

## TECSOUND

TECSOUND is a polymer based, bitumen-free, high-density synthetic membrane. The combination of its viscoelasticity and its high-density offers good sound-insulation in different construction elements without increasing thickness. The upper face is finished with a non-woven polypropene reinforcement fleece which offers also protection. The lower face is finished with a polyethene film.

### ADVANTAGES

- High sound-insulation when combined with light and rigid elements such as gypsum boards.
- High sound damping capacity on metal surfaces.
- Good reaction-to fire classification.
- Flexible and adaptable to uneven surfaces.
- Good behaviour at low temperatures, without breaking or cracking.
- Easy to handle and cut.
- May act as a vapor control layer.
- Negligible water absorption.
- Ageing resistance.
- Rot proof.



### APPLICATIONS

- Increases airborne noise insulation on vertical partition walls with low surface mass (plasterboard partitions, timber partitions,...).
- Soundproofing against airborne noise in ceilings and lightweight roofs.
- Reduction of impact noise in laminated floors.
- Damping of noise caused by weather such as rain and hail in light weight roofs (wood, metal deck, ...).
- Combined with sound-absorbent materials, it offers solutions with high acoustic performances.
- Its applications in the industrial field cover from the soundproofing of cabins to the acoustic insulation of machine-rooms, cowling of engines, gutter pipes, sound-damping of metal sheets, etc.



### INSTALLATION

#### CONDITIONS:

Substrate and/or ambient temperature: min. +5 °C to max. +35 °C.

The substrate must be dry, clean, free from dust and free from elements that could damage the membrane.

#### INSTALLATION:

TECSOUND is mainly applied between two plasterboard panels in lightweight walls (partition walls, retention walls,...) and ceilings.

The membrane is mechanically fastened to the first plasterboard to which the second plasterboard is attached. The membrane can also be glued.

To prevent thickening, the membrane is placed without overlap (only butt joint).

Care must be taken to ensure that the seams fit tightly and that there are no openings.

TECSOUND can also be used in lightweight roofs. Install the membrane with the fleece finish on top and an overlap of at least 50 mm. In the case of profiled steel deck, the membrane must be placed transversely to the profile.

Make sure that there are no openings as these will have a negative effect on the noise reduction capacity.

Contact the manufacturer in case of technical questions.

## PACKAGING AND STORAGE

	Tecsound 35	Tecsound 50	Tecsound 70	Tecsound 100
Mass (kg/m <sup>2</sup> )	3,5	5,0	7,0	10,0
Thickness (mm)	1,75	2,5	3,5	5,0
Length (m)	8,0	6,0	5,0	4,0
Width (m)	1,22	1,22	1,22	1,20
m <sup>2</sup> /roll	9,8	7,3	6,1	4,8
Rolls/pallet	24	24	24	21
m <sup>2</sup> /pallet	234	175	146	100

available in boards/sheets on request

The product is supplied on a roll with cardboard core and individual protective cover.

Store the rolls horizontally on pallets in its original packaging, protected from moisture, sunlight and heat at a temperature of max. +35 °C. Do not stack the pallets on top of each other. The rolls have a shelf life of 1 year.

In cold periods, installation can be facilitated by allowing the product to stand at +2 °C for at least 5 hours before use.

## CHARACTERISTICS

Technical properties	Standard	Value	Unit
Density	-	2010	kg/m <sup>3</sup>
Tensile strength	NT-67	> 30	N/50 mm
Elongation	NT-67	> 500	%
Flexibility at low temp.	EN 1109	-25	°C
Resistance to tearing (nail shank)	EN 12310-1	153-235	N/50 mm
Fire classification	EN 13501-1	B-s2,d0 <sup>(2)</sup>	-
Water vapour resistance factor (μ)	EN 1931 met B	≥ 1806	-
Water absorption (24 h a 23 °C)	ISO 62 met 1	0,03	%
TVOC after 28 days	EN 16516	≤ 60	μg/m <sup>3</sup>
Shore hardness A	NT 74	30 ±10	-
Young module (E)	-	1,35637 x 1,1744	MPa
Poisson coefficient	-	0,23	-
Service temperature	-	-10 up to +70	°C

<sup>(1)</sup> Valid from TECSOUND 35 to TECSOUND 70

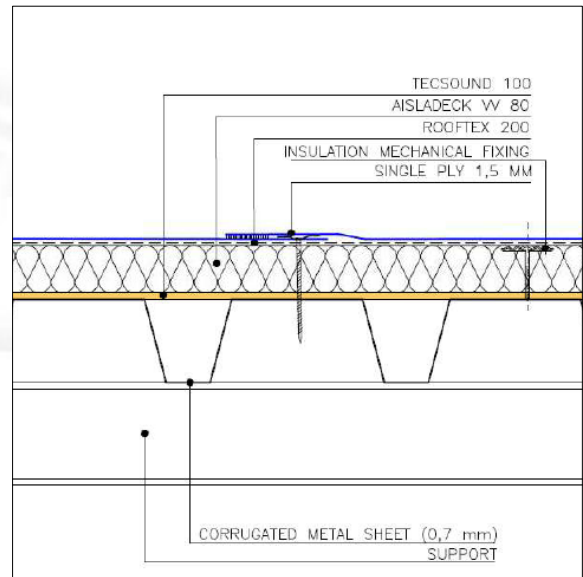
## SOUND REDUCTION

Characteristics	Standard	R <sub>w</sub> (weighted sound reduction index)	
TECSOUND 35	-	23	dB
TECSOUND 50	EN ISO 10140-2	25	dB
TECSOUND 70	EN ISO 140-3	28	dB
TECSOUND 100	EN ISO 10140-2	32	dB

## Exemple of sound insulation on metal decks

Frequency (Hz)	R <sub>w</sub> (with TECSOUND 70) (dB)	R <sub>w</sub> (without TECSOUND) (dB)
125	23,7	16,4
250	24,2	15,3
500	29,2	23,2
1000	35,4	25,0
2000	43,4	30,3
4000	54,6	39,7
<b>R<sub>w</sub> (weighted sound reduction index)</b>	<b>34 dB</b>	<b>26 dB</b>

Testing according to EN 140-3



## SPECIAL INDICATIONS

### Hygiene, Health and Environment

The product does not contain any substance which is likely to be detrimental to your health or to the environment and complies with generally admitted Health and Safety Requirements.

### Quality-, Environment- and Safety Management

**SOPREMA** always recognises as a high level of importance the quality of the products, the environment and safety. For this reason, we operate independently monitored Quality and Environment Assurance Systems in line with **EN ISO 9001** and **EN ISO 14001**.

