

Tecsound®

Tecsound® is a polymer based, 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 has a finish of non-woven polypropylene providing mechanical properties as well as protection. The lower face is finished with PE film.

ADVANTAGES

- High sound-insulation combined with light and rigid elements such as gypsum boards.
- High sound damping capacity on metal surfaces, thus improve insulation to rainfall noise on metal decks.
- Reaction-to fire classified.
- Flexible and adaptable to uneven surfaces.
- Good behavior at low temperatures, without breaking or cracking.
- Easy to handle and cut with a knife or scissors.
- May act as a vapor control layer.
- Negligible water absorption.
- Ageing resistance.
- Rot proof.



APPLICATIONS

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

REGULATIONS

- Laboratory tests reports according to EN ISO 140-1, EN ISO 140-3, EN ISO 140-6, EN ISO 140-8, EN ISO 10140 and EN ISO 717/1/2.
- CE marked according to UNE EN 13984:2013, Plastic and rubber vapour control layers. Type 1.
- CE marking not required for the acoustic insulation products, as there is no harmonized European Standard or European Technical Assessment (ETA) applicable within the scope of the European Construction Products Regulation No. 305/2011
- Environmental Product Declaration (EPD, Type III environmental declaration) according to the standards: ISO 14025 and EN UNE 15804 +A2:.

ACOUSTIC INSULATION

SOPREMA reserves the right to modify the information contained herein without prior notice and declines all liability in cases of errors produced due to an inappropriate use of the product. The values shown in the technical sheet are the mean values from the tests in our lab.

INSTALLATION

SUBSTRATE:

- The substrate must be even, smooth, clean and dry. It must also be free from elements that could damage the membrane. If the rendering is old, its condition must be checked to avoid adherence problems of the Tecsound sheet to the rendering.

INSTALLATION OF THE MEMBRANE ON METAL DECKS:

- Extend the roll over the substrate progressively, fleece upwards, with an overlap of at least 5 cm. In case of direct installation on top of the steel deck, the membrane must be applied perpendicular to the direction of the deck profile. In case of a mechanically fixed insulation and waterproofing systems, specifications of type and number of fasteners needed must be respected.



PACKAGING AND STORAGE

	Tecsound®			
	35	50	70	100
Weight (Kg/m ²)	3.5	5	7	10
Thickness (mm)	1.75	2.5	3.5	5.0
Length (m)	8.05	6.05	5.05	4.0
Width (m)	1.22	1.22	1.22	1.2
m ² /roll	9.82	7.38	6.16	4.8
Rolls/pallet	24	24	24	21
m ² /pallet	235.68	177.12	147.84	100.80
Storage	Product supplied in rolls with carton core inside and individual protection cover. Store the rolls horizontally, inside its original packaging, on a pallet protected against moisture, sunlight and heat at a temperature ≤ +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 leaving the product at +2 °C at least during a minimum of 5h before use.			

	Tecsound®			
	LAM 35	LAM 50	LAM 70	LAM 100
Weight (Kg/m ²)	3.5	5	7	10
Thickness (mm)	1.75	2.5	3.5	5.0
Length (m)	1	1	1	1
Width (m)	1.2	1.2	1.2	1.2
m ² /sheet	1.2	1.2	1.2	1.2
Sheets/pallet		150		75
m ² /pallet		180		90
Storage	Product supplied in sheets. Do not stack the pallets on top of each other. Same storage conditions as the rolls format.			

TECHNICAL PROPERTIES

CHARACTERISTICS	Test Method	Tecsound	Unit
Density	-	2.010	Kg/m ³
Tensile- strength	EN 12311-2	≥200 x ≥125 ⁽¹⁾	N/50mm
Elongation	EN 12311-2	> 40	%
Pliability	EN 1109	<-25	°C
Application temperature ⁽²⁾	-	5 up to 35	°C
Static Service Temperature	-	-10 up to 70	°C
Resistance to tearing (nail shank)	EN 12310-1	≥125	N/50mm
Fire classification	UNE-EN 13501-1	B-s2,d0 ⁽³⁾	-
Water vapour resistance factor	UNE-EN 1931-03	μ ≥ 93.500 Sd ≥ 240	-
Water absorption (24h a 23°C)	ISO 62 met 1	0,003	%
TVOC after 28 days	EN 16516	≤ 60	μg/m ³
Indoor Air Comfort Gold limit values	-	PASS	-
Shore hardness A	EN ISO 868 (DIN 53505)	30 - 40	-
Young module (E)	-	L 1,35637 T 1,1744	MPa
Poisson coefficient	-	0,23	-

⁽¹⁾ Tecsound® 35, Tensile- strength (L xT) > 100 x > 90

⁽²⁾ Ranges of temperatures during installation

⁽³⁾ Valid from Tecsound 35 to Tecsound 70

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SOUND INSULATION

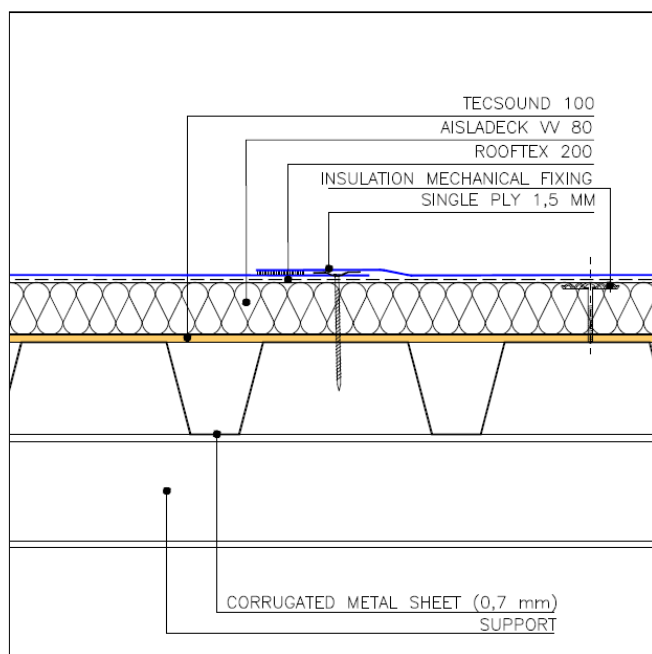
CHARACTERISTICS	Test Method	Weighted sound reduction index R_w	
Tecsound 35	EN ISO 10140-2	24	dB
Tecsound 50	EN ISO 10140-2	26	dB
Tecsound 70	EN ISO 10140-2	29	dB
Tecsound 100	EN ISO 10140-2	32	dB

EXAMPLE OF SOUND INSULATION ON METAL DECKS

FREQUENCY (Hz)	R with Tecsound 70	R without Tecsound	unit
125	23,7	16,4	dB
250	24,2	15,3	dB
500	29,2	23,2	dB
1000	35,4	25	dB
2000	43,4	30,3	dB
4000	54,6	39,7	dB
R_w (acoustic reduction index)	34	26	dB

Testing according to UNE-EN ISO 140-3:1995

(*) See our Solutions Manual or contact our Technical Department to know about other systems



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 recognizes 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**.



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