

# Rock Bond AC 100

# Bonding slurry and anti-corrosion reinforcement primer

## PRODUCT DESCRIPTION

Rock Bond AC 100 is a cementitious, polymer modified one component bonding slurry and primer with active corrosion inhibitors, used for protection of reinforcing steel.

#### AREA OF APPLICATION

- Corrosion protection for steel reinforcement in concrete repair
- Bonding slurry on prepared concrete and mortar for Rock Patch mortars

## FEATURES / BENEFITS

- Only requires mixing with water
- Excellent adhesion to concrete and steel
- Meets ZTV-SIB requirements for corrosion protection
- Good mechanical properties
- Adjustable consistency

- Easy, user friendly application
- Good resistance to water and chloride penetration
- Moisture insensitive
- Sprayable by wet spray method

#### TESTS

Approval/Standards

# PRODUCT INFORMATION

Color/Form: Grey Powder

#### PACKAGING

20,25kg bags.

#### SHELF LIFE

6 Months in original, unopened packaging. Store in a dry area between 5°C and 30°C. Protect from direct sunlight and moisture.

# TECHNICAL INFORMATION

Chemical Base: Cement and Crystalline free Silica aggregate. Approx. 1,80 kg/litre density of fresh mortar. Density:

Layer Thickness: 0,5 - 2 mm

# MECHANICAL PROPERTIES

(28 days, 23°C/50% RH) 30 - 35 N/mm<sup>2</sup> **Compressive Strengths:** 

Adhesive Tensile: 1,5 - 2,5 N/mm<sup>2</sup> (concrete failure)

#### **DOSAGE**

Bonding Slurry: 1,5 - 2,0 kg/m<sup>2</sup> Anti-corrosion Primer: 2 kg/m<sup>2</sup> @ 1mm thick

## DIRECTION FOR USE

Substrate Quality The concrete substrate must be sound and of sufficient compressive strength (min.20 N/mm² (MPa) with a minimum pull off strength of 1.5 N/mm<sup>2</sup> (MPa).

> The surface must be dry and free of all contaminants such as oils, grease, coatings and surface treatments etc.

> The substrate must be prepared mechanically to remove cement laitance and achieve a profile open textured surface.

> Weak concrete should be removed and surface defects such as honeycombed areas; blowholes and voids must be fully exposed.

Repairs to substrate, filling of blowholes/voids and surface levelling should be carried out using by appropriate product from the PCC range of materials.

**Substrate Preparation** 

Precise and efficient surface preparation is essential to achieve the high adhesive qualities of Rock

bond / Rock patch Products.

All concrete, mortar and stone substrates must be sound, clean and free from oils, grease or surface contaminants. All loose materials and surface laitance must be removed by high pressure water jet blasting or similar mechanical means. Small areas and 'spot' repairs should be mechanically prepared by needle gunning, bush hammering or similar means.

The prepared substrate should be thoroughly soaked with clean water until uniformly saturated, leaving no standing water.

Steel reinforcement should be grit blasted to a bright steel condition to remove all traces of rust and

contamination prior to applying Rock Bond AC 100 corrosion protection.

**Application Condition** Limitations

Min. 5°C Max.30°C Substrate Temperature Min. 5°C Max. 35°C Ambient Temperature

> < 10 % **Substrate Humidity**

**Application Instructions** 

Mixing (Ratio/Dosage) 5,0 - 5,5 litres water per 25kg powder

> Add the Rock Bond AC 100 slowly while mixing continuously. To avoid entraining too much air use a slow speed mixer (max. 500 rpm). By gradually adding the powder in portions, the desired application consistency can be obtained. Rock Bond AC 100 must be mixed to a brushable, almost non-drip consistency.

### **Application Method / Tools**

As a reinforcement primer

Apply two coats of approximately 1 mm thickness each, using a stiff brush or suitable spray equipment, onto the cleaned reinforcement. Allow to reach initial set ('thumb-nail' hard) - up to 5 hours between coats depending on conditions. Allow at least 24 hours curing after second coat if repair mortar is to be spray applied.

As a bonding bridge

Apply onto the pre-saturated concrete substrate a coat of Rock Bond AC 100 not less than 0,5mm thick by brush, roller or suitable spraying equipment. To achieve a good bond with the substrate, and ensure that the whole area is fully coated, work the bonding slurry well into the substrate. Repair mortars must be applied wet on wet to the bonding slurry.

**Cleaning of Tools** 

Application and mixing tools should be cleaned with water immediately after use. Hardened

material must be removed mechanically.

Pot life (max. open life)

Approx. 90 - 120 minutes

Notes on Application / Limits Allow the mixed Rock Bond AC 100 to stand for approximately 10 minutes before applying.

Concrete should be a minimum of 28 days old.

The normal precautions pertaining to dew point should be observed.

**Local Restrictions** 

Please note that as a result of specific local regulations the performances of this product may vary from country to country. Please consult the local Product Data Sheet for the exact description of the application fields.

#### Health and Safety Information

**Protective Measures** 

Cement containing material may cause skin irritation. Wear gloves and goggles or apply barrier cream to hands while working with the mortar.

**Important Notes** 

Residues of material must be removed according to local regulations. Fully cured material can be disposed of as household waste under agreement with the responsible local authorities.

Detailed health and safety information as well as detailed precautionary measures e.g. physical, toxicological and ecological data can be obtained from the Material Safety Data Sheet.



