

Technical Data Sheet

StoPox BB OS

Epoxy self-levelling floor coating, industrial



Characteristics

Area of application	<ul style="list-style-type: none"> Interior On floor areas Coloured standard coating for industrial flooring, e.g. warehouses, offices
Properties	<ul style="list-style-type: none"> Medium resistance to chemical and mechanical stress Excellent flow and de-airing properties Free from additives which damage the lacquer
Appearance	<ul style="list-style-type: none"> Gloss
Information/notes	<ul style="list-style-type: none"> Product is in accordance with EN 1504-2 Product is in accordance with EN 13813

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Criteria	Standard / test specification	Value / Unit	Notes
Density	EN ISO 2811	1.41 – 1.49 g/cm ³	
Compressive strength	ASTM C579	> 90 N/mm ²	
Tensile strength	ASTM C307	> 15 N/mm ²	
Flexural strength	ASTM C580	> 24 N/mm ²	
Adhesion strength	ASTM D7234	> 1.5 N/mm ²	
Shore D hardness	ASTM D2240	78 – 83	
Viscosity	EN ISO 3219	1,200 – 1,900 mPa.s	
Water penetration	DIN 1048	0 mm	
Water absorption	ASTM C413	0 %	
Abrasion resistance according to Taber device	ASTM D4060	72 mg	CS 10 / 1000 cycle /1000g

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	<p>The substrate must be sound, dry, load bearing and free from native and foreign substances that have a separating effect. Remove less strong layers and laitance.</p> <p>The maximum moisture content of the substrate should not exceed 4% by weight measured with the CM device.</p> <p>Substrate temperature greater than +8°C and 3 K above dew point.</p> <p>Average adhesion strength >1.5 N/mm². Adhesion strength of the single smallest value 1.0 N/mm²</p>
Preparations	<p>Prepare the substrate using a suitable mechanical process such as shot-blasting, milling and then shot-blasting, or abrasive blasting.</p>

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Application

Application temperature Lowest application temperature: +8°C
 Maximum approved relative humidity 75%
 Highest application temperature: +30°C
 Maximum approved relative humidity 85%

Time for application At +10°C : approx. 50 minutes
 At +20°C : approx. 30 minutes
 At +30°C : approx. 15 minutes

Mixing ratio Component A : Component B = 100.0 : 25.0 parts by weight

Material preparation Component A and Component B are supplied in the correct mixing ratio and should be mixed in accordance with the following instructions.
 Stir Component A, then add all of Component B.
 Mix thoroughly with a slow-running paddle mixer (max. 300 rpm) until a homogeneous, streak-free compound develops.
 It is also vital to stir thoroughly at the sides and the bottom in order to evenly distribute the hardener. Mixing time at least 3 minutes.
 Do not apply from the delivery container!
 After mixing, transfer the material into a clean container and stir it thoroughly once again.
 The temperature of the individual components must be min. +15°C when mixing.

Consumption

Type of application	Approx. consumption
Per mm layer thickness, for a coating up to 1 mm	1.0 – 1.5 kg/m ²
Per mm layer thickness, for a coating up to 1 - 3 mm	1.1 kg/m ²
As a sealing coat, depending on the scatter grain	0.6 – 0.8 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

Industrial floor coating, smooth

- 1) Substrate preparation
- 2) Prime coating of StoPox GH 205
- 3) Scratch coat (optional, e.g. roughness > 0.5 mm)
- 4) Coating of StoPox BB OS (unfilled/filled depending on the layer thickness)
- 5) Matting sealing coat of StoPox WL 150 transparent (optional)
- 6) Care treatment using StoDivers P 105 / StoDivers P 120 (optional)

Industrial floor coating, slip-resistant

- 1) Substrate preparation
- 2) Prime coating of StoPox GH 205
- 3) Scratch coat (optional, e.g. roughness > 0.5 mm)
- 4) Coating of StoPox BB OS (unfilled/filled depending on the layer thickness)
- 5) Scattering in excess of Sto Filler 30/60 or Sto Filler 16/30
- 6) Sealing coat of StoPox BB OS or StoPox DV 100

Application

Industrial floor coating, smooth

- 1) Substrate preparation
- 2) Prime coating of StoPox GH 205
 Apply in flood coat using a rubber squeegee and distributed evenly by rolling down to ensure complete sealing of all substrate pores. Avoid puddle formation.

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Consumption: approx. 0.20 – 0.30 kg/m², depending on substrate and application conditions

If the coating is not to be overcoated within 48 hours, the fresh primer should be scattered off with Sto Filler 60/100 or Sto Filler 30/60 (not to excess, but grain to grain).

Consumption: approx. 0.5 – 1.0 kg/m².

- 3) Scratch coat (optional, for roughness depths > 0.5 mm)
For very rough substrate fill StoPox GH 205 1 : 1 by weight with Sto Filler 60/100 and Sto Filler SM 100 (50 : 50 pbw)
Consumption of StoPox GH 205 approx. 0.3 – 0.4 kg/m²
Consumption of Sto Filler : approx. 0.3 – 0.4 kg/m²
Consumption of ready filled mixture: approx. 0.6 – 0.8 kg/m²
- 4) Coating of StoPox BB OS
Apply the mixed material with a squeegee (48 or 95 notching) and evenly spread it. De-air by using a spiked roller in a criss-cross pattern. For thickness < 0.8mm use a loop roller instead.
The minimum consumption depends on the substrate and the desired appearance/hiding power.
On smooth substrates, layer thicknesses < 0.5 mm normally leads to surface defects.
Coating up to 1 mm:
Consumption of StoPox BB OS: at least 1.0 - 1.5 kg/m²
Coating of 1 to 2 mm:
Consumption of StoPox BB OS: approx. 1.1 kg/m²/mm layer thickness
Consumption of Sto Filler 30/60: approx. 0.5 kg/m²/mm layer thickness
Consumption of total mixture: approx. 1.6 kg/m²/mm layer thickness
Coating of 2 to 3 mm:
Consumption of StoPox BB OS: approx. 1.1 kg/m²/mm layer thickness
Consumption of Sto Filler 30/60: approx. 0.7 kg/m²/mm layer thickness
Consumption of total mixture approx. 1.8 kg/m²/mm layer thickness
- 5) Matting sealing coat of StoPox WL 150 transparent (optional)
Dilute the mixed material with approx. 15% water and mix again.
Apply using a nylon roller (pile length 13 - 14 mm) in a criss-cross pattern. 1 to 2 application cycles may be required.
Consumption: approx. 0.13 - 0.15 kg/m² per application cycle
We recommend applying StoPox WL 150 transparent with a 25 cm roller and then rolling it in a criss-cross pattern using a 50 cm wide roller.
- 6) Care treatment using StoDivers P 105 / StoDivers P 120 (optional)
When the industrial flooring is clean and has cured, evenly apply a thin layer of care treatment.
Apply the material using a pre-dampened, lint-free mop.
Leave the floor to dry sufficiently, approx. 20 - 30 min.
Carry out the second application cycle at right angles (perpendicular) to the previous application. It is very important to observe the specified drying times between application cycles.
Depending on the expected stress, several application cycles may be necessary.
Consumption: approx. 0.02 – 0.05 lit/m² per application cycle

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Industrial floor coating, slip-resistant

- 1) Substrate preparation
- 2) Prime coating of StoPox GH 205

Apply in flood coat using a rubber squeegee and distributed evenly by rolling down to ensure complete sealing of all substrate pores. Avoid puddle formation.

Consumption: approx. 0.20 – 0.30 kg/m², depending on substrate and application conditions.

If the coating is not to be overcoated within 48 hours, the fresh primer should be scattered off with Sto Filler 60/100 or Sto Filler 30/60 (not to excess, but grain to grain).

Consumption: approx. 0.5 – 1.0 kg/m².
- 3) Scratch coat (optional, for roughness depths > 0.5 mm)

For very rough substrate fill StoPox GH 205 1 : 1 by weight with Sto Filler 60/100 and Sto Filler SM 100 (50 : 50 pbw)

Consumption of StoPox GH 205 approx. 0.3 – 0.4 kg/m²
 Consumption of Sto Filler : approx. 0.3 – 0.4 kg/m²
 Consumption of ready filled mixture: approx. 0.6 – 0.8 kg/m²
- 4) Coating of StoPox BB OS

Apply the mixed material with a squeegee (48 or 95 notching) and evenly spread it. De-air by using a spiked roller in a criss-cross pattern.

The minimum consumption depends on the substrate and the desired appearance/hiding power. On smooth substrates, layer thicknesses < 0.5 mm normally leads to surface defects.

Coating up to 1 mm:
 Consumption of StoPox BB OS: at least 1.0 - 1.5 kg/m²

Coating of 1 to 2 mm:
 Consumption of StoPox BB OS: approx. 1.1 kg/m²/mm layer thickness
 Consumption of Sto Filler 30/60: approx. 0.5 kg/m²/mm layer thickness
 Consumption of total mixture: approx. 1.6 kg/m²/mm layer thickness

Coating of 2 to 3 mm:
 Consumption of StoPox BB OS: approx. 1.1 kg/m²/mm layer thickness
 Consumption of Sto Filler 30/60: approx. 0.7 kg/m²/mm layer thickness
 Consumption of total mixture approx. 1.8 kg/m²/mm layer thickness

Scatter in excess of Sto Filler 30/60 or Sto Filler 16/30 over the fresh self-levelling coating.

Consumption of Sto Filler 30/60 or Sto Filler 16/30: approx. 3.0 - 6.0 kg/m² depending on the layer thickness.

The quartz sand scattering increases the total layer thickness by at least 50%. After curing, sweep or suction off any surplus, loose quartz sand using an industrial vacuum cleaner.
- 5) Sealing coat of StoPox BB OS / StoPox DV 100

Using StoPox BB OS as a sealant on scatter coatings is only possible in the following colour shades due to its limited hiding power: RAL 7001, 7023, 7030, 7032 7036, 7037, 7040, 7045, and 7046. Use StoPox DV 100 for other colour shades.

Use a rubber squeegee to apply and evenly spread the mixed material, and then roll it using a short-pile roller in a criss-cross pattern.

Consumption of StoPox BB OS: 0.6 - 0.8 kg/m² depending on the scatter grain
 Consumption of StoPox DV 100: 0.6 - 1.0 kg/m² depending on the scatter grain

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Note:

The reduced hiding power of light colour shades (e.g. RAL 7035) or brilliant colour shades (e.g. RAL 6018) can lead to a poor appearance. For light and special colour shades, we recommend consulting our Technical Information Centre to check whether there is an option to switch to a different product in our Sto offering.

Exposure to direct sunlight, high temperatures, and draughts should be avoided during application.

Depending on chemical load, optical discolouration may appear. These do not however impair the technical function of the coating.

At low material and substrate temperatures, material consumption per m² increases due to the rise in viscosity.

Any yellowing which occurs under UV stress does not impair the technical properties

Drying, curing, ready for next coat	Reworking time : At 10°C : approx. 24 hours At 23°C : approx. 14 hours At 30°C : approx. 10 hours
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Cleaning the tools	Tools must be cleaned immediately after use with cleaning solvent.
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Notes, recommendations, special information, miscellaneous	Please consult the local sales office for further information and any site assistance required.
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Delivery

Colour	Basic range (PG 11) Special range (PG 12)
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Packaging	Name	Packing
	StoPox BB OS	15 kg set
StoPox BB OS	30 kg set	

Storage

Storage conditions	Store in cool dry conditions; avoid direct sunlight.
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Storage life	This product has a shelf life of 12 months from the manufacturing date.
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Identification

Product group	Self-levelling
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Safety	Please refer to Safety Data Sheet.
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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.

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