

Tecsound® SY GEO

Tecsound® SY GEO is a polymer based, bitumen-free, synthetic and high-density soundproofing membrane.

The combination of its viscoelasticity and its high-density offers good sound-insulation in different construction elements without increasing thickness.

Upper face is covered with a polyester non-woven veil that allows the adhesion of foams, fibers or panels of different materials (wood, metal, plastic, etc.) while the lower face has self-adhesive layer allowing its direct application on most building surfaces.

ADVANTAGES

- High sound-insulation combined with lightweight materials such as foams, fibrous materials and rigid panels.
- 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) in refurbishment works.
- Soundproofing against airborne noise in ceilings and lightweight roofs.
- Combined with sound-absorbent materials, it offers solutions with high acoustic performance.
- It is used to manufacture acoustic complexes by gluing other materials on one or both sides of the product.

Examples of some compatible materials:

- Polyurethane foams
- Melamine foams
- Fiberglass
- Rock wool
- wood wool fiber
- polyester fibers
- Textile felts
- Plywood panels
- Metal panels
- Plastic panels
- Gypsum plasterboards

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.

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 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:.

INSTALLATION

PREPARATION:

- Before starting the gluing phase, it is necessary to check that the type of glue being used is compatible with the finishing polyester layer. It is recommended to carry out some previous tests of adherence. Please refers to glue manufacturer concerning working temperature.
- Spread the roll on a sufficiently large flat work surface free of objects and debris that can damage the membrane. Apply the adhesive (spray or contact glue) on both Tecsound SY GEO and product face to be adhered. Follow the glue manufacturer's instructions regarding quantities and touch-to-dry time.

- Remove the protective silicone coated film of Tecsound SY GEO layer either to bond another material or to fix it to a building substrate (renderings, gypsum board, metal, wood, MDF or OSB, plastic materials).

INSTALLATION ON EXISTING PARTITIONS (REFURBISHMENT WORKS):

- The substrate must be even, smooth, clean, dry and free from elements that could damage the membrane. If the rendering is old, its condition must be checked to avoid adherence problems.
- Apply the membrane on the substrate. If the length of the product is too big or it is applied in rolls, peel the protective silicone film progressively to aid installation.
- During the fitting, press all over to ensure a good bonding, taking care of avoiding any air bubbles, as they can cause a loose of adherence.
- Overlap 5 cm both lengthwise and crosswise. For application between plasterboards, to avoid the increase in thickness in the area of the joint,

contiguous rolls will be placed with edges close to each other without overlapping them. Joints will be sealed with an adhesive tape. You should always have the caution to properly seal the joints, as small openings can reduce soundproofing of whole system.



WARNINGS

- Make sure that the adhesive is in contact with the entire surface of the support, especially when it is not flat.
- Substrate temperature must be at least 5°C.

PACKAGING AND STORAGE

	Tecsound SY GEO	
	70	70
Weight (Kg/m ²)	7	7
Thickness (mm)	3.5	3.5
Length (m)	2.6	5.05
Width (m)	1.22	1.22
m ² /roll	3.17	6.16
Rolls/pallet	36	24
m ² /pallet	114.19	147.86
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 SY GEO is also available in sheets. Please consult available dimensions.

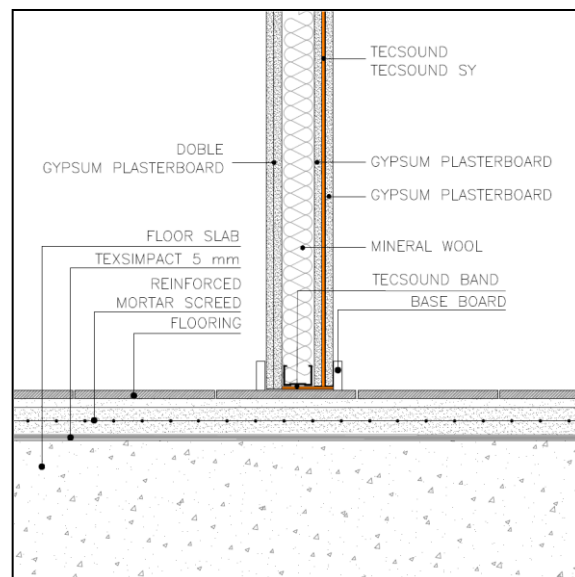
ACOUSTIC INSULATION

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.

TECHNICAL PROPERTIES

CHARACTERISTICS	Test Method	Tecsound SY GEO	Unit
Density	-	2.010	Kg/m ³
Tensile strength	EN 12311-2	>30	N/50mm
Elongation	EN 12311-2	> 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 ⁽²⁾	N/50mm
Fire classification	UNE-EN 13501-1	B-s2,d0 ⁽³⁾	-
Water vapour resistance factor	UNE-EN 1931 met B	$\mu \geq 93.500$	-
Water absorption (24h a 23°C)	ISO 62 met 1	0,003	%
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 (E)	-	1,35637 x 1,1744	MPa
Poisson coefficient	-	0,23	-

⁽¹⁾ Ranges of temperatures during installation



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**.

SOUND INSULATION

CHARACTERISTICS	Test Method	Weighted sound reduction index R_w	
Tecsound SY 70	EN ISO 140-3	28	dB

EXAMPLE OF SOUND INSULATION ON DRY PARTITION WALLS

FREQUENCY (Hz)	R with ^(*) Tecsound	R without Tecsound	unit
125	27,9	16,9	dB
250	39,2	31,9	dB
500	49,5	42,0	dB
1000	60,0	50,7	dB
2000	65,1	54,5	dB
4000	58,1	41,2	dB
R_w (acoustic reduction index)	49	40	dB

Testing according to EN ISO 717-1

^(*) With wall lining system including Tecsound SY 70 GEO



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.