

## HYGROSMART<sup>®</sup> – FER

### Reinforcement Steel Cementitious Anticorrosive Coating – Adhesion Bridge.

#### DESCRIPTION

**HYGROSMART<sup>®</sup>-FER** is a polymer-modified cementitious mortar with corrosion inhibitors suitable for application on reinforcement steel bars against corrosion but also as an adhesion bridge for cementitious repair mortars.

#### COMPLIANCE-CERTIFICATION

Complies with requirements of European Standard **EN 1504-07**.

#### RECOMMENDED FOR

Suitable for preventive protection of reinforcement steel from corrosion, for protection of reinforcement steel in structural concrete repairs. It can also be used as adhesion bridge layer between old and new concrete or mortar.

#### APPLICATION

##### Substrate Preparation:

The reinforcement steel should be free of rust, dust, oil, grease etc. The old concrete substrate should also be free of loose particles, oil, dust, cement laitance, mould release agents, curing membranes.

##### Cleaning of reinforcement steel bars:

It is recommended that rust removal is done with sand blasting or wire brush.

##### Mixing-Application:

Add **HYGROSMART<sup>®</sup>-FER** gradually to water under mechanical mixing until a homogeneous mix with no visible lumps is achieved.

As anticorrosive coating, the product is applied with brush in two layers. The first layer is applied at a thickness of around 1mm. The second layer is applied right after the hardening of the first layer.

As an adhesion bridge layer between old and new concrete or mortar, it is applied in one layer around 2mm thick.

The temperature during application should be between +5°C and +35°C.

#### CONSUMPTION

Anticorrosive protection: 2,0 Kg/m<sup>2</sup> per mm of applied thickness.

Adhesion bridge: 2,0 Kg/m<sup>2</sup> per mm of applied thickness.

#### CLEANING

Brushes and tools can be cleaned with water. Dried product cannot be cleaned with water and can be removed only by mechanical means.

#### PACKAGING

Pails of 1kg, 4kg. **Color:** White (turns blue after mixing with water)

## HYGROSMART® -FER

### STORAGE

The product can be kept for minimum 12 months in the original unopened packaging. Should be stored in dry conditions and at temperatures of 5-25 °C. Once opened, use as soon as possible.

### SAFETY

**HYGROSMART®-FER** contains cement and is therefore irritating. Please use protective equipment and clothing during application.

### TECHNICAL SPECIFICATIONS

PROPERTY	UNIT	RESULT
Color of powder/water mix	-	blue
Water requirement	%	30% by weight
Density of dry mortar	Kg/l	1,40±0,10
Density of wet mortar	Kg/l	1,90±0,10
Pot life in the pail	h	≥1
Waiting time between layers	h	1
Waiting time before application of repair mortar	h	6-24
Minimum thickness	mm	2
Adhesion (28 days, to concrete)	N/mm <sup>2</sup>	>2,0
Compressive strength (28 days)	N/mm <sup>2</sup>	>50
Bending strength (28 days)	N/mm <sup>2</sup>	>5,5

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