STEULER | Linings

TI 308K

Technical Information Surface Protection Linings
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KERAPOX EP 210

Scratch and cavity fill- coat for levelling out concrete surface defects

Base

Epoxy resin

Material Group

Primers, Levelling compounds

Description

Trowel applied, solvent-, nonylphenol- and silikone-free synthetic resin coating based on epoxy resin with mineral fillers. If applied flat, the layer thickness is between 1 and 2 mm.

Solvent free according ibh - recommendation.

Application

The system is applied on concrete and screed substrates to fill cavities, holes, gravel pockets and other imperfections and to create a smooth surface free from pores.

Base coating for a multitude of corrosion protection systems.

Properties

- Very good adhesion to concrete
- Layer thickness approx. 1.0 – 2.0 mm
- Temperature resistant up to 80 °C
- Good barrier effect
- curing without shrinkage

Physical Data

Property [unit], Test method	Value
Adhesive strength to concrete / screed [MPa], DIN EN ISO 4624	> Inherent strength of substrate
Density [g/cm³], DIN EN ISO 1183-1, ASTM D 792	1.7
Compressive strength [MPa], DIN EN ISO 604, ASTM C 579	80
Flexural strength [MPa], DIN EN ISO 178, ASTM C 580	35
Modulus of elasticity [MPa], DIN EN ISO 178, ASTM C 580	3500
Tensile strength [MPa], DIN EN ISO 527, ASTM C 307	16
Shore D hardness, DIN 53505, ASTM D 2240	80
The thermal coefficient of linear expansion [1/K], ISO 11359-2, ASTM C 531	70 x 10^{-6}

Data are mean values

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Chemical Resistance

Information of chemical resistance is available on request.

Substrate

Requirements

Application temperature	approx. 10–30 °C
Dew point distance	> 3 K
Dew point distance from 70 % air humidity	> 5 K

Optimal temperature is 20 °C. Higher and lower temperatures influence the pot life and consistency of the mixtures.

Avoid draughts and solar radiation.

Concrete / screed

Refer to DIN EN 14879-1 as well as to STEULER-KCH-Formsheet 010.

To achieve sufficient adhesive tensile strength, the substrate must generally be pre-treated in such a way that it is free of cement slurry, cement skin, loose and friable parts, structural defects and separating substances.
The residual moisture of cementitious substrates must not exceed 4 %.

The condition of the substrate must be documented by STEULER-KCH-Test-Record 006 (concrete) resp. STEULER-KCH-Test-Record 007 (screed).

Moisture

During application, the substrate must be kept dry. No moisture (condensate, mist, etc.) must get onto the material.

Packaging / Shelf life

All components must be stored and transported dry. The minimum shelf life applies to a storage temperature of 20 °C, unless otherwise specified. Higher temperatures reduce, lower temperatures increase the minimum shelf life.

Component	Item number	Package	Content	Shelf life
KCH-EP-Solution 2	5035002001	Hobbock	25 kg	24 Months
KCH-EP-Hardener 6	5035206001	Hobbock	25 kg	24 Months
KCH-Powder 17	5011045002	Bag	20 kg	24 Months
KCH-Cleaner 1	5040016068	Canister	8.5 kg	24 Months

For handling, transport and storage observe the relevant safety data sheets.

Mixing Ratio / Consumption

Kerapox EP 210

Component	kg/m²	Part by weight	Mix in kg	Mix in l
KCH-EP-Solution 2	0.405	100	3.0	2.7
KCH-EP-Hardener 6	0.243	60	1.8	1.7
KCH-Powder 17	1.052	260	7.8	8.6
Total	**1.700**		**12.6**	

Consumption per mm thickness (approx.): 1.70 kg/m² Application steps: 1

Mix yields per mm thickness (approx.): 7.4 m²

Waiting Times

The waiting times between the individual applications depend on temperature:

Temperature	Until further processing
at 20 °C	approx. 12 h

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Pot Life

Pot life depends on temperature:

Temperature	Pot life
15 °C	approx. 60 min
20 °C	approx. 45 min
30 °C	approx. 20 min

Safety and Disposal

The following points should be observed:

- Sufficient ventilation and venting (especially in pits and tanks)
- No smoking and no fire
- Safety Data Sheets
- Observe hazard warnings and safety instructions on labels
- Wear required personal protective equipment (avoid skin contact with materials)
- Clean and protect hands with skin protection soap (no solvents!) and skin protection cream
- Wear a dust mask when grinding (e.g. for repairs)
- Operating instructions as per § 14 of GefahrstoffV (Toxic Substances Act) and TRGS 507 (Technical regulations for Hazardous Substances - Germany)
- Accident prevention regulations by the Liability Insurance Association for the Chemical Industries (Germany)
- Avoid direct contact of the materials with the flame, especially during welding work (welding beads) on site

Preferably consume residual quantities. Do not pour into a spout or dustbin! Collect separately for disposal in durable, lockable and labelled containers.

GISCODE

Product	GISCODE
Kerapox EP 210	RE55

Cleaning of Equipment

Tools soiled with uncured materials can be cleaned with KCH-Cleaner 1. Only clean in well ventilated areas.

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