RP17

Construction Chemicals > Repair Mortars > Epoxy-Based



RP 17 is a single-component, cement-based, polymer-modified repair mortar with high strength, providing waterproofing properties through the activation of special chemicals. It can be applied in both positive and negative directions and is free of shrinkage.

■ Fields of Application

- In the repair of segregated concrete structures
- For filling tie holes
- For chamfering all corners
- In the repair of cold joints
- In the repair of elevator shafts
- In the repair of installation and pipe edges
- For surface repairs in clean and wastewater treatment plants

Advantages

- Can be easily used for the repair of concrete surfaces exposed to positive and negative water pressure
- Can be used easily without a primer when the surface is moistened.
- Provides high adhesion, does not shrink. It is highly durable
- Gains waterproofing properties upon contact with water due to the active chemicals it contains

Surface Preparation

The surface to be applied must be free of oil, dirt, rust, and all loose materials. If necessary, it should be cleaned with a water jet. The application should be done directly onto the concrete, and the surface must have achieved sufficient strength. After cleaning, the surface should be lightly moistened, ensuring that no water puddles remain.

Preparation of The Mortar

20 kg of RP 17 repair mortar should be mixed with approximately 3 to 3.5 liters of water using a low-speed drill until no lumps remain. The required amount of water should be placed in a clean container, and RP 17 should be gradually added. After the mixture is prepared, it should be allowed to rest for 3-4 minutes and then mixed again. The mixture may show false setting; it should be mixed again without adding more water until the final consistency is achieved. The prepared mixture should be used within 20 minutes, so only enough mortar to be used within this time should be prepared.

B Application

If tie filling is to be done, the area around the tie should be properly cleared, and the tie should be removed using a drill bit with a diameter suitable for the plastic inside the tie. Then, RP 17 repair mortar should be pushed into the tie and carefully finished with a trowel along the edges. For corner chamfering, the corners should be slightly deepened and roughened using a breaker. Chamfering should be done with mortar prepared to be at least 4x4 cm in size. In segregated areas, loose surfaces should be cleaned, the surface should be thoroughly saturated with water, and repairs should be carried out with RP 17 using a trowel.

Curing

Curing should be done only with water. The sudden drying of the material's surface should be prevented, and if drying occurs immediately, curing with water should begin right away. Generally, curing should be performed at least 4 times a day and continued for 3 days. In very hot site conditions, the curing period should be extended by an additional 3-4 days. Curing is extremely important for the material's impermeability performance as it activates the active chemicals in the material. The use of chemical curing agents is absolutely not suitable.

Sometion Consumption Amount

Depending on the surface, approximately 9.5 to 10.5 liters of mortar can be obtained from one bag.

6 Points to Consider

- Should be applied at temperatures between +5°C and +40°C.
- The amount of water used should be measured each time; if necessary, use a measuring container to prevent insufficient or excessive water usage.
- During the initial mixing, the mortar may appear thick but becomes more workable as it is mixed. Therefore, the prepared mortar should be mixed well, and no additional water or powder should be added.
- Avoid application in frozen areas or in direct sunlight and wind.
- Surfaces applied should not be kept moist for the first 3-4 days.
- After work is finished, tools should be cleaned with plenty of water.

Packaging

In 20 kg PE-reinforced kraft bags.

Storage Life

At least 12 months in a sealed package and protected from frost.





Material Composition	Mineral filler, polymer-modified additives, and cement.
Appearance	Grey colored powder
Mixing Ratio	2.6 - 2.8 l water / 20 kg powder
Application Temperature	(+5°C) - (+35°C)
Powder Unit Volume Weight	1,75 kg/l
Wet Bulk Density	2,00 kg/l
Flexural Strength	3 N/mm2 – 28 days
Compressive Strength	28 N/mm2 – 28 days
Setting Time	3-4 minutes
Pot Life	20 min
Curing Time	3-4 days

Health and Safety Measures

Shelf Life

Packaging

TECHNICAL DATAS

During application, protective goggles and gloves should be worn, and all tools used should be washed with plenty of water before drying. Due to the chemical properties of the product, contact with skin, eyes, or mouth should be cleaned thoroughly with water. In case of ingestion, seek medical attention immediately.

20 kg PE-reinforced kraft bag

In its unopened packaging, in a dry environment, for 12 months