

INNO- CRETE FOX EPOFLOW® FC541

Epoxy Resin Based, Three Component, Flowable Consistent, Structural Repair Mortar

Description

FOX EPOFLOW® FC541 is an epoxy based, three component, solvent free, flowing consistency, structural repair and filling mortar that containing special gradation quartz aggregate.

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In compliance with EN1504-3 standard /R4 class

Fields of Application

- In repairing reinforced concrete building elements,
- Repair of marine structures,
- Repairing underground art structures,
- In assemblies and repairs requiring high strength on crane beams and feet,
- It is used to fill the gaps between reinforced concrete columns and steel reinforcement.

Advantages

- Applied without primer,
- Resistant to chemicals,
- Has high compression, bending and tensile strength,
- Has high abrasion and impact resistance.
- Pan life and working time are long,
- Does not contain solvent,
- Hardens without shrinkage.

Technical Data

Structure of Material		Component A	Epoxy Resin
		Component B	Epoxy Hardener
		Component C	Special Gradation Quartz
Color			Gray
Density			2,06 kg/lt
Compression Strength	1 day	TS EN 12190	> 40 N/mm ²
	7 days	TS EN 12190	> 70 N/mm ²
Bending Strength	1 days	TS EN 12190	> 15 N/mm ²
	7 days	TS EN 12190	> 25 N/mm ²
Bond Strength	to concrete	TS EN 1542	> 2 N/mm ²
	to steel	TS EN 1542	> 2,5 N/mm ²
Application Thickness			Min. 4 mm - Max. 50 mm
Application Surface Temperature			+5°C / +35°C
Service Temperature			-15°C / +70°C
Working Time			30 minutes
New Coated Time			18-24 hours
Walkable Time on			24 hours
Fully cured time			7 days



The above values are given for +23°C and 50% relative humidity. High temperatures shorten the time, low temperatures extend the time.

Application Procedure

Preparation of Substrate

Care should be taken that the surfaces to be repaired are strong, dry, carrier, dust-free and clean. The surface must be thoroughly cleaned from any oil, grease, rust and paraffin residues that will weaken its adherence. The edges of the surface created by breaking should be steep as much as possible, rust and residues in the reinforcement should be cleaned.



Mixing

FOX EPOFLOW FC541 components A and B should be added to a clean mixing bucket and mixed with an electric mixer with 400 - 600 rpm and suitable mixing tip for 2 minutes. Then the component C should be added slowly and mixed until a homogeneous and lump-free mixture is obtained.

Application

The prepared mixture should be applied on the surface with a trowel. The thickness should be between 4 mm and 50 mm. The maximum application thickness should not exceed 50 mm in a single coat.

Cleaning of the Tools

Tools and equipment used after the application should be cleaned with solvent. **FOX EPOFLOW FC541** can only be mechanically cleaned from the surface after hardening.

Coverage

To obtain 1 mm thickness, approximately 2,10 kg / m² powder product should be used.

Watch Points

- **FOX EPOFLOW FC541** should not be applied at temperatures below +5°C and above +35°C. It should be applied within 30 minutes at +20°C. This time decreases to 20 minutes at +30°C.
- Working and reaction times of epoxy based repair mortars are affected by air temperature, humidity and ground temperatures. High temperatures accelerate hydration and the working time is reduced accordingly. Low temperatures slow hydration and prolonged working time.
- In order for the material to complete its curing, the ground temperature and ambient temperature to be applied must not fall below the minimum allowed value
- Solvent etc. should not added into the mixture prepared during the application
- Wide surfaces open to the atmosphere should be protected during 24 - 48 hours from external influences such as rain etc.

Package

10 kg set

Component A: 3,75 kg tin bucket

Component B: 1,25 kg tin bucket

Component C: 5,00 kg tin bucket

Shelf Life

When stored properly at room temperature, away from direct sunlight, between +5°C and + 30°C, shelf life is 12 months from the date of production. Opened packages should be consumed within 1 week by closing their mouths.

Storage

Should be stored in its original package, in a cool and dry place protected from frost. In short-term storage, maximum 3 pallets should be placed on top of each other and shipment should be made with the first-in, first-out system. In long-term storage, pallets should not be placed on top of each other.

Safety Precautions

It is dangerous to approach the storage and application areas with fire. Storage and application areas should be ventilated.

During the application, work clothes, protective gloves, goggles, masks in accordance with the occupational health and safety rules should be used. During storage and application, the material should not be contacted with the skin and eyes, if contacted, should be washed immediately with plenty of water and soap, and if swallowed, should be sought medical attention immediately. Foods and drinks should not be taken into the application areas. The material should be stored out of the reach of children.

For detailed information, please refer to the Material Safety Data Sheet.

Disclaimer

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