

Crocodile Structure Repair

Structural Repair



Structural Repair Fiber Reinforce and Sulfate Resistant Patching Mortar

Crocodile Structure Repair is a fiber reinforced patching mortar with sulfate resistant property which is designed for concrete structure repair. It provides a high bonding to concrete surface and high compressive strength more than 55 MPa. Once applied onto damaged concrete, it becomes homogeneous with the repaired surface. Able to be applied vertically and overhead by minimum thickness of 5 mm and maximum of 50 mm.

Product Features

- Resistant to the sulfate attacked and coastal environment
- High compressive strength at 28 days more than 55 MPa
- Contain a reinforce-fiber minimizes early cracking
- Able to recover the damaged depth thickness at 5-50 mm
- Excellent bonding

Application

- Damaged concrete structure (beams, column, retaining wall, etc.) which get deep to the rebars.
- Concrete Structure which located near by the sea
- Wherever the concrete structure which possible effected to the sulfate area

**Application Instruction****Substrate Preparation**

The concrete surface must be sound and removed unsound concrete, form-oil, dust, or other surface contaminates. The surface must be damped by clean water prior to the mortar application (according to site condition). Rebar must be in good condition; rust must be removed then covering with Crocodile Repair Mortar with bonding agent to prevent further corrosion and improve adhesive performance during plastering.

Mixing Ratio

Crocodile Structure Repair 1 bag/20 kg per Clean Water of 3.20-3.60 Liters.

Product Mixing

Mix one bag of Crocodile Structure Repair (20 kg) with 3.20-3.60 Liters of clean water. Mix with low speed drill (500 rpm.) Add the recommended amount of water into the mixing-container then followed by the Crocodile Repair Mortar and continue mixing for 2-3 minutes. It is recommended to mix only amount what will be applied within the setting period (approximately 30 minutes according to the site condition). Leave the mixed product for 2 minutes then homogeneously slow mix again before applying.

Application

Ensure that the surface was damped but not soaked. Apply the mixed-product by stainless-trowel onto the prepared surface. Force the mixed product with pressure into the crack or the spalled area. If the damage is deeper than 50 mm, recommend applying with 2 layers. Leave at least 3 days before using the area.

Curing

For maximum performance of the product, curing with water on the exposed surface especially in high temperature area. It is able to use water base curing compound for large areas.

Consumption

Crocodile Structure Repair 1 bag (20 kg) mixed with water is 0.011 m³

Cleaning

Cleaning tools with water while material is still fresh.

Suggestion

- The repaired surface must be prepared under the mentioned standard and strong
- Do not apply Crocodile Structure Repair if the surface temperature is below 5°C
- Do not apply over tightly finished floor without first scarifying the floor.

Caution

- The product contains Portland cement and other admixtures which may cause skin irritation. Using rubber gloves, dust masks, eye protection, and other safety equipment is recommended.
- If contact to the eyes or face, rinse immediately and repeatedly with water, and then consult doctor immediately
- Keep away from children

Packing

Net weight : 20 kg/ bag

**Technical Data**

Test Method	Standard	Evaluation
Open Time	In house	20 min
Setting Time	ASTM C191	
Initial set		43 min
Final set		83 min
Adhesive Strength 28 days	ASTM C882	>9 MPa
Compressive Strength 28 days	ASTM C109	>55 MPa
Flexural Strength 28 days	ASTM C348	>15 MPa
Drying Shrinkage 7 days	ASTM C490	<1.00%
Chloride Diffusion Coefficient	NT BUILD 492 : 1999-11	$\leq 0.800 \times 10^{-12} \text{ m}^2/\text{s}$
Chloride Ion Penetrability, Charge passed	ASTM C1202-22e1	<300 Coulombs

The information provided is given in good faith, based on current knowledge and Jorakay Corporation's experience with the products when they are properly stored, handled and applied in normal situations and in accordance with the recommendations of Jorakay Corporation. This is useful for information and consulting, but is not legally binding. In particular, it does not exempt the user from testing and verifying the suitability of the product for the desired application and purpose. Jorakay Corporation reserves the right to modifications that improve the product or its application. This version invalidates previous ones.