

STICKSON+

Presentation

The **Stickson+** range comprises **polymer-based synthetic masses used for vibration damping and boosting sound attenuation**. These high-density, bitumen-free materials can be used in construction and manufacturing applications. They are produced in rolls or sheets between 1.75 and 5 mm in thickness, depending on the required basis weight (3.5, 5, 7 and 10 kg/m²). Stickson+ can be cut to the required shape and includes an adhesive underside or one covered by a protective polypropylene film on the surface of the product.

Principle

Stickson+ possesses three essential properties when it comes to sound attenuation:

- **Increased mass** enabling greater insulation of a partition from sound waves (theoretical mass law: gain of 6 db in sound insulation by doubling the basis weight of the medium)
- **Vibration damping** by dissipation of mechanical energy in the form of heat through internal friction between the molecules which make up the material. These materials dramatically reduce wear and tear, such as the formation of cracks or increased clearance in mechanical systems.
- **The inherent properties of the material:** the elastic characteristics of the product increase the sound attenuation index at the critical frequency of the material to which it is affixed.

Applications

- **Reduction in impact noise** in collisions with floors, metal housings, collecting channels, hoppers, conveyor systems, grinders etc.
- **Dissipation of vibrational energy** in a metal structure such as the cowling on machine housings, pellet transport tubes, ventilation or exhaust ducts, automotive applications etc.
- **Acoustic reinforcement** of a surface by eliminating insulation loss at the level of critical frequencies of the materials.
- **Vibration damping** through the application of patches on all metal shapes, such as tubs, stainless steel basins, metal desks and drawers, specific shapes etc.
- **Increase in the sound attenuation index** through the mass effect on plaster, steel, aluminium or chipboard partitions, roof panels, cladding, PVC carpentry etc.

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Mechanical characteristics

Characteristics	<i>Stickson+</i>
Tensile strength (UNE 104-281/6.6)	30 N/cm ²
Stretching resistance (UNE 104-281/6.6)	300%
Compressive strength	4.84 kg/cm ²
Cold pliability pursuant to UEAtc (Passed)	-20°C

Fire/smoke performance

Characteristics	<i>Stickson+ 35</i>	<i>Stickson+ 50</i>	<i>Stickson+ 70</i>	<i>Stickson+ 100</i>
Fire rating (EN ISO11925-2 and EN 13823)	B S2 d0	-	B S2 d0	-
Quantity of VOC through fogging tests (DIN 75201)	88 %			

Hermetic characteristics

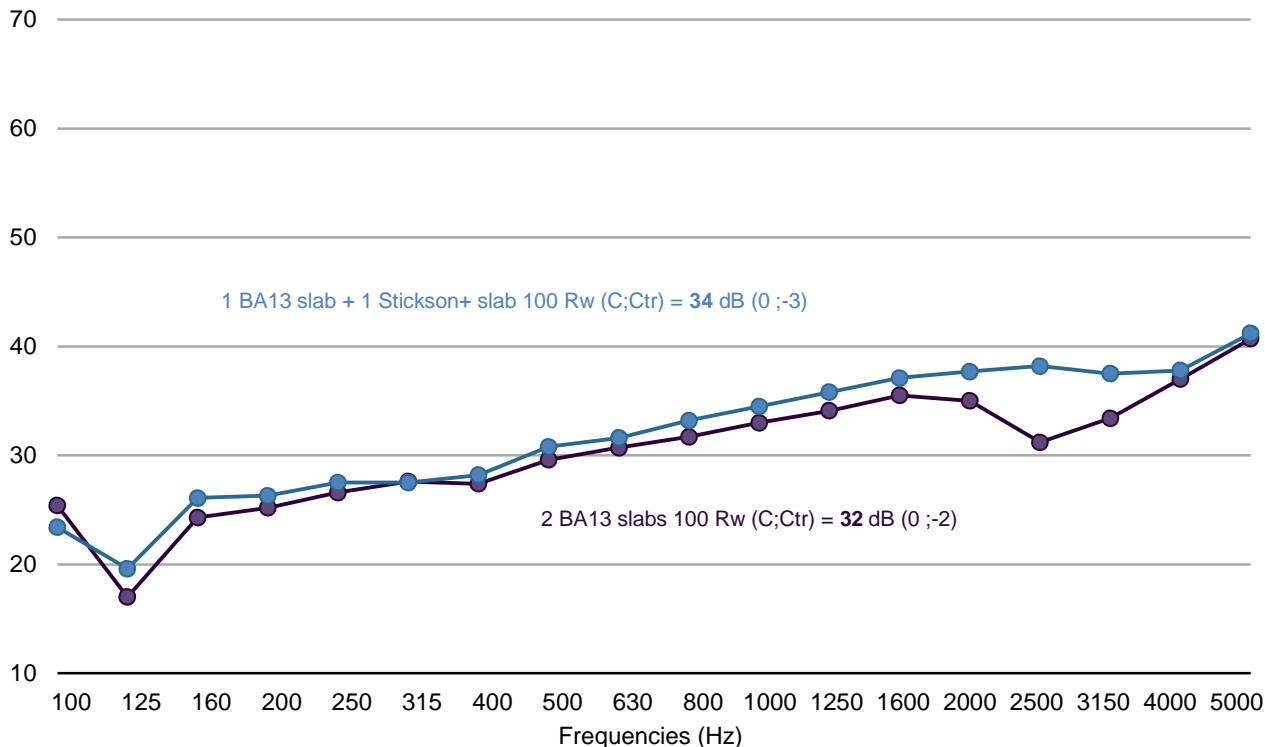
Characteristics	<i>Stickson+ 50</i>
Water vapour transmission (UNE EN-1931)	$G \leq 4.6 \times 10^{-9} \text{ kg/m}^2.\text{s}-1$
Water vapour resistance (UNE EN-1931)	$\mu \geq 4.15 \times 10^4$

Depending on developing knowledge and techniques, SILENT WAY reserves the right to modify the composition and conditions of use of its materials, and therefore their price, without notice. Consequently, each order will only be accepted in accordance with the conditions and technical specifications in force on the day of receipt.

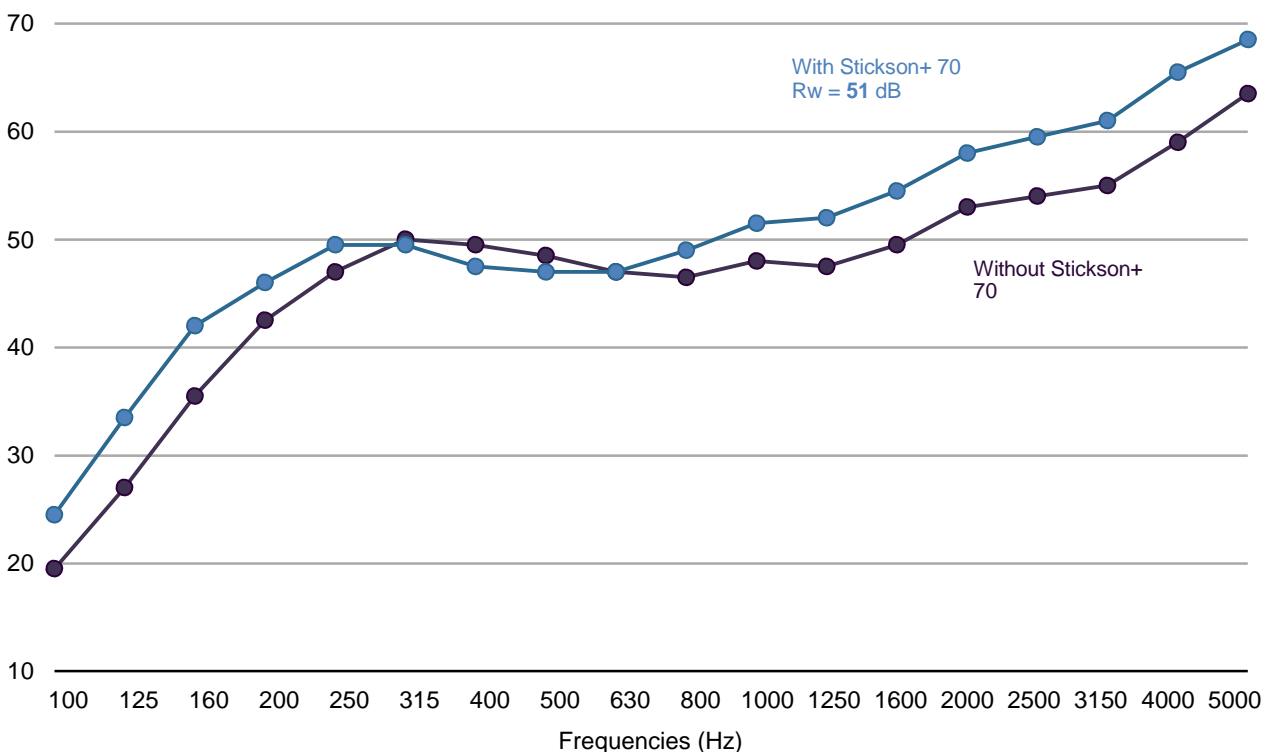
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Sound performance

Sound attenuation R(dB) facing comparisons (report no. 4.042.667 and report no. 4.042.665)



Sound attenuation R(dB) partition comparisons (report no. 20.012.327 and report no. 20.012.331)



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Composition and Formats

Characteristics	<i>Stickson+ 35</i>	<i>Stickson+ 50</i>	<i>Stickson+ 70</i>	<i>Stickson+ 100</i>
Composition	Polymer-based high-density synthetic sheet			
Thickness	1.75 mm	2.5 mm	3.6 mm	5 mm
Basis weight	3.5 kg/m ²	5 kg/m ²	7 kg/m ²	10 kg/m ²
Slab formats				
Roll formats	8 x 1.22 m	6 x 1.22 m	5 x 1.22 m	4 x 1.2 m
Number of rolls per pallet	24	24	24	21
Number of m ² per pallet	234.24	175.68	146.4	100.8
Other formats are possible: please contact us for details				

Manner of application and storage conditions

Stickson+ can be used on all standard construction materials (plaster, metal, wood or OSB, plastics). The application surface must be even, smooth, clean and dry. It must also be free of any element which might damage the membrane.

When using Stickson+ on a primer, you must check its condition, especially if is old, in order to avoid any detachment problems.

To use Stickson+, remove the silicone protective film and attach the membrane to the surface, applying uniform pressure to the entire surface in order to prevent the formation of air bubbles and ensure good adhesion. For rolls, we recommend that you remove the protective paper gradually for easy application.

In order to ensure an acoustic seal, a 5 cm covering (either with the adhesive or with hot air) both vertically and horizontally is preferable: a 1 m² sheet covers a surface measuring approximately 0.9 m², including the coverings.

Stickson+ must be kept in a dry place and protected from bad weather and temperatures of over 35°C. The maximum recommended storage period is one year.

Specific information

The information provided on this sheet is based on our experience and under no circumstances may we be held liable for its content, considering the diversity of materials available on the market and the various application procedures, over which we have no influence whatsoever. We strongly recommend that you conduct tests on your materials according to your specific application procedure to determine whether the product meets the requirements you are entitled to expect.

The sheets contain no hazardous components. In general terms, they meet hygiene, health and environmental requirements. For any further information, refer to the Safety Data Sheet.

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