

Tecsound®

Soundproofing sheet membrane

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 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 improving insulation to rainfall noise on metal decks.
- Reaction-to-fire classified.
- Flexible and adaptable to uneven surfaces.
- Good behaviour 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.

Application:

- 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 of 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-absorbing 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.

Testing:

Laboratory tests according to EN ISO 140-1, EN ISO 140-3, EN ISO 140-6, EN ISO 140-8, EN ISO 10140, EN ISO 717/1/2, EN ISO 11925-2:2020 and EN 13823:2012+A1:2016

Installation:

Substrate:

The substrate must be even, smooth, clean and dry. It must also be free from elements that could damage the membrane.



Installation of the Membrane on Metal Decks:

Extend the roll over the substrate progressively, fleece upwards, with an overlap of at least 50mm. In case of direct installation on top of the deck, the membrane must be applied perpendicular to the direction of the deck profile. In case of a mechanically fixed insulation and waterproofing systems, specification of type and number of fasteners needed must be respected.



Packing 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

	TECSOUND®			
	35	50	70	100
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 $\leq +35$ °C. Do not stack the pallets on top of each other.

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.

Sound Insulation:

Characteristics	Test Method	Weighted sound reduction index Rw	
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

Technical Properties:

Characteristics	Test Method	TECSOUND	Unit
Density	-	2.010	Kg/m ³
Tensile strength	NT-67	>30	N/50mm
Elongation	NT-67	>500	%
Pliability	EN 1109	-25	°C
Application temperature ⁽¹⁾	-	5 up to 35	°C
Static Service Temperature	-	-10 up to 70	°C
Resistance to tearing (nail shank)	EN 12310-1	153-235	N/50mm
Fire classification	UNE-EN 13501-1	B-s2.d0 ⁽²⁾	-
Water vapour resistance factor	UNE-EN 1931 met B	$\mu \geq 1806$	-
Water absorption (24h a 23°C)	ISO 62 met 1	0.0003	%
TVOC after 28 days	EN 16516	≤ 60	$\mu\text{g}/\text{m}^3$
Indoor Air Comfort Gold limit values	-	PASS	-
Shore hardness A	NT 74	30 \pm 10	-
Young module €	-	1.35637 x 1.1744	MPa
Poisson coefficient	-	0.23	-

⁽¹⁾ Ranges of temperatures during installation

⁽²⁾ Valid from TECSOUND 35 to TECSOUND 70

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
Rw (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 & Environment**

This 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**.



Equus Industries Ltd
PO Box 601
Blenheim
New Zealand
P: 03 578 0214
techsupport@equus.nz
www.equusnz
March 2022