

Sound absorbing line

SUITEPAD

EU Registered Design

ADVANTAGES

- Registered model*
- Dual sound absorption function
- Three-dimensionality
- Versatility of use
- Light weight

* Registration No. 008267579 of 12.11.2020 at

EUIPO - EUROPEAN UNION INTELLECTUAL PROPERTY OFFICE



DESCRIPTION

Mono-material sound absorbing panel 40 mm thick with variable density, composed of a recycled polyester fiber core and a coloured fabric covering on the flat side. The rear side of the panel is distinguished by its special shell shape, whose maximum thickness point coincides with the centre of gravity of the panel. The perimeter is fitted with a rigid edge with support function for applications inside metal suspended ceilings.

SIZE

Thickness	mm	40 mm	40 mm
Format	Panel	59,5 x 59,5 cm	59,5 x 119,5 cm
Packaging	Piece	1	1
Weight	Kg/mq	0,82 Kg/mq	1,64 Kg/mq



TECHNICAL INFORMATION

59,5 x 59,5 cm

59,5 x 119,5 cm

Density [ρ]		variabile	variabile
Sound absorption coefficient [α_w]	UNI EN ISO 354	0,65 **	0,65 **
Confined sound absorption coefficient H 200 mm [α_w]	UNI EN ISO 354	0,85 **	0,85 **
Classification to fire [Class]	EN 13501 - 1	B, s2-d0	B, s2-d0
Volatile organic compound (TVOC) emission	UNI EN ISO 16000 - 9	CLASSE A+	CLASSE A+

** Value certified in the reverberant chamber and obtained by the sum of the absorption contributions of the various parts of which it is composed, taking into account that the thickness of the central sound absorbing body is prevalent and varies from 5 to 28 mm.

DOP

POLYMAXITALIA SRL headquartered in Via Fusina no. 12 of Castelfranco Veneto, a company operating in the production and marketing of materials and systems for the acoustic insulation of buildings and subjected to quality control ISO 9001, with reference to European Regulation 305/2011 (ex Directive 89/106), regulating the performance of construction products, in force since 1 year. July 2013: "in the absence of harmonised European standards for products with a sound insulation function, result in performance dependent not on the individual product but on a combination of components and the basic building system",

DECLARES

than for the product SUITEPAD is not bound to the certification process aimed at the production of the declaration of performance.

In this regard, the data reported in the relevant product fiche are authentic.

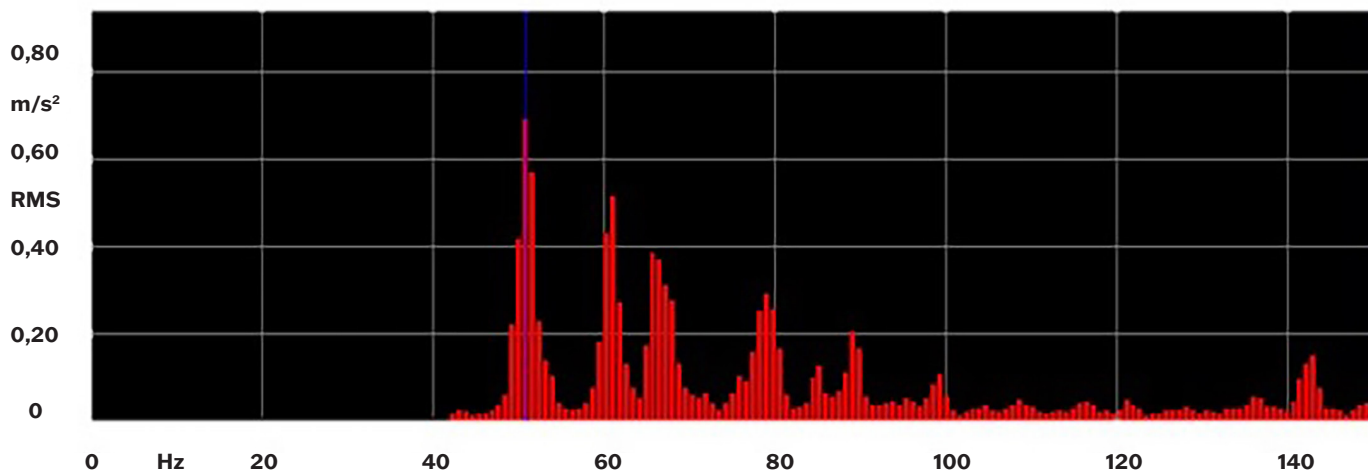


ASSORBIMENTO PER MEMBRANA VIBRANTE

SUITEPAD is a sound absorbing panel that combines two sound absorption principles: the one for porosity and the one for vibrating panel, thus meeting even the low frequency absorption requirements, which are the limit of common sound absorbing panels.

Due to its structure and form factor, the SUITEPAD has a resonance frequency of 50.78 Hz on which the principle of absorption by vibrating membrane is based.

This condition makes it unique on the market.



Resonance frequency [fr] = 50.78 Hz for 60x60 cm format

The presence of a semi-elastic fibrous layer and a back air cavity, which is also present when the panel is applied to a surface, allows the panel to dissipate sound and noise by exploiting the principle of “resonance”.

In this case the behaviour of the panel-air-wall system is comparable to the movement of a vibrating mass (flat fibrous element), connected with an elastic constraint (air contained in the interspace) to a rigid support (wall).

Unlike a conventional vibrating panel, where the resonance frequency, or maximum acoustic absorption frequency, is visible and accentuated on that specific frequency, in SUITEPAD, thanks to its micro-porosity of the fabric and fiber, Gaussian absorption is amplified.

