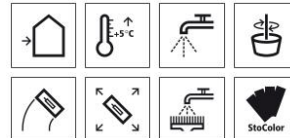


Technical Data Sheet

Stolit Milano[®]

Organic, ultra fine-grained, free-style textured render



Characteristics

Area of application

- exterior
- on masonry, insulated and rainscreen cladding facades with a base coat
- on mineral and organic substrates
- thin-layer, as a multi-layer build-up of finishing render
- not suitable for horizontal or sloping surfaces that are exposed to weather conditions

Properties

- render in accordance with EN 15824
- free-style textured render for fine-textured, freely-decorated surfaces
- fine graining under 0.1 mm
- good suitability for sanding
- water-repellent
- water vapour permeable
- weather-resistant

Appearance

- fine to coarse spotted trowelling technique
- additional coating possible, e.g. with lasure
- in various StoSignature surface techniques in accordance with separate application instructions

Information/notes

- see Services/Silo overview in the product guide or price list
- if the selected colour shade has a light reflectance value ≥ 15 , no additional finish is necessary
- sanded surfaces appear lighter

Technical data

Criterion	Standard / test specification	Value/ Unit	Notes
Density	EN ISO 2811	1.7 - 1.9 g/cm ³	
Diffusion-equivalent air layer thickness	EN ISO 7783	0.40 - 0.44 m	V2 medium

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Water permeability rate w	EN 1062-1	< 0.05 kg/(m ² h ^{0.5})	W3 low
Water vapour diffusion-equivalent air layer thickness μ	EN ISO 7783	400 - 550	V2 medium
Reaction to fire (class)	EN 13501-1	A2-s1, d0	
Thermal conductivity	DIN 4108	0.7 W/(m*K)	

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, load-bearing, and free from sinter layers, efflorescence and release agents. Damp or not fully cured substrates can lead to defects in the following coatings, e.g. bubble formation, cracks.

If using the product as a thin-layer, float-finished, fine textured render, it is necessary to apply additional levelling coats of substrate filler.

For areas in external wall insulation systems with a change in material, e.g. a fire strip or fire flash-over protection, first fill these and then apply the base coat.

Layer thicknesses in the external wall insulation system:

- complete render system: at least 4 mm
- The base coat under the fine plaster finish should be thicker than 3.0 mm.
- Recommendation: Apply additional layers to level the base coat and prevent markings from the substrate.

Note: the smoother, glossier, and more colour-intense the surface should be, the more time-consuming the substrate preparation.

Preparations

Apply Sto-Primer as an undercoat to ensure application properties such as open time on mineral substrates and to optimise adhesion.

Recommendation:

In the case of intense colour shades, adjust the colour shade of the substrate to the colour shade of the Stolit Milano® finish. Use the relevant tinted Sto products in the system build-up for this.

Application

Application conditions

Do not apply the material in intense, direct sunlight or onto heated substrates.

Avoid strong air movements during application and during the first phase of drying, otherwise increased shrinkage cracks and pores may develop in the coating.

Application temperature

Lowest temperature of substrate and air: +5 °C
Highest temperature of substrate and air: +30 °C

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Material preparation

Dilute with as little water as possible to achieve application consistency. Stir the material well before application. If applying the material by machine or pump, adjust the application consistency accordingly. Do not dilute intensely tinted material, or only use very little water. Too much dilution impairs the properties of the material, e.g. with regard to application, hiding power, and colour shade intensity.

Consumption

Type of application	Approx. consumption	
1 filler base coat	1.50	kg/m ²
intermediate filler coating	0.50	kg/m ²
spot-smoothed finish (per application cycle)	0.20 - 0.30	kg/m ²
overall build-up of Stolit Milano®	2.20 - 2.50	kg/m ²

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

Coating build-up

Primer:
Depending on the type and condition of the substrate, it may be necessary to apply consolidating, absorbency-regulating prime coatings.

Intermediate coat on load-bearing, mineral substrates:
Apply an intermediate coat with adhesion-promoting and absorbency-regulating properties.
Products: Sto-Primer or StoPrep QS (alkalinity-isolating)

Intermediate coat on load-bearing, organic substrates:
Recommendation:

If the colour shade of the finishing render differs significantly from the colour shade of the substrate, apply an intermediate coat that aligns the colour shades. If applying a finishing render with a rilled texture, always apply an intermediate coat that has a similar colour shade.
Products: Sto-Primer or StoPrep QS (alkalinity-isolating)

Application

manually

Filler base coat:
Apply the filler base coat manually and non-directionally (in a criss-cross pattern) to the entire surface with a max. layer thickness of approx. 1.0 mm per application cycle to level the substrate. Depending on the substrate and demand on the surface, apply the filler base coat in two application cycles.

Level any larger unevenness of the substrate (e.g. holes) using a material with better filling properties that is matched to the substrate.

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Grind down any spatula burr. Sanding spots stay visible if they are not reworked.
Alternatives:

After a short drying time, float-finish any unevenness/transitions using a damp, not wet, plasterer's float with a velour latex sponge covering.

Then level the scaffold anchor holes with Stolit Milano® and carefully close them taking the increased surface requirements into consideration.

trowelling technique and spot-smoothed finish:

Allow the filler base coat to dry and then apply Stolit Milano® using a surface technique with its versatile design possibilities. Apply

Stolit Milano® in a spot pattern and non-directionally using a finishing trowel as an elegant and subtle trowelling technique. Apply the individual filled spots so they are connected and not coarsely spread.

Allow the surface to dry briefly and then float-finish using a velour latex sponge to create a relatively smooth, but not totally even, surface. Apply this application cycle once or twice depending on the desired appearance.

Apply Stolit Milano® in a spot pattern and non-directionally using a finishing trowel as a decorative spot-smoothed finish in one to two application cycles with breaks between applications. It is possible to either leave the transitions between the individual spot-smoothed finishes as they are, or float-finish them with a velour latex sponge.

The more densely the trowelled finish/spot-smoothed finish is applied, the calmer the effect. If Stolit Milano® is applied by several people as a finish over a surface, please take into account that their different application styles might result in different different surface effects.

Further surface effects are possible in certain cases. If using Stolit Milano® in several colour shades, start with the darkest colour shade.

Recommendation:

Create a sample surface area on the project.

Stolit Milano® is also suitable in the area of reveals and edgings.

The surface of Stolit Milano® can be overcoated after drying with Sto products, e.g. with Lotus-Effect®, silicone resin or organically-bound products. Overcoating with other products may be possible on request.

Drying, curing, ready for next coat

The product dries physically, in that water evaporates. Higher humidity, lower temperatures, and low air exchange prolong the curing and drying times.

During unfavourable weather conditions, apply suitable protective measures (e.g. protection against rain) to any facade surface which is to be treated or which has been freshly completed.

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At +20 °C air and substrate temperature and 65 % relative humidity:
 as a filler base coat: over-coatable after approx. 8 hours,
 as spot-smoothed finish: over-coatable after approx. 1 - 3 hours. Suitable for
 sanding: after approx. 24 hours. Final hardness is achieved after approx. 28 days.
 The surface is then more difficult to sand.

Cleaning the tools

Clean tools with water immediately after use.

Delivery

Colour shade

white, tintable in accordance with the StoColor System

Float-finishing with a damp latex disc might result in bouncers in places. This makes the surface appear subtly vivid.

Colour stability:

Weathering, intensity of UV radiation, and moisture penetration change the surface over time. Visible changes in colour shade are possible.

This change process is influenced by material and project conditions.

Recommendation: A build-up of additional paint coats improves the colour stability of intense and/or very dark colour shades.

Extender material breakdown:

Mechanical stress can damage the extenders in the material and lead to lighter marks. This does not influence the product quality or functionality.

Colour accuracy:

Different weather and project conditions influence colour shade accuracy and colour shade uniformity. Avoid the following conditions (a - d) in every case:

- a) uneven absorbency of the substrate
- b) different levels of substrate moisture over an area
- c) partly very different alkalinity and/or substances in the substrate
- d) direct sunlight with sharp, clear shadows on a still-damp coating

Washout of processing aids:

If water such as condensation, fog, or rain comes into contact with not fully dry coatings, processing aids may be released from the coating and build up on the surface. Whether the effect is strongly visible or not depends on the intensity of the colour shade. This does not influence the product quality. The effects disappear when the surface is exposed to further weathering.

Texturing grain:

Natural white marble types are used as texturing grain. The natural graining of the marble can become partially visible and appear as darker texture grain in the finishing render.

With light clear (and especially clear yellow) colour shades, the colour of the texturing grain can shine through the finishing render across an area. In very rare cases, marble grain can cause isolated markings due to natural ingredients, e.g.

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pyrite.
Both effects are due to the basic appearance of a marble-filled finishing render and attest to the natural properties of the raw materials used. This is an inherent property.

Tintable This product can only be tinted at the factory.

Possible special options There are no special settings for this product.

Packaging pail

Storage

Storage conditions Store tightly sealed in frost-free conditions. Protect from heat and direct sunlight.

Storage life The quality of the product in its original container is guaranteed until the maximum storage life has expired. The storage life information is included in the batch number on the container.
Explanation of batch no.:
digit 1 = last digit of the year, digits 2 + 3 = calendar week
Example: 1450013223 - storage life ends week 45 in 2021

Certificates/approvals

ETA-05/0098	StoTherm Classic [®] 2 (EPS and StoLevel Classic/StoLevel Classic QS/Sto-RFP) European Technical Assessment
ETA-09/0058	StoTherm Classic [®] 5 (EPS and StoArmat Classic plus/StoArmat Classic plus QS) European Technical Assessment
ETA-09/0266	StoTherm Classic [®] 8 (EPS and StoArmat Classic/Classic plus) European Technical Approval
ETA-20/0465	StoTherm Classic [®] 11 (EPS and StoArmat Classic HD + StoAdditiv HD) European Technical Assessment
ETA-07/0088	StoTherm Classic [®] 2 (MW/MW-L and StoLevel Classic) European Technical Assessment
ETA-09/0288	StoTherm Classic [®] 5 (MW/MW-L and StoArmat Classic plus/StoArmat Classic plus QS) European Technical Assessment
ETA-05/0130	StoTherm Vario 1 (EPS and StoLevel Uni) European Technical Assessment
ETA-06/0045	StoTherm Vario 3 (EPS and StoLevel Novo) European Technical Assessment
ETA-06/0107	StoTherm Vario 4 (EPS and StoLevel Duo) European Technical Assessment
ETA-19/0443	StoTherm Vario 8 (timber frame construction – EPS and StoLevel Duo/StoLevel Duo plus/StoLevel Uni/StoLevel Novo/StoLevel FT)

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	European Technical Assessment
ETA-09/0231	StoTherm Mineral 1 (MW/MW-L and StoLevell Uni) European Technical Assessment
ETA-07/0027	StoTherm Mineral 3 (MW/MW-L and StoLevell Novo) European Technical Assessment
ETA-13/0581	StoTherm Mineral 8 (timber frame construction - MW-L and StoLevell Uni/StoLevell Novo, fixing: bonded) European Technical Assessment
ETA-17/0406	StoVentec R European Technical Assessment

Identification

Product group Render

Composition

In accordance with the VdL directive (German Paint and Printing Ink Association) on coating materials for buildings
 polymer dispersion
 titanium dioxide
 mineral extenders
 aluminium hydroxide
 water
 aliphatics
 glycol ether
 hydrophobic agents
 thickener
 dispersing agent
 wetting agents
 anti-foaming agents
 storage protection agent based on BIT/ZPT
 storage protection agent based on CIT/MIT 3:1
 coating protection agent based on OIT / diuron

Safety

Observe the Safety Data Sheet!
 Safety instructions refer to the ready-to-use, unapplied product.

EUH210

Safety data sheet available on request.

EUH208

Contains 1,2-benzisothiazol-3(2H)-one, 2-octyl-2H-isothiazol-3-one, reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one[EC no.247-500-7]and 2-methyl-2H-isothiazol-3-one[EC no.220-239-6] (3:1). May produce an allergic reaction.

These are preservatives.

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Avoid contact with the skin and the eyes.

EUH211

Warning! Hazardous respirable droplets may be formed when sprayed. Do not breathe spray or mist.

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.

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