

Technical Data Sheet

StoPox WL 110

EP conductive layer, water-based, low-emission



Characteristics

Area of application

- interior
- exposed to the weather
- on dry, cementitious substrates, e.g. concrete, screed
- on magnesite screeds, calcium sulphate screeds
- as a conductive intermediate layer underneath electrically conductive finishing coats

Properties

- very good adhesion to the substrate
- very good bond for the subsequent intermediate coats and finishing coats
- water-dilutable
- cures quickly at ambient room temperature
- very good horizontal electrical conductivity
- low VOC content

Technical data

Criterion	Standard / test specification	Value/ Unit	Notes
Bond strength	EN 1542	> 2,0 MPa	
Density (mixture 23 °C)	EN ISO 2811	1,20 - 1,40 g/cm ³	

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

General:

- Dry, load-bearing
- Free from separating, native, or foreign substances
- Remove weak layers.
- Remove any accumulation of fine concrete particles on the surface.

Dry substrate:

- Depends on the compressive strength class
- Dry in accordance with the definition in EN 1504-10

Substrate temperature: at least +8 °C, 3 K above the dew point

Technical Data Sheet

StoPox WL 110

Bond strength, average: 1.5 N/mm²
Bond strength, lowest single value: 1.0 N/mm²

Screed:

- The condition of magnesite screeds and calcium sulphate screeds should be evaluated by qualified personnel.

Preparations

1) Prepare all the above-mentioned substrates using a mechanical method, see "Substrate, requirements".

Example:

- Shot-blasting
- Milling followed by shot-blasting
- Abrasive blasting -

Application

Application temperature

Application temperature:
minimum temperature: +10 °C
Maximum temperature: +30 °C

Relative humidity:
maximum: 75 %

Time for application

At +12 °C: approx. 120 minutes
At +20 °C: approx. 60 minutes
At +30 °C: approx. 45 minutes

Mixing ratio

component A : component B
A : B
100.0 : 20.0 parts by weight

Material preparation

Notes:

- Component A and component B are supplied in the correct mixing ratio and should be mixed in accordance with the following instructions.
- Observe the order of the "Preparing material" steps.
- The material temperature is between +15 °C and +25 °C.
- The temperature of all components is between +15 °C and +25 °C.

Mixing time:

- The length of the mixing time depends on the temperature of the material and the ambient temperature.
- Mix each container for the same length of time.

Possible consequences if mixing times are too long or too short:

- Mixing the product too long will shorten the time for application.

Preparing the material:

Technical Data Sheet

StoPox WL 110

- 1) Stir component A.
- 2) Add all of component B.
- 3) Mix the components until the hardener is well distributed, the mixture is homogeneous, and a streak-free mass is produced.
Paddle mixer: slow running mixer, max. 300 rpm
Mixing time: at least 3 minutes
- 4) Ensure that the mixing equipment covers the bottom and the rim areas of the mixing container. The hardener must be evenly distributed.
- 5) Transfer the mixture to a clean container. Mix the components again.

Consumption	Type of application	Approx. consumption
	as a conductive intermediate coat	0,12 - 0,15 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	A: Conductive intermediate coat underneath electrically conductive, water-based StoCretec coatings, water vapour permeable. 1) Prepare the substrate. 2) Priming: StoPox WG 100 3) Apply a levelling filler: StoPox WG 100 4) Self-adhesive conductive strip: StoDivers LB 100 5) Apply a conductive layer: StoPox WL 110 6) Apply a finishing coat: StoPox WB 110 7) Optionally, seal: StoPox WL 113, StoPox WL 213 B: Conductive intermediate coat underneath electrically conductive, solvent-free StoCretec coatings 1) Prepare the substrate. 2) Priming: StoPox GH 205 3) Apply a levelling filler: StoPox GH 205 4) Self-adhesive conductive strip: StoDivers LB 100 5) Apply a conductive layer: StoPox WL 110 6) Apply a finishing coat: StoPox KU 611, StoPox KU 614, StoPur IB 510 7) Optionally, seal: StoPur WV 210, StoPox WL 113, StoPox WL 213
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Application	A: Conductive intermediate coat underneath electrically conductive, water-based StoCretec coatings, water vapour permeable. 1) Prepare the substrate. 2) Priming: - StoPox WG 100 - Dilute with approx. 10 % water.
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Technical Data Sheet

StoPox WL 110

- Apply the product. Tools: rubber squeegee
- Rework the product with a roller and spread evenly. Tools: short-pile roller sleeve
- Consumption: approx. 0.3–0.5 kg/m², depending on the roughness of the substrate

3) Optionally, apply a levelling filler:

- StoPox WG 100
- filling the product: 1:0.5 to 1:0.8 parts by weight, StoPox WG 100 : StoQuarz 0.1-0.5 mm

Apply the product. Tools: rubber squeegee, 5 mm notching

- Trowel off the material leaving a thin layer. Tools: smoothing trowel
- Consumption of StoPox WG 100 per mm layer thickness: approx. 0.8–1.0 kg/m²
- Consumption of the mixed material per mm layer thickness: approx. 1.5 kg/m²
- Note: Do not dilute the product.
- Apply a levelling coat for roughness depths > 0.5 mm.

4) Self-adhesive conductive strip:

- StoDivers LB 100
- Affix the product to the prepared substrate.
- Pull the free ends vertically up the wall surface and connect to ground.
- Overlap the joints of the conductive strip by 5 cm.
- Optional: Connection to ground is also possible using the conducting set.

product: StoDivers LS

Note:

- A connection to ground is required for every 100 m² of surface.
- The number and location of the groundable points must be determined by an electrician.
- Only an electrician is permitted to ground connections of the conductive strips or conducting set.

5) Apply a conductive layer:

- StoPox WL 110
- Dilute with approx. 10 % water.
- Apply the product evenly. Tools: short-pile roller sleeve
- consumption: approx. 0.12-0.15 kg/m²

Note:

- Check the resistance to ground before applying the top coat. This ensures the functionality of the conductive layer.
- Resistance to ground: StoPox WL 110 maximum 50 kiloohm

6) Apply a finishing coat:

- StoPox WB 110
- The application information is described in the Technical Data Sheet of the coating used.

7) Optionally, seal:

- StoPox WL 113, StoPox WL 213

B: Conductive intermediate coat underneath electrically conductive, solvent-free

Technical Data Sheet

StoPox WL 110

StoCretec coatings

1) Prepare the substrate.

2) Priming:

- StoPox GH 205
- Flood apply the product without pores. Tools: rubber squeegee
- Rework the product with a roller and spread evenly. Tools: short-pile roller sleeve
- Consumption: approx. 0.3–0.5 kg/m², depending on the roughness of the substrate
- Note: Avoid the formation of puddles.

3) Optionally, apply a levelling filler:

- StoPox GH 205
- filling the product: 1:1 to 1:3 parts by weight, StoPox GH 205: Sto-Aggregate KS, or StoQuarz 0.1-0.5 mm, StoQuarz 0.01 mm
- consumption StoPox GH 205 per mm layer thickness: approx. 0.4-0.5 kg/m²
- consumption of Sto-Aggregate KS, StoQuarz per mm of layer thickness: approx. 0.4-1.5 kg/m²
- consumption: approx. 1.8 kg/m² per mm layer thickness (filled)
- Note: Apply a levelling coat for roughness depths > 0.5 mm.

4) Self-adhesive conductive strip:

- StoDivers LB 100
- Affix the product to the prepared substrate.
- Pull the free ends vertically up the wall surface and connect to ground.
- Overlap the joints of the conductive strip by 5 cm.
- Optional: Connection to ground is also possible using the conducting set. product: StoDivers LS

Note:

- A connection to ground is required for every 100 m² of surface.
- The number and location of the groundable points must be determined by an electrician.
- Only an electrician is permitted to ground connections of the conductive strips or conducting set.

5) Apply a conductive layer:

- StoPox WL 110
- Dilute with approx. 10 % water.
- Apply the product evenly. Tools: short-pile roller sleeve
- consumption: approx. 0.12-0.15 kg/m²

Note:

- Check the resistance to ground before applying the top coat. This ensures the functionality of the conductive layer.
- Resistance to ground: StoPox WL 110 maximum 50 kiloohm

6) Apply a finishing coat:

- StoPox KU 611, StoPox KU 614, StoPur IB 510

Technical Data Sheet

StoPox WL 110

- The application information is described in the Technical Data Sheet of the coating used.

- Note: Ensure the conductive layer is not soiled before overcoating it.

7) Optionally, seal:

- StoPur WV 210, StoPox WL 113, StoPox WL 213

Note:

Application of water-based coating systems:

- Ensure sufficient ventilation. Prevent draughts.

- Different material application, too high humidity, and low temperatures can lead to visual defects, e.g. differences in the gloss levels.

Drying, curing, ready for next coat

Reworking time:

at +12 °C: approx. 24 hours

at +20 °C: approx. 18 h

at +30 °C: approx. 14 h

Notes, recommendations, special information, miscellaneous

Observe the general application instructions:

- see www.stocretec.de, Products

- see technical manual, notes

Declaration of performance, CE marking:

- declaration of performance: see www.stocretec.de

Delivery

Colour shade

black

Packaging

pail and tin

Article number

Name

Container

01784/004

StoPox WL 110 Set

12 kg set

Storage

Storage conditions

Store in dry and frost-free conditions. Protect from direct sunlight.

Storage life

The product quality is best guaranteed in its unopened original container until its shelf life has expired. This information is included in the batch number on the container. Explanation of batch nos.:

digit 1 = last digit of the year, digits 2 + 3 = calendar week, example: 2450013223 - storage life ends at week 45 in 2022

See product packaging

Technical Data Sheet

StoPox WL 110

Identification

Product group Water-based coating material

GISCODE RE90

Safety

This product is subject to compulsory labelling in accordance with the current EU regulation.

Observe the Safety Data Sheet!

Please observe the information regarding the handling of the product, its storage, and disposal.

Handling epoxy resins: "Praxisleitfaden für den Umgang mit Epoxidharzen",

(Practical guide for handling epoxy resins) and

test report: "Prüfbericht zur Schutzwirkung von acht

Chemikalienschutzhandschuhen gegenüber EP-Beschichtungen" (Test report on the protective effect of eight chemical protective gloves against EP coatings),

Gloves: "Handschuhe für den Umgang mit lösemittelfreien Epoxidharzen" (Gloves for handling solvent-free epoxy resins), and

Protective gloves: "Die richtige Anwendung von Schutzhandschuhen" (The correct use of protective gloves)

<https://www.bgbau.de/themen/sicherheit-und-gesundheit/gefahrstoffe/umgang-mit-epoxidharzen/>

Published by:

BG BAU - Berufsgenossenschaft der Bauwirtschaft

Hildegardstraße 29/30, 10715 DE-Berlin

Tel. (+49) 30 85781-0, Fax. (+49) 800 6686688-37400, www.bgbau.de

Guidelines for the planning of building site facilities: "Wirtschaftliche and sichere Baustelleneinrichtung"

Published by:

Bundesanstalt für Arbeitsschutz und Arbeitsmedizin (BAuA)

Friedrich-Henkel-Weg 1-25, 44149 DE-Dortmund

Tel. (+49) 231 9071-0, Fax. (+49) 231 9071-2454,

E-mail: poststelle@baua.bund.de, homepage: www.baua.de

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

Technical Data Sheet

StoPox WL 110

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.

StoCretec GmbH
Gutenbergstr. 6
D-65830 Kriftel

Tel.: +49 6192 401-104
stocretec@sto.com
www.stocretec.de