REP FC Single-component, Polymer-modified, Cement-based Fairing Coat



Description

Rep FC is a single-component, polymer-modified, cement-based fairing coat, supplied as a ready to use blend of dry powders, which only requires the addition of clean water on site. **Rep FC** is designed to be applied from feather edge up to 3 mm thickness in a single application and higher thicknesses can be achieved by applying multiple layers.

Uses

- Levelling of vertical and horizontal surfaces.
- Filling of static cracks up to 4 mm in width.
- Improving the aesthetic appearance of concrete surfaces.
- Suitable for indoor and outdoor applications, in both dry and wet conditions.

Characteristics / Advantages

- Factory-controlled pre-blended dry mix which only requires the addition of water.
- Polymer-modified, with low permeability to water, CO2, and chlorides.
- Easy and fast application.
- Excellent adhesion to substrates.
- Suitable for vertical and overhead applications for filling blow holes and voids up to 3 mm deep in the concrete surface.
- Can be applied on horizontal surfaces, after being protected with a sealer.
- High freeze/thaw resistance.

Typical Properties

Color / Appearance	Grey powder
Fresh Wet Density (@ 23°C)	$1.70\pm0.05~\text{g/ml}$
Working Time (@ 23°C)	Approx. 30 minutes
Yield / 20 kg bag	~16 Liters
Compressive Strength (EN 12190) @ 28 days	≥ 12.0 MPa
Flexural Strength (ASTM C348) @ 28 days	≥ 2.0 MPa
Bond Strength (EN 1542)	≥ 0.80 MPa
Substrate Temperature	+5 to +40° C
Application Thickness	Up to 3 mm in a single layer

Packaging

Rep FC is supplied in 20 kg bags.

Shelf Life and Storage

Rep FC has a shelf life of 12 months when stored in its original unopened packaging in cool and dry conditions, protected from direct sunlight, heat and moisture. Shelf life may reduce if the recommended storage conditions are not followed.

Safety Instructions

Rep FC contains hydraulic cement and may cause irritation to skin or eyes. Refer to the most recent Material Safety Data Sheet for information and advice on the safe handling, storage and disposal of the product.





Application Instructions

1. Surface Preparation

The substrate must be free from dust, loose materials, surface contamination and materials that may reduce bond or prevent adhesion of the repair mortar. Remove damaged concrete by suitable means. All substrate surfaces in the repair area shall be roughened by suitable means e.g., light scabbling or grit blasting to provide a key for the repair material. Remove by suitable means from any exposed steel reinforcement; rust, scale, mortar, concrete, dust and any other loose or deleterious material which reduces bond or contributes to corrosion. Metal surfaces (iron and steel) should be free from scale, rust, oil and grease.

Prior to application, thoroughly saturate concrete surface to provide a saturated surface dry condition (SSD). Poor quality concrete may require soaking for a significant time. Any surface water should be removed using an oil-free compressed air jet.

2. Mixing

Rep FC requires 7.0 liters of potable water per 20 kg bag for manual hand application. For optimum results, mixing should be performed using a forced action mixing paddle powered by a heavy-duty electric mixing drill.

Add the pre-measured amount of water to a clean mixing bucket.

Add Rep FC powder slowly to water whilst mixing and continue mixing for 3 - 5 minutes until a homogenous, lump-free consistency is achieved.

3. Application

Rep FC is applied to the prepared substrate using a steel trowel. Scratch coat technique is used to ensure filling of blow holes prior to building to the finished level. Final troweling to a smooth finish should commence once the material has partially set. Alternatively, the applied material may be finished using a damp sponge.

4. Cleaning

All mixing and application equipment should be cleaned immediately with clean water. Hardened material should be mechanically removed.

5. Curing

Treat exposed surfaces with a curing compound or use other approved curing methods such as polyethylene sheeting or wet hessian.

Limitations

- Do not apply the product if the ambient temperature is less than 5°C.
- Hot weather practices should be adopted during application and curing if the temperature is above 35°C. In hot conditions store the material in a cool environment prior to mixing.
- Rep FC is not suitable for use in trafficked areas.
- Protect freshly applied material from direct rain until at least final set as surface scouring may occur.

Technical Support

Refer to contacting technical information, method statement, or contact technical support team for any inquiry.

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