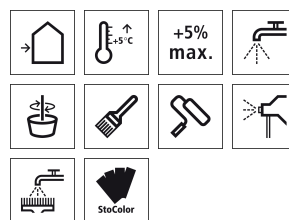


Technical Data Sheet

StoColor X-black

Facade paint with X-black Technology, for reducing solar heating in case of dark colour shades



Characteristics

- Area of application**
- exterior
 - for heat-reflective paints on mineral and organic, non-elastic substrates
 - for paint coats with an intense colour shade
 - not suitable for horizontal or sloping surfaces subject to weathering, with the exception of StoDeco architectural elements

Properties

- reflects near-infrared components of sunlight
- reduces solar heating of facade surfaces
- increases protection against crack formation in the substrate
- texture-retaining
- highly water-repellent
- water vapour permeable
- pure acrylate binding agent
- alkali-resistant
- very good adhesion
- additional film protection possible
- very good hiding power
- particularly for intense colour shades

Appearance

- matt

Information/notes

- with encapsulated film protection

Technical data

Criterion	Standard / test specification	Value/ Unit	Notes
Density	EN ISO 2811	1.4 - 1.5 g/cm ³	
Diffusion-equivalent air layer thickness	EN ISO 7783-2	1.2 m	V2 medium
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 7783-2	6,700	Average value

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Gloss	EN 1062-1	Matt	G3
Dry layer thickness	EN 1062-1	180 µm	E3 > 100; ≤ 200
Grain size	EN 1062-1	< 100 µm	S1 fine

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 following layers, such as bubble formation or cracks.

Preparations Check existing coatings for their load-bearing capacity. Remove any non load-bearing or structurally weak coatings.

Application

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

Material preparation Intermediate coat diluted with max. 5 % water.
Finish diluted with max. 5 % water.
Do not mix with other products.

Use as little water as possible to achieve application consistency. Stir well before application. For machine application, the amount of water to add depends on the requirement of the respective machine/pump. As a rule, strong colour shades need less added water to achieve the optimum application consistency. Diluting the material too much will make application more difficult and will result in poorer characteristics (e.g. hiding power, colour shade).

Consumption	Type of application	Approx. consumption	
	per paint coat	0.15 - 0.18	l/m ²
for 2 application cycles	0.30 - 0.36	l/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 Substrate coating:
Depends on the type and condition of the substrate.

Intermediate coat:
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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 paint brush, by roller, by airless spray-gun

Sprayable without producing major mist:
Nozzle: 4/17 - 4/25
pressure: 80 - 100 bar

Use a nozzle extension and a flexible whip hose to achieve optimum results.

Drying, curing, ready for next coat

High humidity and/or low temperatures prolong drying.

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

At +20 °C temperature (air and substrate) and 65 % relative air humidity: over-coatable after approx. 8 hours.

Cleaning the tools

Clean tools with water immediately after use.

Delivery

Colour shade

tintable in accordance with the StoColor System

The special formulation with NIR technology can lead to slight differences in colour tone compared to standard tinting. Material from one batch number should generally be used for connecting or immediately adjacent surfaces.

Colour stability:

The effects of the weather, humidity, UV radiation, 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.

Extender material breakdown:

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

Colour accuracy:

It is not possible to give any warranty for uniform colour accuracy and freedom

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from stains due to chemical and/or physical curing processes and fluctuations in the weather and different substrate conditions, especially in the case of:

- uneven absorption behaviour of the substrate
- different substrate moisture levels over the entire surface
- partially very different alkalinity/substances from the substrate
- direct sunlight 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 processing aids 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	May not be tinted by the applicator.
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Possible special options	The product is equipped at the factory with encapsulated film preservative, it is possible to add agents. However, it is not possible to guarantee that there will be no algae and/or fungal attack in the long term.
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Packaging	Pail
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Storage

Storage conditions	Store tightly sealed in frost-free conditions. Protect from heat and direct sunlight.
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Storage life	The quality of the product in its original container is guaranteed until the maximum storage life has expired. The storage life date can be deduced from the batch number of the container. Batch number explanation: Number 1 = the last number of year, numbers 2 + 3 = a calendar week i.e.: 8450013223 – storage life until week 45 of the year 2018
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Certificates/approvals

ETA-03/0037	StoTherm Vario 5 (EPS and StoLevell Beta) European Technical Approval
ETA-09/0288	StoTherm Classic® 5 MW/MW-L (StoArmat Classic plus) European Technical Approval
ETA-09/0267	StoTherm Resol European Technical Approval

Identification

Product group	Facade paint
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Composition	In accordance with the VdL directive (German Paint and Printing Ink Association) on coating materials for buildings, polymer dispersion, titanium dioxide, calcium
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carbonate, silicate extenders, talcum, water, glycol ether, additives, preservatives

Safety

This product is a hazardous material.
Observe the 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 the Internet.

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