EN

Repoc EB 456

Construction Chemicals > Repair Mortars > Epoxy-Based

An epoxy resin-based, thixotropic, solvent-free, two-component structural repair, adhesive, and assembly mortar made from high-strength aggregate and binder.

Fields of Application

- For the repair of concrete in both indoor and outdoor areas
- Structural repairs of reinforced concrete structures such as columns, beams, and walls
- Repairing and protecting wide cracks
- Adhesion of steel, aluminum, iron, wood, and glass
- Bonding of ceramics, hard natural stones, mortar, and brick walls
- Adhering dilatation bands

Advantages

- Hardens without shrinkage
- Excellent adhesion to concrete and steel
- Provides early high strength
- High abrasion resistance and chemical resistance
- Waterproof
- High load-bearing capacity
- Can be applied on dry and damp surfaces
- Solvent-free

1 Preparation of Substrate

The surface to be applied must be clean and free of loose material. Steel surfaces must be free of rust. New reinforced concrete surfaces must have achieved sufficient strength. No additives or similar chemicals should be added to the prepared mortar. Water running on the surface should be removed. For dilatation and other applications, applying Merks pu primer Pb 724 or 720 primer to the surface enhances the performance of the product.

2 Application

When used as an adhesive, it can be applied to the surface with a spatula, trowel, or notched trowel. (The application thickness should be thin; for repairs thicker than 30 mm, formwork should be used.)

3 Consumption Rate

The consumption of the product is 1750 g/m^2 (for a thickness of 1 mm).

4 Mortar Preparation

The mixing ratios of Repoc EB 456 are pre-packaged in ready-to-use amounts. Add the 1.25 kg of Component B (hardener) to the 3.75 kg of Component A (epoxy resin), and mix with a mixer operating at 400-600 rpm for at least 3 minutes until a homogeneous consistency is achieved. Both components are packaged in the correct mixing ratios. For mixtures prepared outside of the packaging, mix 3 parts of Component A (resin) with 1 part of Component B (hardener).

5 Points to Consider

- High temperatures accelerate curing, while low temperatures extend curing time.
- Avoid application at temperatures below +10°C and above +30°C.
- The two components should be mixed together with a low-speed drill.
- Do not mix by hand or with a trowel.
- Do not add extra solvents, water, or similar liquids to the mixture.
- Avoid applying in frozen conditions, areas at risk of freezing within 24 hours, or areas exposed to direct sunlight and wind.

6 Packaging

Packaged in 5 kg sets in tin containers (Component A: 3.75 kg, Component B: 1.25 kg).

7 Storage Life

At least 12 months in sealed packaging and protected from freezing.









TECHNICAL DATAS

Material Structure	
Component A	Epoxy resin
Component B	Hardener
Color	
Component A	White
Component B	Dark Grey
Density	~1,80 kg/l (20°C) ± 0.05
Mixing Ratio (A+B)	3,75:1,25
Solids Content	%100
Application Temperature	(+5°C) - (+30°C)
Adhesion to Concrete	>4 N/mm2
Adhesion to Steel	>3,5 N/mm2
Compressive Strength	~60-70 N/mm^2 (7th day at +20°C)
Tensile Strength	~15 N/mm^2 (7th day at +20°C)
Flexural Tensile Strength	~30 N/mm^2 (7th day at +20°C)
Full Strength	7 day
Shelf Life	12 months in unopened packaging, protected from frost
Packaging	5 kg set (3.75 kg tin bucket for Component A, 1.25 kg tin bucket for Component B)