with 5 cm wide border. Pallets containing 16 rolls for a total area of 160 m<sup>2</sup>.

### STORAGE

12 months in its original packaging in a dry place protected from direct sunlight with the exception of **Mapesilent Band R** and **Mapesilent Tape**, which can be stored for 9 months.

Do not stack the pallets on top of each other.

Contact with solvents or organic liquids may damage the product.

### SAFETY INSTRUCTIONS FOR PREPARATION AND APPLICATION

**Mapesilent Roll** is an article and referring to the current European regulations (Reg. 1906/2007/CE - REACH) does not require the preparation of the material Safety Data Sheet.

During use it is recommended to wear protective gloves and goggles and follow the safety requirements of the workplace.

PRODUCT FOR PROFESSIONAL USE.

### WARNING

*Although the technical details and recommendations contained in this product data sheet correspond to the best of our knowledge and experience, all the above information must, in every case, be taken as merely indicative and subject to confirmation after long-term practical application; for this reason, anyone who intends to use the product must ensure beforehand that it is suitable for the envisaged application. In every case, the user alone is fully responsible for any consequences deriving from the use of the product.*

**Please refer to the current version of the Technical Data Sheet, available from our website [www.mapei.com](http://www.mapei.com)**

***The contents of this Technical Data Sheet ("TDS") may be copied into another project-related document, but the resulting document shall not supplement or replace requirements per the TDS in force at the time of the MAPEI product installation. The most up-to-date TDS can be downloaded from our website [www.mapei.com](http://www.mapei.com).***

***ANY ALTERATION TO THE WORDING OR REQUIREMENTS CONTAINED OR DERIVED FROM THIS TDS EXCLUDES THE RESPONSIBILITY OF MAPEI.***

**All relevant references for the product are available upon request and from [www.mapei.com](http://www.mapei.com)**



**Cut the lower part of Mapesilent Band R to form a 90° angle in correspondence with the angles**



**After having removed the protective film from the back, place Mapesilent Band R around all the perimeter of the room**



**Cut and apply Mapesilent Tape in all the corners and along the overlaps of Mapesilent Band R and Mapesilent Roll around the blended-in areas of Mapesilent Band R to guarantee that the joints are perfectly protected**



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