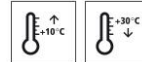


Technical Data Sheet

StoPox WHG Deck 105

EP coating, tested and approved water protection systems



Characteristics

Area of application

- interior and exposed to the weather
- as a coloured coating for industrial flooring (facilities for storing, bottling, and processing substances hazardous to water, as well as areas for the production, treatment, and use of water-polluting substances) exposed to mechanical and chemical stress
- for production areas in the food-processing industry
- as a top coat in the StoCretec WHG System 7 (Z-59.12.408)

Properties

- very high resistance to chemicals
- crack-bridging up to 0.2 mm
- for short-term cleaning +80 °C, if permanently wet max. +40 °C
- sensitive to humidity while curing
- suitable for vehicle traffic

Information/notes

- product is in accordance with EN 13813
- for water protection in accordance with § 62 German Federal Water Act (WHG)
- it is possible that some yellowing might occur in interior or exterior areas exposed to direct sunlight
- various test certificates
- Visual changes cannot be ruled out in case of frequent temperature- and chemicals-related stress.

Technical data

Criterion	Standard / test specification	Value/ Unit	Notes
Bond strength (28 days)	EN 1542	> 2.0 MPa	
Viscosity (at 23 °C)	EN ISO 3219	1,700 - 2,300 mPa.s	mixture
Density (mixture 23 °C)	EN ISO 2811	1.35 - 1.39 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

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Requirements	<p>The substrate must be dry, load-bearing, and free from native and foreign release agents. Remove less strong layers and laitance.</p> <p>Dry in accordance with the definition of the DAfStb (German) Repair Guideline 2001-10, but depending on the compressive strength class. The moisture content may not exceed 4 CM per cent for concrete qualities up to C30/37 and max. 3 CM per cent for C35/45 concrete, measured with a calcium carbide meter.</p> <p>Substrate temperature higher than +8 °C and 3 K above dew point. Average bond strength: 1.5 N/mm² Bond strength, lowest single 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>	
Application		
Application temperature	<p>Lowest application temperature: +10 °C and max. 75 % relative humidity. Highest application temperature: +30°C and max. 80% relative humidity</p>	
Time for application	<p>At +10 °C: approx. 90 minutes at +23 °C: approx. 40 minutes at +30 °C: approx. 20 minutes</p>	
Mixing ratio	<p>component A : component B = 100.0 : 31.0 parts by weight (3.2 : 1)</p>	
Material preparation	<p>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 is at least 3 minutes. After mixing, pour the compound into a clean container and mix again. Do not apply from the delivery container!</p> <p>The temperature of the individual components must be at least +15 °C when mixing.</p>	
Consumption	Type of application	Approx. consumption
	with 0.2 mm crack bridging in each case	1.5 - 2.0 kg/m ²
	<p>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.</p>	

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Coating build-up

- 1) Prime coating of StoPox WHG Grund 105
- 2) Levelling coat of StoPox WHG Grund 105
- 3) Coating of StoPox WHG Deck 105

Application

Application:

- 1) Substrate preparation

- 2) Prime coating

Flood apply StoPox WHG Grund 105 with a foam rubber squeegee until the substrate is totally free of pores, and then evenly spread it by rolling. Avoid the formation of puddles.

consumption: approx. 0.3 - 0.5 kg/m², depending on the roughness of the substrate

Rework in accordance with the time period indicated, without prior scattering. In outdoor areas, sand the prime coating before applying the next coating.

- 3) Levelling coat

Fill StoPox WHG Grund 105 with 1 : 1 parts by weight with a mixture of StoQuarz 0.1 - 0.5 mm and StoQuarz 0.01 mm using a finishing trowel or squeegee with triangular notching, and de-air with a spiked roller. Add StoDivers ST thixotropic additive if required.

consumption: StoPox WHG Grund 105 approx. 0.6 - 0.7 kg/m²/mm layer thickness

Consumption: Sto quartz sand mixture StoQuarz 0.1 - 0.5 mm and StoQuarz 0.01 mm approx. 0.6 - 0.7 kg/m² per mm of layer thickness

Determine the exact amount of thixotropic additive required at the project, depending on the temperature and slope of the surface.

If applying quantities of 2 kg/m² or less, the substrate must be very level.

Avoid consumption amounts under 1.5 kg/m², because lower layer thicknesses can result in flow problems and poor hiding power.

- 4) Coating

Apply the material using a notched trowel or squeegee with triangular notching or a rubber squeegee with coarse notching, and de-air with a spiked roller (notching e.g. 25, Sto Tool Catalogue)

The suitable notching depends on the user and project conditions. Determine it on site and then check the layer thickness.

Consumption: approx. 1.5 - 2.0 kg/m²

Observe the consumption quantities as exactly as possible and check at regular intervals during coating.

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Application on vertical surfaces:

1) Prime coating, adding approx 0.5 % StoDivers ST

2) Filler

StoPox WHG Grund 105, filling degree 1 : 1 parts by weight with StoQuarz (StoQuarz 0.01 mm or StoQuarz 0.1 - 0.5 mm), adding approx. 4 wt% StoDivers ST.

consumption of StoPox WHG Grund 105: approx. 500 g/m²

consumption of StoQuarz 0.01 mm: approx. 250 kg/m²

consumption of StoQuarz 0.1-0.5 mm: approx. 250 kg/m²

3) Coating

For application on vertical surfaces, add StoPox WHG Deck 105 at ambient room temperature up to max. 4 wt% thixotropic additive.

Several application cycles may be necessary to achieve the required consumption rate.

Note:

Full mechanical and chemical loading capacity: after 7 days.

Depending on the exposure to chemicals, discolourations can occur. These do not, however, impair the technical function of the coating.

Slight deviations in the colour shade are possible between different batches. Any yellowing which occurs under UV stress does not have any effect on the technical properties of the coating.

Observe the information on consumption, application, and execution in the national technical approvals!

In order to aid ventilation, immediately smooth the freshly-applied coating resin over the surface with a squeegee in a dragging motion. Next, carefully re-roll the coating with a spiked roller.

Drying, curing, ready for next coat

Reworking time:
At +10°C: approx. 24 h
At +23°C: approx. 18 h
At +30°C: approx. 12 h

Cleaning the tools

StoDivers EV 100, StoCryl VV

Notes, recommendations, special information, miscellaneous

The declaration(s) of performance can be obtained from the StoCretec Technisches InfoCenter
General application instructions are available at www.stocretec.de and in the notes

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of the latest Technical Manual.

The abrasion resistance class specified in the CE marking refers to the smooth, not scattered covering.

Delivery

Colour shade limited colour choice

Article number	Name	Container
08855/002	StoPox WHG Deck 105 Set RAL7032	30 kg set
08855/001	StoPox WHG Deck 105 Set tinted	30 kg set

Storage

Storage conditions Store in dry and frost-free conditions. Avoid direct sunlight.

Storage life In the original container until ... (see packaging).

Certificates/approvals

EPD-DBC-20220178-IBF1	Products based on epoxy resin, group 5 Environmental Product Declaration
Z-59.12-408	StoCretec WHG System 7 National technical approval

Identification

Product group Coating

Safety

This product is subject to compulsory labelling in accordance with the current EU regulation.
You will receive an EU Safety Data Sheet with your first order.
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->

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StoPox WHG Deck 105

mit-epoxidharzen/

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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 the Internet.

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