Technical Data Sheet
StoSilent Board 300

Acoustic panel made of expanded glass granulate for suspended ceiling and wall structures

Characteristics

Area of application	• interior • for suspended ceiling and wall structures • fixing with screws and adhesive
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 in the reverberation time and noise level • improved ability to concentrate • improvement in speech intelligibility • weighted sound absorption coefficient α_w of up to 0.60 depending on the suspension height • low weight and high stiffness • low moisture-induced and thermal expansion
Format	• board edge: sharp-edged / coated • length x width x thickness • 1200 x 800 x 15 mm • 2400 x 1200 x 15 mm • 1200 x 800 x 25 mm
Appearance	• coating: StoSilent Top Basic and StoSilent Top Finish
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 • observe installation instructions

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Technical data

Criterion	Standard / test specification	Value/ Unit	Notes
Diffusion-equivalent air layer thickness	EN ISO 7783-2	0.16 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	0.09 W/(m*K)	With coating
Mass per unit area		4.9 kg/m²	
Bulk density		494 kg/m³	
Sound absorption coefficient α_w		0.60	With coating; can vary depending on the suspension height and damping

The characteristic values stated are average values or approximate values. Due to the natural raw materials in our products, 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 formation.

Consumption

Type	Approx. consumption	
	1.00	m²/m²

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 build-up

metal sub-construction in accordance with EN 13964 with vernier hangers; fine grid bonded with StoSilent Profile Tape

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System adhesive:
StoSilent Fix(approx. 0.4 kg/m²)

Intermediate coat:

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	StoSilent Top Basic(approx. 1.5 - 2.5 kg/m²) finish StoSilent Top Finish(approx. 3.0 kg/m²)
Application	The boards should be fixed in longitudinal direction to the carrier profiles to which the StoSilent Profile Tape has been applied. Align longitudinal joints toward the incidence of light. Install the boards with transverse joints that are offset by at least 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 fixing the screws, press the board 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. At the factory, a sealant is applied to the board edges to make them flow-proof. Dust off, paint, or waterproof all edges cut subsequently or on site using the system paint or system adhesive in order for the finished surface to appear homogeneous (closed pores, no visible expanded glass). 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: 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.
Cleaning the tools	Remove dust after use.
Notes, 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 1013), rear side: grey (approx. RAL 7039)
Packaging	pallet

Storage

Storage conditions	Store in dry and frost-free conditions. Product is sensitive to shock; 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
M 35 120/108 Page 1	StoSilent Distance - StoSilent Board 300 - StoSilent Top Basic & Finish - build-up E-45 Determination of the sound absorption factor in accordance with EN ISO 354
M 35 120/108 Page 2	StoSilent Distance - StoSilent Board 300 + mineral wool - StoSilent Top Basic & Finish - build-up E-45 Determination of the sound absorption factor in accordance with EN ISO 354
M 35 120/108 Page 3	StoSilent Distance - StoSilent Board 300 - StoSilent Top Basic & Finish - build-up E-115 Determination of the sound absorption factor in accordance with EN ISO 354
M 35 120/108 Page 4	StoSilent Distance - StoSilent Board 300 - StoSilent Top Basic & Finish - build-up E-260 Determination of the sound absorption factor in accordance with EN ISO 354
M 35 120/109 Page 1	StoSilent Distance - StoSilent Board 300, 25 mm - StoSilent Top Basic & Finish - build-up E-55 Determination of the sound absorption factor in accordance with EN ISO 354
M 35 120/109 Page 2	StoSilent Distance - StoSilent Board 300, 25 mm + mineral wool - StoSilent Top Basic & Finish - build-up E-55 Determination of the sound absorption factor in accordance with EN ISO 354
M 35 120/109 Page 3	StoSilent Distance - StoSilent Board 300, 25 mm - StoSilent Top Basic & Finish - build-up E-125 Determination of the sound absorption factor in accordance with EN ISO 354
M 35 120/109 Page 4	StoSilent Distance - StoSilent Board 300, 25 mm - StoSilent Top Basic & Finish - build-up E-270 Determination of the sound absorption factor in accordance with EN ISO 354
M 35 120/110 Page 1	StoSilent Distance - StoSilent Board 300, 25 mm + mineral

	wool - StoSilent Top Basic & Sto-Terrazzo Effect - build-up E-55 Determination of the sound absorption factor in accordance with EN ISO 354
M 35 120/110 Page 2	StoSilent Distance - StoSilent Board 300, 25 mm + mineral wool - StoSilent Top Basic & silicon carbide F14 - build-up E-55 Determination of the sound absorption factor in accordance with EN ISO 354
M 35 120/110 Page 3	StoSilent Distance - StoSilent Board 300, 25 mm - StoSilent Top Basic, tinted (blue) - build-up E-125 Determination of the sound absorption factor in accordance with EN ISO 354
M 35 120/117 Page 1	StoSilent Distance - StoSilent Board 300, 25 mm + mineral wool - StoSilent Top Basic, white - build-up E-55 Determination of the sound absorption factor in accordance with EN ISO 354
M 35 120/117 Page 2	StoSilent Distance - StoSilent Board 300, 25 mm - StoSilent Top Basic, white - build-up E-55 Determination of the sound absorption factor in accordance with EN ISO 354
M 35 120/117 Page 3	StoSilent Distance - StoSilent Board 300, 25 mm - StoSilent Top Basic, white - build-up E-125 Determination of the sound absorption factor in accordance with EN ISO 354
M 35 120/117 Page 4	StoSilent Distance - StoSilent Board 300, 25 mm - StoSilent Top Basic, white - build-up E-270 Determination of the sound absorption factor in accordance with EN ISO 354

Identification

Product group	Acoustic panel
Safety	Observe the Safety Data Sheet!

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Special notes

The information 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. Users are nevertheless responsible for establishing the product's suitability and use.
Applications not specifically mentioned in this Technical Data Sheet are permissible only after prior consultation. Where no approval is given, such applications are at the user's own risk. This applies in particular when the product is used in combination 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
79780 Stühlingen / Germany
Phone: +49 7744 57-0
Fax: +49 7744 57-2178
Infoservice.export@sto.com
www.sto.com