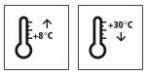
Technical Data Sheet
StoPox IHS PK

EP bonding agent, thixotropic



Characteristics

Area of application

- exterior and interior
- force-transmitting bonding of concrete to concrete and steel to concrete
- bonding agent for fresh concrete on existing concrete
- epoxy resin bonding agent with interlocked hard grains
- embedding of steel anchors

Properties

- pigmented, solvent-free, paste-form, two-component epoxy resin adhesive, pourable
- very good adhesion to the concrete substrate and the subsequent fresh concrete

Technical data

Criterion	Standard / test specification	Value/ Unit	Notes
Compressive strength	EN 12190	120 MPa	
Flexural strength	EN ISO 178	50 MPa	
Static modulus of elasticity	EN 13412	5 GPa	
Viscosity (at 23 °C)	EN ISO 3219	1.160 - 1.740 mPa.s	mixture
Shore hardness type D	DIN 53505-D/EN ISO 868	81 - 87	
Density (mixture 23 °C)	EN ISO 2811	1,66 - 1,76 g/cm³	
Tensile strength	EN 1542	27 N/mm²	

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

Requirements on the substrate:
The concrete substrate must be dry, load-bearing, and free from native and foreign substances that have a separating action. Remove less strong layers and laitance.

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.

	Protect the concrete substrate from rising damp. 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 The steel must correspond to preparation grade SA 2½ after substrate preparation.
Preparations	Substrate preparation: Concrete: The substrate must be prepared by a suitable mechanical process such as shot-blasting, blasting with solid abrasives, or also high-pressure water jets (> 600 bar). Steel: Prepare steel built-in parts by blasting with solid blasting abrasives (SA 2½), Priming coat: see StoPox ZNP technical data sheet
Application	
Application temperature	Lowest application temperature: +8 °C Highest application temperature: +30 °C
Time for application	At +10 °C: approx. 120 minutes at +23 °C: approx. 90 minutes At +30°C: approx. 70 minutes Dust-dry: after: 6 hours over-coatable after: 12 - 24 h walkable after: 12 - 24 h fully cured after: 7 days
Mixing ratio	component A : component B = 6.0 : 1.0 parts by weight
Material preparation	Component A and Component B are supplied in the correct mixing ratio and mixed in accordance with the following instructions. Stir Component A, then add all of Component B. Stir thoroughly with a slow-running mixer (maximum 300 rpm.) until a homogeneous, smooth compound is achieved. It is also vital to stir thoroughly at the sides and the bottom to ensure that the hardener is uniformly spread. Mixing time approx. 5 minutes. Do not apply from the delivery container! Transfer into a clean container after mixing and stir once again. StoPox IHS PK can be filled with approx. 2 weight percent of StoDivers ST for applying to vertical or strongly sloped surfaces. The quantity of the added filling agent depends on the temperature. After adding StoDivers ST, mix again thoroughly and apply immediately.

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The temperature of the individual components must be min. +15 °C when mixing.

Consumption

Type of application	Approx. consumption	
per mm layer thickness	1,7	kg/m²
depending on substrate	0,7 - 1,0	kg/m²

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.

Application

1.1. Steel primer

Prime sand-blasted steel (SA 2.5) with StoPox ZNP in two application cycles and sand the second application cycle with StoQuarz 0.1 - 0.5 mm.
StoPox ZNP: 2 x 0.2 - 0.3 kg/m²
StoQuarz 0.1 - 0.5 mm: approx. 0.2 kg/m²
Remove the quartz sand which has not been integrated the next day. StoPox ZNP is over-coatable with StoPox IHS PK after 3 days (at +23°C).

1.2 Concrete primer:

Healthy concrete can be bonded directly after substrate preparation with StoPox IHS PK.
Pre-prime strongly absorbent, crumbly concrete with StoPox IHS BV:
Spread the mixed StoPox IHS BV abundantly on to the substrate with a rubber squeegee. Leave to react for 5 minutes. Then roll evenly. StoPox IHS BV: 300 - 500 g/m²
Scatter StoQuarz 0.3 - 0.8 mm evenly, grain by grain, over the fresh prime coating.
StoQuarz 0.3 - 0.8 mm: approx. 1 kg/m²
Remove the quartz sand which has not been integrated the next day. StoPox IHS BV is over-coatable with StoPox IHS PK after 1 day (at +23°C).

2.1 Bonding of concrete with concrete or steel with concrete:

Spread the mixed StoPox IHS PK on to the bonding surfaces and ventilate with the spiked roller. Press the building elements together and fix.
StoPox IHS PK: 1.7 kg/m² pro mm layer thickness

2.2 Concreting fresh concrete on to old concrete (epoxy resin bonding bridge):

Spread the mixed StoPox IHS PK on to the prepared old concrete.
StoPox IHS PK: 0.7 - 1 kg/m², depending on the roughness of the substrate.
Install the top concrete layer fresh in fresh at the latest within a max. of 2 hours (+23 °C). W/C value of the concrete top layer < 0.55.

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2.3 Hard grain, toothed, epoxy resin bonding bridge for transferring shearing forces:

Spread the mixed StoPox IHS PK on to the prepared old concrete.
StoPox IHS PK: 2.5 kg/m², depending on the roughness of the substrate
Scatter the fresh coat evenly, grain by grain, with broken hard material, such as Durop 3 - 8 mm.
Durop 3 - 8 mm: approx. 4 kg/m²
Important: Do not scatter excessively, but instead grain by grain.
Remove any scatter grain which has not been integrated the next day.
Reinforcement can be subsequently applied. Wet the substrate before applying the adhesive slurry. Please observe that no shiny water film remains on the surface.
Mix the mineral adhesive slurry StoCrete BE bonding bridge and apply it evenly to the pre-wetted substrate.
StoCrete BE Bonding Bridge: 1.5 kg/m²
Install the top concrete layer fresh in fresh at the latest within a max. of 30 minutes.
W/C value of the concrete top layer < 0.55.

Delivery

Colour shade grey

Article number	Name	Container
04133/002	StoPox IHS PK Set	40 kg set
04133/001	StoPox IHS PK Combi	15 kg combi

Storage

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

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

Identification

Product group Adhesive

GISCODE RE30

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-mit-epoxidharzen/

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

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*This product is a hazardous material.

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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