

ACOUSTIC MEMBRANE

Asphalt membrane for acoustic treatment

Asphalt sheet modified with polymers, copolymers and elastomers. It is treated with plasticizer oil and minerals and it has fiber glass reinforcement with special features as noise impacts resistance and acoustic insulation.



Characteristics

- The product has been designed for decrease the resonance frequency of rigid materials, which
 means transform the acoustic energy in dynamic energy, thus it increases the insulation at low
 frequencies.
- The acoustic membrane is used to be adhered or placed between rigid elements in light constructions as plasterboards plates to enhance the insulation of others insulations at low frequencies.
- It can be used in vertical or horizontal position. Furthermore, it can be used as support to let float walls or facilities of plasterboards as acoustic seal in joints of light walls with mezzanine and covers. Is possible combine it with phonabsorbent panels in fiber glass, which increase the insulation treatment; therefore it improves its performance at low frequencies (membrane into system as mass-springmass).
- The membrane can be used as reinforcement of insulation for pipes in any type of construction. Its installation is easy in order to adhere it to structural plates in cement, so it increases the performance of the acoustic insulation in some conditions of thick. Finally, it decreases the impact noise installed under hard finishing as ceramics tablets or wooden.

Membrane Layers distribution

- 1. Flammable Polyethylene
- 2. Modified asphalt
- 3. Fiber glass reinforcement
- 4. Modified asphalt
- 5. Flammable Polyethylene

Presentation

PRODUCT	LENGTH	WIDE	THICKNESS
	cm	cm	mm
ACOUSTIC MEMBRANE	1000 ± 5 cm	100 ± 1 cm	3 ± 0.3 mm





Technical Properties

ICON	PROPERTIES	STANDARD	DESCRIPTION
4	Cold flexibility	ASTM D 5147 / UNI EN 1109	10 °C Approved (50°F Approved)
	Tensile Strength	NTC 2436 Parte 6.3	450 ± 100 N/ 50 mm
	Elongation	ASTM D 5147	4.3 % ± 1
	Tear Strength	UNE-104-281-85 Parte 6.5	PS2 (5 kgf – 10 kgf)
0	Water absorption	UNE-104-281-86 Parte 6.11	1 % Maximum
	Loss due to heating	UNE 104 – 281-85 Parte 6.3	1% Maximum

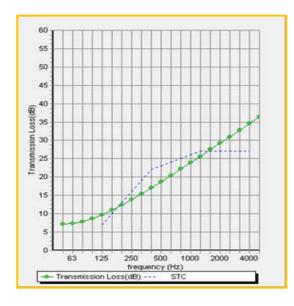
(*) PS2: There are not losses waterproofing with <5 kg load, but there are losses waterproofing with >10 kg load.

Acoustical Performance

Hertz (Hz)	63	125	250	500	1000	2000	4000	STC (**)
TL (dB)	12	15	20	25	30	35	40	23

(*) TL: Transmission Loss (dB)

(**) STC: Sound Transmission Class



STC value is reported by a simulation in the software INSUL and it is calculated based on transmission loss (Insulation at aerial noise) simulating the partition. Values can differ from +0 to -3 dB according to real measurements of laboratory based on standards ASTM E413 and ASTM E90.





Packaging

PRODUCT	UNITS/ PACKAGE	AREA/ PACKAGE (m²)	MASS/ AREA +/-10% kg/ m ² (g/ft ²)
ACOUSTIC MEMBRANE	1	10	4.5 (418.2)

Recycled content

- (1) PI Recycled Content: Post Industrial Recycled Content: Collected from manufacturers or industry.
- (2) PC Recycled Content: Post-Consumer Recycled Content: Collected from end uses.

TOTAL	POST INDUSTRIAL	POST CONSUMER
RECYCLED	RECYCLED	RECYCLED
CONTENT	CONTENT (1)	CONTENT (2)
4.8 %	4.8 %	0 %

Visual Standard

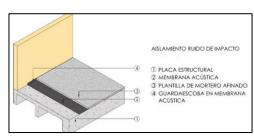
CHARACTERISTICS	ACEPTANCE GUIDE
Color	The product is black color like asphalt.
Surface appearance	Surfaces must be homogenous. The polyethylene should be covering completely two surfaces of the product. It must not have flaws like holes, torn edges or watermarks on reinforcement area. Telescopy: 1.5 cm maximum.

Fitting Recommendations

The material should be kept in an upright position on floor; it is advisable on shelving units or pallets. The membrane should be transported on pallets with aid of forklift and stacking maximum 3 units per row. Likewise the product should be stored in a flat area, it protected from sun and water. (It is less than 95% in humidity and storage temperature 40° C (104°F) maximum). You should use personal protection elements like safety goggles, leather gloves, thick clothing

Installation of acoustic membrane differs according to specific application:

1. Mezzanines (cement or wood): The system consist of a structural plate which is installed as treatment the acoustic membrane and on it a stencil of mortar.









2. On ceiling tiles: The system is installed with the following layers: Frescasa, acoustic membrane, mesh and Dry Wall.



3. Between division walls:





Others applications:

- Covers type sandwich
- Acoustical mobiles divisions or acoustical doors.

Certifications



Quality management system ISO 9001: 2015 CO11 / 4442 certified by SGS.

For further information:

www.isover.com.co

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