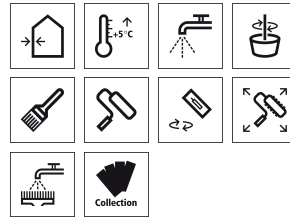


Technical data sheet

StoColor Metallic

Effect coating with metallic effect for creative interior and exterior design, low-emission



Characteristics

Areas of application

- exterior and interior
- as double top coat or decorative glaze onto prepared substrates
- onto StoTherm Classic® and StoTherm Vario EWIS with individual release
- onto Sto RSC systems
- not suitable for horizontal or sloping surfaces subject to weathering
- onto coatings as well as wall and ceiling coverings in interiors

Properties

- metallic effect coating
- weather-resistant
- highly water-repellent
- without biocide film preservative
- almost solvent-free with only 2 g/l

Appearance

- metallic look
- matt to silk gloss

Information/notes

- Caution! Applications that have been barred are listed under substrate specifications.

Technical data

Criterion	Standard / test regulation	Value/ Unit	Notes
Density	EN ISO 2811	1.0 - 1.2 g/cm ³	
Diffusion-equivalent air layer thickness	EN ISO 7783-2	0.6 - 0.7 m	V2 medium
Water permeability rate w	EN 1062 -3	< 0.05 kg/(m ² *h ^{0.5})	W3 low
Water vapour diffusion resistance factor μ	EN ISO 7783-2	11,000 - 13,000	

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

Important!!
When applying to facade insulation systems, StoTherm Classic® and StoTherm Vario, a project-related, individual release is required via the system provider.

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Caution!!

StoColor Metallic may not be used on the following systems and substrates without using a building physical calculation and individual release:

Facade insulation systems:

- newly created with mineral fibre insulation boards, e.g. StoTherm Mineral,
- with wood soft fibre boards, e.g. StoTherm Wood,
- with mineral foam boards, e.g. StoTherm Cell

Other substrates and systems:

- StoDeco Profiles and StoDeco Rustication Facades,
- StoReno EWIS renovation system,
- horizontal or slanted surfaces with weathering,
- and newly created QS render systems,
- for very diffusion-open wall structures and/or damp intensive building use: e.g. senior citizens' homes or swimming baths

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.

In the case of ventilated rainscreen cladding systems and EWIS systems released by Sto, float-finished, fine textured render/free-style textured render substrates, stippled render and filled render textures can be coated up to a grain size of 6.0.

Preparations

Protect the surface to be coated against direct solar radiation during application. Prepare absorbent mineral substrates with StoPrim Micro or other suitable Sto primers. Prepare synthetic or metallic substrates professionally by priming. If required, match the colour of the load-bearing substrate to the planned application.

Important notes during planning:

As smaller hand samples or test surfaces are not always suitable for conveying an overall visual impression of a technique on larger surfaces, the contractor is required to create a project-related, meaningful test surface.

The test surface shall be accepted by the site management/building owner on completion and kept as a reference surface for the commissioned service.

If scaffolding is used during application, this should be taken into account when creating the sample and removed before assessing the test surface.

Divide larger facade sections into separate sections in accordance with the personnel resources available.

Plan the coating process in detail and prepare the material taking the weather conditions into account.

Obstacles too close to the facade or wall lead to spurious markings on the finished wall surface area.

Application

Application temperature

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

Material preparation

Covering coat with roll or brush:

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Intermediate coating undiluted or diluted with a max. of 15% water.
Top coat undiluted or diluted with a max. of 15% water.

Glazing decorative coating diluted with 30 - 100% water.

To achieve optimum pigment distribution, and hence the metallic effect, stir thoroughly before and during application.

Consumption	Type of application	Approx. consumption	
	per coat, covering	0.15 - 0.20	l/m ²
as a decorative glaze	0.10 - 0.15	l/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

Covering application:

The substrate must be matched to the colour shade of StoColor Metallic. In case of colour shade differences, coat the substrate with StoColor Jumbosil (exterior) or StoColor Opticryl (interior) in the matching covering colour shade.

Intermediate coat:
StoColor Metallic

Finishing coat:
StoColor Metallic

Glazing application:

Intermediate coat:
StoColor Metallic in glaze patch technique

Finishing coat:
StoColor Metallic in glaze patch technique

Application

by paint brush, rolls, float-finishing, texture with texturing roller

Application 1: covering, double on float-finished, free-style textured render substrates.

Intermediate coating: apply the material evenly, diluted with a max. of 15% water, wet in wet (seamless) with the Sto-Paint Roller Fil Short-Pile.

Top coat: apply the material evenly, diluted with a max. of 15% water, with a Sto-Paint Roller Fil Short-Pile and texture the metallic surface evenly in a criss-cross pattern while still wet using a Sto-Decorating Roller with Leather Pieces.

Application 2: covering, twice on stippled render texture substrates grain 1.5 to grain 3.0, and also on StoTap Infinity, StoTex Classic Mesh.

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Intermediate coating: apply the material evenly, diluted with a max. of 15% water, wet in wet (seamless) with the Sto-Paint Roller Fil Short-Pile.

Top coat: apply the material evenly, diluted with a max. of 15% water, with a Sto-Paint Roller Fil Short-Pile and texture the metallic surface evenly in a criss-cross pattern while still wet using a Sto-Loop Pile Roller.

Application 3: covering, double on StoTap Pro Fleece.

Intermediate coating: apply the material evenly, diluted with a max. of 5% water, using a Sto-Paint Roller Fil Short-Pile and level out with a Sto-Sponge Float (orange).

Top coat: apply the undiluted material evenly using a Sto-Paint Roller Fil Short-Pile and level out with a Sto-Sponge Float (orange) in a round figure of eight movement.

Application 4: glazing on float-finished or levelled fine textured substrates, for example, Stolit Milano, StoDecolit MP etc.

Glaze patch technique, first application cycle: apply the material in even patches with a paint roller and level out glazing immediately using the Sto-Sponge Float (orange).

Apply the "patches" offset at an irregular spacing of approx. 50 cm. Particularly where there are any possible scaffolding platforms, ensure that the material is applied offset and not in straight lines.

Glaze patch technique, second application cycle: coat the remaining open spaces from the first application cycle in the same manner as described for the first application cycle.

For larger surfaces and several sponge float applicators, further application cycles should be accordingly selected with larger patch distances to enable a uniform, irregular, glaze appearance.

Drying, curing, ready for next coat

High humidity and low temperatures prolong drying.

During unfavourable weather conditions it is imperative that suitable protective measures (e.g. protection against rain) be applied to the work in progress and freshly completed facades.

Successive coats may be applied after 8 hours when the air and foundation/base temperature is of about +20°C and the humidity level is of 65%.

Cleaning the tools

Clean tools with water immediately after use.

Delivery

Colour shade

tintable in accordance with the StoColor Metallic Collection, StoColor Metallic Colour Fan

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Colour fastness:

The effects of the weather, humidity, UV irradiation and deposits can lead to changes in the coating surface over time. This can result in colour changes. This is a dynamic process, which varies according to climate conditions and the degree of exposure. National regulations, data sheets etc. apply.

Filler break:

When coated surfaces are exposed to mechanical stress it is possible that, due to the natural calibration grains used for darker, more intense colour shades, the areas of impact change to a lighter colour. This does not affect the quality and functionality of the product.

Colour accuracy:

It is not possible to give any warranty for uniform colour accuracy and freedom from stains due to chemical and/or physical curing processes and fluctuations in the weather and different substrate conditions, especially in the case of:

- a) uneven absorption behaviour of the substrate
- b) different substrate moisture levels over the entire the surface
- c) partially very different alkalinity/substances from the substrate
- d) direct solar radiation with sharply delineated shadowing on the freshly applied coating.

Emulsifier washouts:

In case drying is delayed and the coating layers have not fully dried through, surface effects (streaking) caused by dew, mist, water spray or rain can occur during initial stages of weathering because of water-soluble additives in the coatings. Depending on the intensity of the colour shade, this effect can occur to varying degrees. This does not constitute an impairment of product quality. These effects usually disappear with the following rainfall.

Tintable	Can be tinted by the user with max. 1 % StoTint Aqua. The metallic effect is impaired.
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Special options possible	There are no special settings for this product.
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Packaging	bucket
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Storage

Storage conditions	Store tightly sealed in frost-free conditions. Protect against heat and direct solar radiation.
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Storage life	The highest 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
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Certificates/approvals

P-BWU03-I-16.5.153	StoTex Avantgarde, Signet, Classic / StoTap Pro and StoTap Infinity with paint coats - building material class B1 General building inspection test certificate
The Blue Angel for external wall insulation systems - RAL Certificate No. 24769	StoTherm Mineral L Environmentally compatible thermal protection
The Blue Angel for external wall insulation systems - RAL Certificate No. 24770	StoTherm Mineral Environmentally compatible thermal protection

Identification

Product group Effect coating

Composition in accordance with VdL (German Paint and Printing Ink Association) guideline: Construction coating materials for buildings, polymer dispersion, metallic effect pigments, water, glycol ether, glycols, aliphatics, alcohols, additives, preservatives

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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