

MONNELI BETOFER

Corrosion-Proof Cement Slurry for Steel Reinforcement

Product Description

A two component cement based mortar. Component (A) is a powder consisting of hydraulic binders and special additives. Component (B) is a liquid consisting of selected polymers and migrating inhibitors of corrosion. The two components must be mixed at the moment of use without addition of water or any other product.

Uses

BETOFER is used as:

- A protection for steel reinforcement against corrosion when concrete repair is needed.
- Can also be employed as an adhesive primer for the repairing mortars or for new concrete castings onto the old one.

Advantages

- Excellent adhesion to concrete and steel
- Excellent corrosion resistance
- Formulated for use with Colmef concrete repair products
- High water and vapor resistant
- Impermeability (2 mm layer of hardened BETOFER is resistant against CO₂ diffusion in same degree as 320 cm layer of concrete)
- High straining ability
- BETOFER increases significantly the adhesion of mortar to steel reinforcement

Instructions for Use

Surface Preparation

The reinforcing bars must be clean from weak concrete, grease substances and rust. Sandblasting would be advisable for cleaning deep rust. Continue cleaning until all rust is removed. Exposed reinforcement can also be cleaned mechanically or by using a stiff brush tool.

Mixing

BETOFER is composed of two components that must be mixed at the moment of use. Pour the liquid (Component B) into a clean container and then add the powder (Component A). Mix till a homogeneous lump free mix is achieved.

The mixture must be applied within 45 minutes from its preparation.

Application

Apply BETOFER using a brush in one coat. If necessary to apply second coat, it should be applied at a right angle to the previous coat after at least 2 hours and within 24 hours from the previous coat. Make sure that the whole steel surface is completely covered. The average total thickness of BETOFER should not be less than 1 mm.

Repairing mortars such as BETOCEM FIBRE, BETOCEM HCS or BETOCEM HR) can be applied after 4 to 5 hours from the time of applying BETOFER.

Cleaning

Tools and equipment used should be cleaned promptly with SOLVENTE 10.

Recommendations

- Protect the applied product from the direct sunrays, freeze and rain up to the complete hardening.
- During Summer Season, working area should be covered to prevent the direct sun effects.
- Keep equipment and material cool.

Technical Data

Properties	Results
Appearance	Dense mix
Component A Appearance	Grey powder
Component B Appearance	Liquid
Mix density	1.5 kg/L
pH of mixture at 25°C	12 - 13
Mixing ratio in weight	Comp A : Comp B 3 : 1
Adhesion to concrete after 28 days (BS 1881 Pt 207)	>2.0 N / mm ²
Adhesion to steel after 28 days	1.9 N / mm ²
VOC	0.4 g/L
Slant shear bond strength (BS 6319-4)	20 N / mm ²
Salt spray test (ASTM B117)	Passed
Pot life time of mixture at 25°C	45 minutes

Test performed at 25°C, 50% of relative humidity and in absence of ventilation.

All values are subject to 5-10 % tolerance

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Consumption

0.65 m²/kg for 1 mm thickness

Packaging

BETOFER is packed in two components kit; 1.5kg powder in plastic bag and 0.5 kg Liquid in plastic bottle.

Storage

The product must be kept in dry well covered place at temperature not less than +5°C and not more than +35°C. Shelf life is 12 months if stored as recommended.

Health & Safety

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.