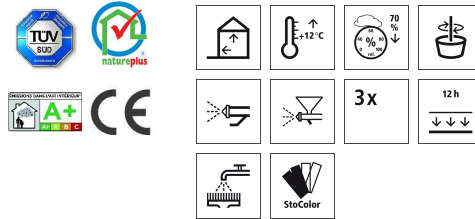


Technical data sheet

StoSilent Decor M

Sound-permeable silicate acoustic coating



Characteristics

Areas of application

- interior
- as finish for Sto acoustic panel systems
- onto ceiling and wall surface areas which are not subjected to mechanical impacts
- sprinkled onto StoSilent Board 110, StoSilent Board 210, StoSilent Board 310, StoSilent Board 310 F, and onto ceilings laminated with StoSilent Fleece

Properties

- sound-permeable decorative coating
- solvent- and plasticiser-free
- low-emission
- TÜV seal of quality - externally monitored
- free of fogging-active substances
- eco-certified (natureplus®)

Appearance

- matt in accordance with EN 13300
- fine texture (0.5 - 0.8 mm)

Information/notes

- do not use on StoSilent Sil AP
- sound permeability is achieved by means of the special application technique

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Technical data

Criterion	Standard / test regulation	Value/ Unit	Notes
Density	EN ISO 2811	1.2 - 1.4 g/cm ³	
Water vapour diffusion resistance factor μ	EN ISO 7783-2		V1 high
Reaction to fire (class)	EN 13501-1	A2-s1, d0	non-combustible
PH value		11.0 - 12.0	
Light reflectance value		83	
Degree of whiteness		66 %	
Tensile strength on concrete	EN 1542	≥ 0.3 N/mm ²	

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, as well as free from sinter layers, efflorescence and release agents. Damp or not fully cured substrates can lead to defects in subsequent layers, such as blistering or cracks. Therefore do not apply onto damp or soiled substrates.

Preparations

Acoustic panel systems:
StoSilent Board 110, StoSilent Board 210, StoSilent Board 310, and StoSilent Board 310 F acoustic panel systems:

Inspect the surface to be coated:
Check if the surface is uneven and if seams are visible by means of a metal bar or glancing light; touch these spots up if necessary.
Board joints must be filled and sanded even.

StoSilent Fleece:

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Prior to coating of the fleece, check the surface for unevenness and marks, and touch them up if necessary. Due to the fineness of the coating, the substrate must be level and coatable.

Check if the ceiling is uneven by means of a metal bar or glancing light. Cut open any bubbles in the glass-fibre nonwoven, recoat the board with adhesive and press the nonwoven back on. Allow the corrected area to dry.

There must be no adhesive on the underside of the fleece (caution! - light marks). The joints between the glass-fibre nonwoven strips must neither gape nor overlap as these are not concealed by the finishing coat.

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.

Material preparation Ready-to-use

Consumption	Type of application	Approx. consumption	
	for 3 application cycles (depending on the colour shade, a further application cycle may be necessary)	2.70	kg/m ²
in case of 4 application cycles	3.20	kg/m ²	

Material consumption depends on, among other factors, the application, substrate and consistency. The stated consumption values are only to be used as a guide. If required, precise consumption values should be determined on the basis of the specific project.

Coating procedure load-bearing acoustic system StoSilent Board 210, StoSilent Board 310, StoSilent Board 310 F, and StoSilent Fleece

Intermediate coat 1:
StoSilent Decor M

Intermediate coat 2:
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Finish:
StoSilent Decor M

load-bearing acoustic system StoSilent Board 110

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Intermediate coat 1:
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Intermediate coat 2:
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Intermediate coat 3:
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Finish:
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Depending on the colour shade and type of the substrate, further coats may be necessary.

Application

by machine, spray with the hopper gun

StoSilent Board 210, StoSilent Board 310, StoSilent Board 310 F, and StoSilent Fleece:

Sprinkle with increasing amounts of material in at least 3 offset application cycles (1st application cycle approx. 700 g/m²)

Use a compressor with an air output of 400-600 l/min for sufficient air volume. To achieve a spray pattern that is as fine as possible, use the Sto-Hopper Gun 6 mm nozzle or a rotor and stator pump with Vario drive (output of 0-5 l/min.) and fine spraying set and 6 mm nozzle, e.g. Inomat M8.

Check air volume and consistency by test sprinkling the material onto paper or paper board. The distance between the sprinkling device and the surface to be coated must measure 50 - 70 cm when working with a hopper gun, or 70 - 90 cm when working with a rotor and stator pump. If necessary, take additional measures (lower scaffolding, etc.).

Between sprinkling application 1 and 2, observe min. 5 hours of drying time (at less than 70 % air humidity and a temperature of +18 °C).
Between spray application 2 and 3, observe min. 12 hours of drying time (at less than 70 % air humidity and a temperature of +18 °C).

StoSilent Board 110:

Between spray application 3 and 4, observe min. 12 hours of drying time (at less than 70 % air humidity and a temperature of +18 °C).

When used as coating on flow-proof boards, drying can take longer.

In case of intense colour shades, drying can take longer than expected. Otherwise

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there is a risk of "cloud formation". Additional spray application layers may be necessary depending on the colour shade. Apply 1-2 layers in white to level the substrate.

If necessary, the use of dehumidifiers is recommended.

Always work in circular movements when sprinkling, never remain at one spot. The material must not run over the surface, as otherwise the acoustic transparency is not guaranteed and the surface becomes patchy due to the spots where the material ran down.

Each spray application with dosed material use.

After thorough through-drying (min. 48 hours), sweep the surface with a clean hair broom.

When using machinery equipment, it may be necessary to plan a 4th application cycle to maintain sound permeability with reduced amounts of material per application cycle.

Reworking:

For renovation purposes, the same material must be spray applied once or twice in a criss-cross fashion onto the Sto-Acoustic Ceilings coated with the product.

First, suction off dust deposits with an industrial vacuum with a brush attachment.

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

Drying, curing, ready for next coat

High humidity and/or low temperatures prolong drying.

Cleaning the tools

Clean tools with water immediately after use.

Indications, recommendations, special information, miscellaneous

Please observe the general Sto application guidelines for acoustic systems. They are available from Sto SE & Co. KGaA.
Installation/coating must only be carried out after prior instruction.

Delivery

Colour shade

signal white (approx. RAL 9003), limited tintability in accordance with the StoColor System

Colour accuracy:

It is not possible to give any warranty for uniform colour accuracy and freedom from stains due to chemical and physical setting processes and different

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conditions, especially with regard to:

- a) uneven absorption behaviour of the substrate
- b) different substrate moisture levels
- c) partially very different alkalinity/substances in the substrate.

Note:

When tinting the material, the pigment paste adds small amounts of solvent to the product.

Packaging pail

Storage

Storage conditions Store tightly sealed in frost-free conditions.

Storage life The quality of the original package is guaranteed until stock by date. The batch number of the package indicates the end of the storage period.
 Batch number explanation:
 Number 1 = the last number of year, numbers 2 + 3 = a week
 I.e.: 5450013223 – storage life until the 45th week of the year 2015

Certificates/approvals

Declaration of conformity No. 2014-04	Acoustic products formulation identity/name change Certificate of conformity
TÜV - Certificate No. TM-10/140829-1	StoSilent Decor M (low-emission, physiologically harmless, and production monitored) Assessing emissions
natureplus® - Certificate 0602-0602-046-2	StoSilent Decor M Environment - Health - Features
M 35 120/82	StoSilent Panel with StoSilent Superfine/StoColor Climasan Determining the sound absorption factor

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Identification

Product group Acoustic coating

Composition

comprehensive declaration in accordance with the "natureplus®" procurement directive, mineral filler materials, water, potassium silicate, Barium sulphate, titanium dioxide, polymer dispersion, silicate filler materials, thickener, wetting agents, stabilisers, dispersing agent

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.

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