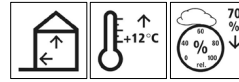


Technical Data Sheet

StoSilent Board 100

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



Characteristics

Area of application

- Interior
- For suspended ceiling and wall structures
- For the StoSilent Distance S Acoustic System
- Fixing with screws, bonded board joints

Properties

- 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 0.80 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 625 x 25 mm

Appearance

- Smooth surface
- Depending on the finish: fine graining with StoSilent Top Basic or ultra-fine graining with 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 and areas subject to mechanical stress
- Observe installation instructions

Technical Data

Criteria	Standard / test specification	Value / Unit	Notes
Diffusion-equivalent air layer thickness	EN ISO 7783	0.12 m	with coating
Reaction to fire (class)	EN 13501-1	A2-s1, d0	with coating
Rated value of thermal conductivity λ	TIAP-655 based on EN 12667	0.09 W/(m ² K)	with coating
Mass per unit area		6.8 kg/m ²	
Bulk density		362 kg/m ³	
Sound absorption coefficient α_W		0.80	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.

Technical Data Sheet

StoSilent Board 100

Substrate

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

Application

Application temperature Lowest substrate and application 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
	1.34 no's of panel/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 build up

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

StoSilent Board 100

System adhesive:
 StoSilent Fix (approx. 0.5 kg/m²)

Intermediate coat:
 StoSilent Top Basic (approx. 1.5 - 2.5 kg/m²)

Finish:
 StoSilent Top Finish (approx. 3.0 kg/m²) or StoSilent Top Basic (approx. 1.50 - 2.50 kg/m²)

Application

The boards should preferably be fixed to the carrier profiles in a transverse direction using StoSilent Profile Tape.

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, drywall screw 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.

Mix the system adhesive (StoSilent Fix) in accordance with the application guidelines.

After fixing the board, apply the system adhesive to the edges.

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.

In glancing light the ceilings are not free from visible unevenness.

Technical Data Sheet

StoSilent Board 100

Cleaning the tools	Remove dust after use.
Notes, recommendations, special information, miscellaneous	<p>Please consult the local sales office for further information and any site assistance required.</p> <p>Please observe the general Sto application guidelines for Sto acoustic panel systems. They are available from Sto SEA Pte Ltd.</p> <p>Installation/coating must only be carried out after prior instruction.</p> <p>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.</p> <p>Recommendation: installation on walls outside areas subject to a risk of impact, above a height of 2 m.</p> <p>Structural expansion joints must be incorporated</p>

Delivery

Colour shade	Visible side: White (approx. RAL 9002), Rear side: Grey (approx. RAL 7039)
---------------------	---

Packaging	Article number	Name	Packing
	03548-001	StoSilent Board 100	50 pcs/pallet

Storage

Storage conditions	Store in cool dry conditions; avoid direct sunlight. Product is sensitive to shock; do not subject it to loads or stress.
---------------------------	---

Identification

Product group	Acoustic panel
----------------------	----------------

Safety	Please refer to Safety Data Sheet.
---------------	------------------------------------

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 www.sto-sea.com.

Sto SEA Pte Ltd
159 Sin Ming Road
#06-02 Amtech Building
Singapore 575625
Phone: +65 6453 3080
Fax : +65 6453 3543
info.sg@sto.com
www.sto-sea.com

Sto SEA Sdn Bhd
28, Jalan Rajawali 3
Bandar Puchong Jaya,
47170 Selangor, Malaysia
Phone: +60 3 8080 9066
Fax: +60 3 8080 9255
info.my@sto.com
www.sto-sea.com

Sto SEA Pte Ltd
3656/49-52 Green Tower, 16th Floor
Rama IV Rd, Klongton, Klongtoei,
10110 Bangkok, Thailand
Phone: +66 2 1684 921 Ext. 230
Fax: +66 2 1684 999
info.sg@sto.com
www.sto-sea.com

Sto SE & Co. KGaA
Ehrenbachstrasse 1
79780 Stühlingen,
Germany
Phone: +49 7744 57-0
Fax: +49 7744 57-2178
info.sg@sto.com
www.sto-sea.com

*Product images may differ from the actual product.