

Technical Data Sheet

StoPox WL 110

Water-based, epoxy conductive intermediate coating



Characteristics

- Area of application**
- For Interior and exterior application on floor surfaces
 - For cementitious substrates such as concrete or screed surfaces
 - As a conductive intermediate layer underneath electrically conductive finishing coats

- Properties**
- Very good adhesion to the substrate
 - Very good bond with subsequent intermediate coats and finishes
 - Rapid curing at ambient room temperature
 - Excellent horizontal conductivity
 - Low VOC emissions

- Appearance**
- Blackish

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Criteria	Standard / test specification	Value/ Unit	Notes
Density	EN ISO 2811	1.20 - 1.40 g/cm ³	Mixture undiluted
Adhesion strength	ASTM D7234	> 1.5 N/mm ²	

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 sound, dry, load bearing and free from native and foreign substances that have a separating effect. Remove less strong layers and laitance. The maximum moisture content of the substrate should not exceed 4% by weight measured with the CM device.
- Substrate temperature greater than +8°C and 3 K above dew point.
- Average adhesion strength >1.5 N/mm². Adhesion strength of the single smallest value 1.0 N/mm².

- Preparations**
- Prepare the substrate using a suitable mechanical process such as shot-blasting, milling and then shot-blasting, or abrasive blasting.

Application

- Application temperature**
- Lowest application temperature: +10°C
 Highest application temperature: +30°C
 Maximum approved relative humidity 75%

- Time for application**
- At +10°C : approx. 120 minutes
 At +20°C : approx. 60 minutes
 At +30°C : approx. 45 minutes

- Mixing ratio**
- Component A : Component B = 100.0 : 20.0 parts by weight

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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 and agitate settlements with a trowel in 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
As a conductive intermediate coat	0.15 – 0.20 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

Conductive intermediate coat underneath electrically conductive, water-based StoCretec coatings, water vapour permeable.

- 1) Substrate preparation
- 2) Prime coating of StoPox WG 100
- 3) Scratch coat of StoPox WG 100 (optional, e.g roughness > 0.5 mm)
- 4) Installation of StoDivers LS
- 5) Conductive layer of StoPox WL 110
- 6) Finishing coat

Conductive intermediate coat underneath electrically conductive, solvent-free StoCretec coatings

- 1) Substrate preparation
- 2) Prime coating of StoPox GH 205
- 3) Scratch coat of StoPox GH 205 (optional, e.g roughness > 0.5 mm)
- 4) Installation of StoDivers LS
- 5) Conductive layer of StoPox WL 110
- 6) Finishing coat

Application

Conductive intermediate coat underneath electrically conductive, water-based StoCretec coatings, water vapour permeable.

- 1) Substrate preparation
- 2) Prime coating
Priming coat with StoPox WG 100 diluted approx. 10% with water depending on substrate and application conditions.
Apply with a rubber spreader and distribute evenly by rolling / brushing down.
Consumption: approx. 0.15 – 0.25 kg/m², depending on substrate roughness.
- 3) Scratch coat (optional, for roughness depths > 0.5 mm)
For very rough substrate, StoPox WG 100 undiluted filled with 1: 0.5 to 1: 0.8 parts by weight with Sto Filler 60/100 spread with a smoothing trowel and sharply screeded with a steel trowel.
Over-coating when used as scratch coat: after approx. 6 - 8 hrs at 30°C
Consumption of ready filled mixture: approx. 1.5 kg/m²/mm coating thickness.
Consumption StoPox WG 100 : approx. 0.8 - 1.0 kg/m²/mm coating thickness

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- 4) Installation of conductive set StoDivers LS
Install and connect to ground using the StoDivers LS (conducting set). A connection to ground is required for every 100 m² of surface. No surface point should be more than 10 m away from a connection point. The connection points should be distributed as evenly as possible. If needed, bridge with conductive ribbon StoDivers LB 100.
Only an electrician is permitted to ground the conducting set.
- 5) Conductive layer of StoPox WL 110
Dilute StoPox WL 110 with approx. 10% water and apply it using a rubber squeegee or roller.
Consumption: approx. 0.15 - 0.2 kg/m²
Check the functionality of the applied conductive layer by measuring the resistance to ground before applying the subsequent top coat. The resistance value must not exceed 5 x 10⁴ Ohms.
- 6) Finishing coat
Coat with StoCretec electrically conductive, water-based products (e.g StoPox WL 113 / StoPox WB 110) in accordance with the Technical Data Sheet.

Conductive intermediate coat underneath electrically conductive, solvent-free StoCretec coatings

- 1) Substrate preparation
- 2) Prime coating
Apply StoPox GH 205 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
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) Installation of conductive set StoDivers LS
Install and connect to ground using the StoDivers LS (conducting set). A connection to ground is required for every 100 m² of surface. No surface point should be more than 10 m away from a connection point. The connection points should be distributed as evenly as possible. If needed, bridge with conductive ribbon StoDivers LB 100.
Only an electrician is permitted to ground the conducting set.
- 5) Conductive layer
Dilute StoPox WL 110 with approx. 10% water and apply it using a rubber squeegee or roller.
Consumption: approx. 0.15 - 0.2 kg/m²
Check the functionality of the applied conductive layer by measuring the resistance to ground before applying the subsequent top coat. The resistance value must not exceed 5 x 10⁴ Ohms.

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- 6) Finishing coat
 Coat with StoCretec electrically conductive products (e.g StoPox KU 611 /613 / 615, StoPur IB 510) in accordance with the Technical Data Sheet.

Notes:

Ensure the conductive layer is not soiled before overcoating it.
 Ensure sufficient ventilation when applying water-based coating systems.
 However, avoid draughts.
 Different layer thicknesses, too high humidity, and low temperatures can lead to visual and functional defects.

Drying, curing, ready for next coat	Reworking time: At 10°C : approx. 24 hours At 20°C : approx. 12 hours At 30°C : approx. 8 hours
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Cleaning the tools	Tools must be cleaned immediately after use with clean water.
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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

Packaging	Name	Packing
	StoPox WL 110	12 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	Electro-Static Discharge (ESD)
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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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*Product images may differ from the actual product.