

Technical data sheet

StoSilent Board 315

Acoustic panel made of expanded glass granulate for suspended ceiling structures



Characteristics

- Areas of application**
- interior
 - for suspended ceiling and wall structures
 - fixed with screws, bonded board joints

Properties

- limited combustibility
- Reaction to fire (class) in accordance with EN 13501-1: B-s1, d0 (panel with coating)
- up to 200 m² possible without expansion joint (max. side length: 20 m)
- reduction of the reverberation time and noise level
- improvement of the ability to concentrate
- improvement of speech intelligibility
- rated sound absorption factor α_w of up to 0.80 depending on the suspension height

Format

- Board edge: sharp-edged/or all-round bevel
- length x width x thickness
- 1200 x 800 x 15 mm
- 2400 x 1200 x 15 mm
- 1200 x 800 x 25 mm
- Special dimensions are possible (special thicknesses and untrimmed, raw panels on request)

Appearance

- Coating: StoSilent Decor M

Information/notes

- use in brine or saltwater swimming pools only on request
- not suitable in splash water zones
- not suitable for radii < 10 m and areas exposed to mechanical stress
- shadow joint > 2 cm mandatory
- observe installation instructions

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Criterion	Standard / test regulation	Value/ Unit	Notes
Diffusion-equivalent air layer thickness	EN ISO 7783-2	0.10 m	with coating
Reaction to fire (class)	EN 13501-1	B-s1, d0	with coating
Rated value of thermal conductivity λ	TIAP-655 based on EN 12667	0.08 W/(m*K)	with coating
Area weight		4.8 kg/m ²	
Apparent density		343 kg/m ³	
Sound absorption degree α_w		0.80	With coating; can vary depending on the suspension height and damping

The characteristic values stated are average values or approx. values. We use natural raw materials in our products, which means that the stated values can vary slightly in the same delivery batch; this does not affect the suitability of the product for its intended use.

Substrate

Requirements

The substrate must be firm, dry, clean, and load-bearing.

Application

Application temperature

Lowest application and substrate temperature: +12 °C at max. 70 % relative air humidity; installation after adjusting the equilibrium humidity in the room. Rapid shock-type heating or cooling during installation and drying can induce crack

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formation.

Consumption	Execution	Approx. consumption	
		1.00	m ² /m ²

The stated consumption values are only to be used as a guide. If required, precise consumption values plus cuttings should be determined on the project.

Coating procedure	<p>metal sub-construction in accordance with EN 13964 with vernier hangers</p> <p>StoSilent Board 315</p> <p>System adhesive: StoSilent Fix (approx. 0.3 kg/m²)</p> <p>System filler: StoSilent Plan (approx. 0.2 kg/m²)</p> <p>finish StoSilent Decor M (three spray application cycles with a total of 2.7 kg/m²)</p>
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Application

The boards should be fixed to the carrier profiles in longitudinal direction. Align longitudinal joints toward the incidence of light. Lay the boards with offset transverse joints, offset width min. 400 mm.

Fix the boards with phosphate-treated, quick-assembly screws with a needle point (TN form in accordance with DIN 18182) starting from the middle of the board or a corner in order to avoid compressions. When screwing on the panel, press it firmly onto the sub-construction. Insert the screws approx. 15 mm from the board edge and sink the screw heads to a depth of approx. 1 mm. Ensure a distance of 200 mm between the screws.

The bonding edges must be free from dust. Mix the system adhesive (StoSilent Fix) in accordance with the application guidelines.

After fixing the board, apply the system adhesive to the edges (e.g. with a Japanese spatula or cartridge).

Press the following board onto the fine grid of the sub-construction, then push it against the already installed boards and fix it with screws.

Use an electrical keyhole saw, handsaw or surform to cut, grind or plane the material.

System connections:

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to enable pressure equalisation between the ceiling cavity and the used space, ensure rear ventilation either through an open, all-around joint or openings in the ceiling. The proportion of the ceiling opening should account for at least 0.8 % of the ceiling surface area. In most cases, this is achieved by an open all-around joint of 2 cm.

The ceilings are not 100 % free from the effects of glancing light.

Cleaning the tools Remove dust after use.

Indications, recommendations, special information, miscellaneous

Please observe the general Sto application guidelines for Sto acoustic panel systems. They are available from Sto SE & Co. KGaA.

Installation/coating must only be carried out after prior instruction.

If the fine grid (e.g. when retrofitting ceiling installations) is cut through, create additional transition points. Seal the cavities in adjacent walls to prevent low-pressure ceilings.

Structural expansion joints must be incorporated.

Delivery

Colour shade visible side: white (approx. RAL 9010), Rear side: grey (approx. RAL 7047)

Packaging pallet

Storage

Storage conditions Store in dry and frost-free conditions. Product is sensitive to shocks, do not subject it to loads or stress.

Certificates/approvals

Declaration of conformity No. 2014-04	Acoustic products formulation identity/name change Certificate of conformity
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35 120/41 S.4	StoSilent Panel, 27 mm cavity with MW Determining the sound absorption factor
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35 120/41 S.5	StoSilent Panel, 27 mm cavity without MW Determining the sound absorption factor
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35 120/59	StoSilent Panel, 100 mm cavity without MW Determining the sound absorption factor
M 35 120/63	StoSilent Panel, 245 mm cavity without MW Determining the sound absorption factor
M 35 120/82	StoSilent Panel with StoSilent Superfine/StoColor Climasan Determining the sound absorption factor

Identification

Product group Acoustic panel

Safety Please observe safety data sheet

Special notes

The information or data in this technical data sheet serves to ensure the product's intended use, or its suitability for use, and is based on our findings and experience. Nevertheless, users are responsible for establishing the suitability of the product for its intended use.

Applications other than those explicitly mentioned in this technical data sheet are only permissible after prior consultation. Where no approval is given, such applications are at the risk of the user. This applies particularly to combinations with other products.

When a new technical data sheet is published, all previous technical data sheets are no longer valid. The latest version is available on the Internet.

Sto SE & Co. KGaA
Ehrenbachstr. 1
D - 79780 Stühlingen
Phone: +49 7744 57-0
Fax: +49 7744 57-2178
Infoservice.export@sto.com
www.sto.com