

MonniRep F3

Single component cementitious fairing coat

Product Description

MonniRep F3 is a cementitious polymer modified mortar composed of high resistance cements, silica sand and special additives. It is designed to give thin layers to produce a fair faced appearance, to concrete or masonry surfaces. When mixing with water the product becomes easily workable mortar applicable horizontally, vertically and overhead. MonniRep F3 is applicable for coatings that are 3 mm thick or less.

Uses

MonniRep F3 is designed for applications on concrete or masonry surfaces:

- ▶ To produce a smooth fair faced surfaces prior to applying decorative coating
- ▶ As a general re-profiling layer over large areas
- ▶ For filling pinholes or porous surfaces prior to over coating
- ▶ As a minor repair product for defected concrete elements
- ▶ For cosmetic repair fairing coat after a major concrete repair is executed in association with any of Monneli cementitious concrete repair products

Advantages

- ▶ Excellent bond to all concrete supports
- ▶ Requires only on site addition of water
- ▶ High impact resistance and excellent adhesion to concrete
- ▶ Smooth, easily producing fair faced finish
After hardening it creates an impermeable layer, resistant against atmospheric gas, frost and thaw cycles
- ▶ Resistant against salts, chloride and chemical attack 2 cm layer of hardened product is resistant against CO₂ diffusion in the same degree as an 80 cm layer of concrete
- ▶ No chloride content
- ▶ Fully compatible with Monneli Repair Products

Usage Instructions

Surface Preparation

The support must be perfectly cleaned, free from dust, inconsistent parts, traces of form stripping oils, efflorescence, rust etc.

Saturate the surface with water to eliminate possible water absorption at the moment of application.

Mixing

To prepare the mortar, pour 7.50 liters of water into a clean container and add slowly the content of MonniRep F3 (25kg). Mix using spiral paddle in slow speed heavy duty drill for few minutes till a homogeneous lump free consistency mix is achieved. Always add powder to water and not the other way around.

Application

Apply MonniRep F3 manually with spatula or steel trowel with a maximum thickness of 3 mm per coat. The product can be applied in more than one layer. Leave the surface rough if the application of following layers is needed.

Only the last coat can be smoothed with sponge trowel few minutes after the application. If surface dries too fast during the smoothing, it can be dampened by water spraying to facilitate the trowel application. Care should be taken not to over work the surface. When high mechanical resistant thin plaster is required, MonniRep F3 must then be reinforced with a special fibers tissue.

Curing

Curing is not generally needed however under extreme conditions - high temperature and drying winds, MonniCure AR shall be used as a curing compound.

Cleaning

MonniRep F3 should be removed from tools and equipment and mixers with clean water immediately after use. Cured material should be removed mechanically.

Technical Data

Category	Typical Values
Appearance	Grey
Density at 25°C	1.8–1.85 kg/L
VOC	2.0g/L
Workability time at 25°C	40 minutes
Adhesion to concrete (BS 1881)	≥1.5 N/mm ²
Compressive Strength at 28 days (ASTM C579)	20 N/mm ²
Flexural Strength at 28 days (ASTM C580)	7 N/mm ²
Tensile Strength at 28 days (BS 6319 Pt. 7)	> 1 N/mm ²
Porosity (ASTM C 642)	5.7%
Coefficient of thermal expansion (ASTM C 531)	6x 10 ⁻⁶ /°C
Rapid Chloride permeability (ASTM C102)	low
Drying Shrinkage at 28days (ASTM C 157-93)	<400 microstrains

All values are subject to 5-10% tolerance

Yield

17 Liters/ 25 Kg bag

Packaging

MonniRep F3 is supplied in 25 Kg bag sizes.

Shelf Life & Storage

The product must be stored in dry and sheltered place and into the original well closed bag. In these conditions the product will have a shelf life of 12 months.

Health & Safety

MonniRep F3 can be harmful to skin as it contains cement powders which may release alkalis when mixed with water.

During application, wear appropriate protective clothing, goggles, gloves and respiratory equipment if necessary.

In case of contact with skin, rinse with water and again wash thoroughly with soap and water. In case of contact with eyes, rinse with plenty of water and seek medical advice accordingly.

If ingested, obtain medical attention immediately. Do not induce vomiting.

Legal disclaimer

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