

## INNO- CRETE

# FOX EPOMORTAR® FC543

## Epoxy Resin Based, Three Component, Thixotropic, Structural Repair Mortar

### Description

**FOX EPOMORTAR FC543** is an epoxy based, three component, solvent free, thixotropic, structural repair and filling mortar containing special gradation quartz aggregate.

### Public works pose No: 04.613/8-b

### Fields of Application

- In repairing reinforced concrete building elements,
- In surface repairs before floor coatings,
- Repair of marine structures,
- Repairing underground art structures,
- It is used to fill the gaps between reinforced concrete columns and steel reinforcement.
- Repairing large cracks happened in reinforced concrete floors,
- It is used in bridge bearings.

### 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			1,9 kg/lit	
Compression Strength	1 day	TS EN 12190	>25 N/mm <sup>2</sup>	
	7 days	TS EN 12190	>50 N/mm <sup>2</sup>	
Bending Strength	1 days	TS EN 12190	>15 N/mm <sup>2</sup>	
	7 days	TS EN 12190	>20 N/mm <sup>2</sup>	
Bond Strength	to concrete	TS EN 1542	>2 N/mm <sup>2</sup>	
	to steel	TS EN 1542	>2 N/mm <sup>2</sup>	
Application Thickness			Min. 4 mm - Max. 50 mm	
Application Surface Temperature			+5°C / +30°C	
Service Temperature			-15°C / +80°C	
Working Time			40 minutes	
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

The surfaces to be repaired must be robust and free from all kinds of dust and dirt. Broken surfaces to be repaired should be steepened as much as possible, rust and residues in the reinforcement should be cleaned. If necessary, reinforcement should be added.



### Mixing

**FOX EPOMORTAR FC543** 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 EPOMORTAR FC543** can only be mechanically cleaned from the surface after hardening.

### Coverage

To obtain 1 mm thickness, approximately 1,90 kg/m<sup>2</sup> powder product should be used.

### Watch Points

- **FOX EPOMORTAR FC543** should not be applied at temperatures below +5°C and above +30°C. It should be applied within 40 minutes at +20°C. This time decreases to 30 minutes at +30°C.
- Outdoor applications should be protected from sun, rain, wind and frost for the first 24 hours.
- 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

### Package

25 kg set

Component A: 2 kg tin bucket

Component B: 1,00 kg tin bucket

Component C: 22,00 kg Polyethylene reinforced kraft bag

### 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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