

# ISOLMANT **STRONG**

## HEAVY LAYER PRODUCTS

FOR PROVIDE SOUND INSULATION AND VIBRATION CONTROL

### WHAT IS ISOLMANT STRONG?

High density Isolmant polyethylene underlay (approx. 70 kg/m<sup>3</sup>), designed for special applications where a high compressive strength of the resilient layer is required.

### SPECIFIC APPLICATIONS

Isolmant Strong is suitable for sound insulation and vibration control in special applications. In non-residential structures where live loads exceed 5 kN/m<sup>2</sup>, it can be used also overlapping some layers on each other.

### ADVANTAGES

- Excellent acoustic impact sound and airborne insulation.
- Suitable for use in both renovation and new construction.
- For special building needs where increased compressive strength is required.
- Unalterable over time.
- Unlimited durability.
- Contact with water does not compromise performance or characteristics.
- Resistant to mould or insects

### INSTALLATION

- Easy installation;

#### ISOLMANT *Green Planet*

- Volatile Organic Compounds free (VOC A+).
  - Manufactured with low environmental impact.
  - It contributes to achieve credits for the environmental certification of a building according to LEED or ITACA standards.
  - This product can be disposed of according to EWC n. 170604.
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- It complies with the requirements defined by the CAM Edilizia for acoustic and thermal insulation materials regarding the request for high acoustic insulation performance, the percentage of recycled material and the absence of hazardous substances.



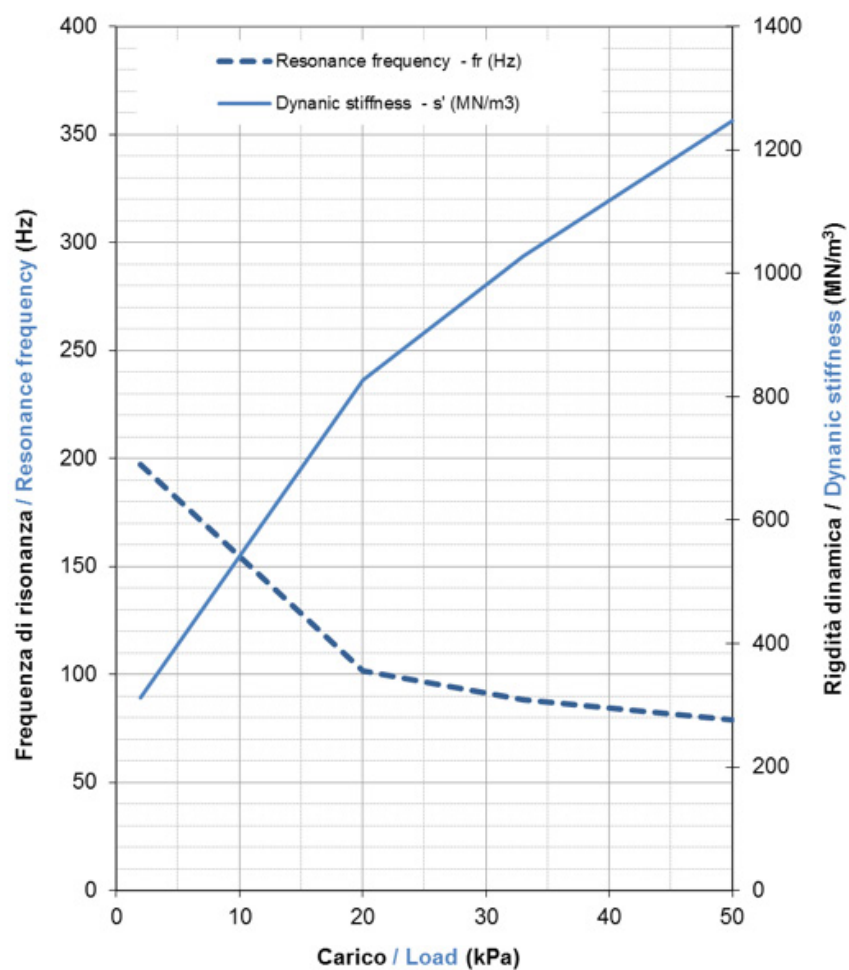
NOMINAL THICKNESS:	6 mm
DENSITY:	Approx. 70 kg/m <sup>3</sup>
COMPRESSIVE STRENGTH:	deformation 10% 85 kPa deformation 25%: 120 kPa deformation 50%: 185 kPa
RESIDUAL DEFORMATION:	0.5 h after discharge, 23°C: 8% 24 h after discharge, 23°C: 3% after a 22h load and 25% deformation
THERMAL CONDUCTIVITY:	$\lambda = 0.043 \text{ W/mK}$
THERMAL RESISTANCE:	$R_t = 0.140 \text{ m}^2\text{K/W}$
SPECIFIC HEAT CAPACITY:	$c = 2100 \text{ J/kgK}$
VAPOUR RESISTANCE:	$\mu = 6700$
EQUIVALENT AIR LAYER THICKNESS:	$S_d = 40 \text{ m}$
CE MARKING:	Harmonised standards for CE marking are NOT currently available for acoustic insulation products. This means that Isolmant products are currently NOT subject to CE marking, nor to the drawing up of a PDO (declaration of performance) or DDP (declaration of performance). All Isolmant products are placed on the market in compliance with the regulations in force in the country of destination and with the necessary certifications to guarantee their use in dedicated applications.
SIZE:	Rolls of 1.50 m x 50 m (h x L) = 75 m <sup>2</sup>
PACKAGE:	Single rolls

## ITEM SPECIFICATIONS

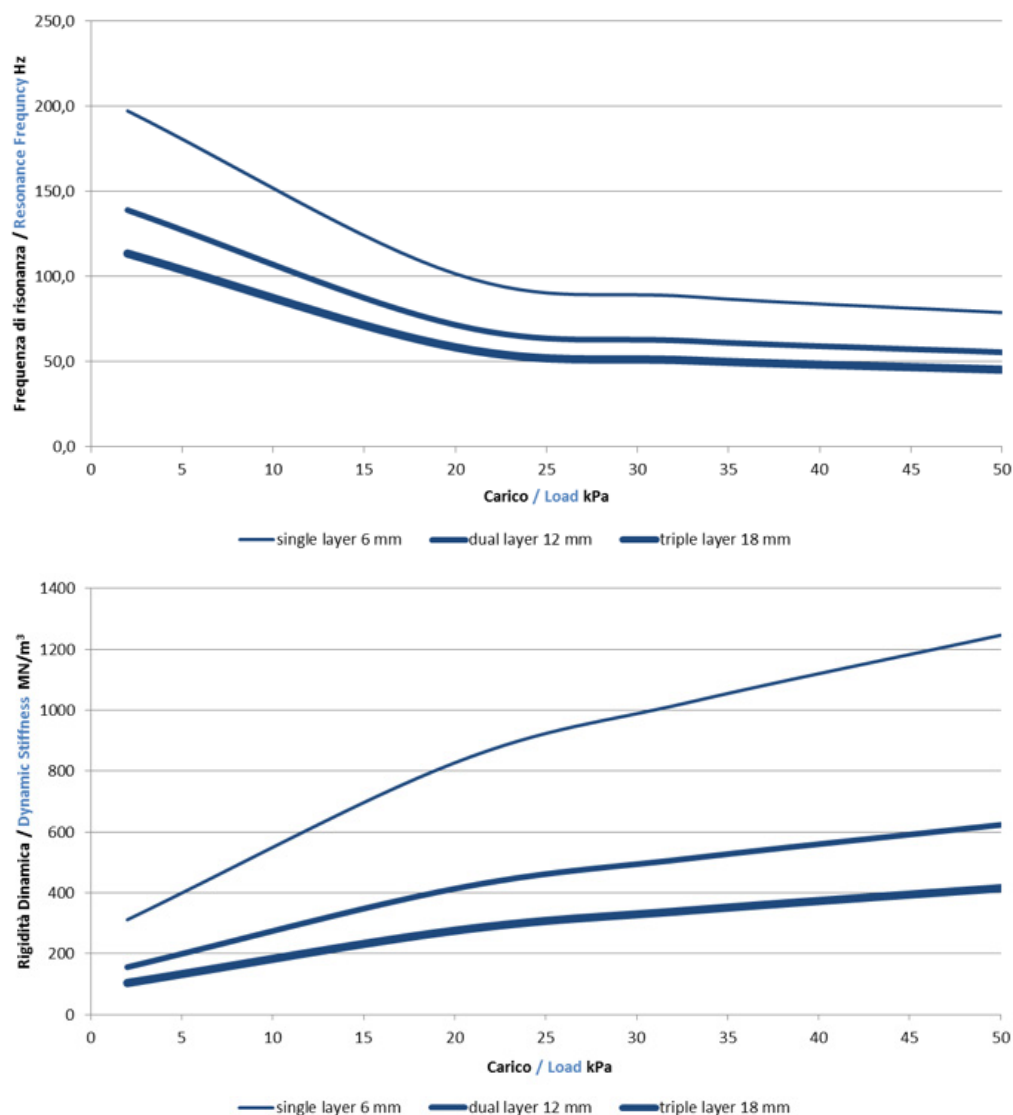
Resilient layer is made of second-generation reticulated expanded closed-cell polyethylene. This product ensures an even performance and high compressive strength over the time (live loads exceeding 5 kN/m<sup>2</sup>(Isolmant Strong type). Nominal Thickness 6 mm, density 70 kg/ m<sup>3</sup>. 10% compressive deformation with 85 kPa. 3% residual deflection after 24 h (after 22 h loading at 25% deflection).

Variation in resonance frequency and dynamic stiffness as a function of load

	load		resonance frequency	dynamic stiffness
kPa	kg/cm <sup>2</sup>	kg/sample	Hz	MN/m <sup>3</sup>
2	0,020	8,2	197,4	312
20	0,204	81,6	101,7	827
33	0,337	134,6	88,2	1028
50	0,510	203,9	78,9	1247



Variation in resonance frequency and dynamic stiffness as a function of load, for different layers of Isolmant Strong.



## WARNINGS:

\*This data sheet does not constitute a specification and, if it consists of several pages, please ensure that you have consulted the complete document. Although these instructions are the result of our best expertise they are indicative. The user should establish whether the product is suitable for its intended application. The user will be also in charge of all the responsibility for the use of the product itself.

\*\*The sound insulation values given in this technical data sheet are the result of laboratory tests or tests carried out on site: they cannot be considered a predictive value for every situation that may occur on site. Acoustic performance is closely linked to the specific conditions of each site.

\*\*\*Caution: do not expose the product to direct sunlight.

# isolmant



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