

FERROSEAL

Cement-based anticorrosive coating for reinforcement elements Bonding agent

Description

FERROSEAL is a ready-to-use cement mortar protecting steel reinforcement elements from corrosion and acting as a bonding layer between the old and new mortar or concrete in repair works. It is classified as a product for reinforcement corrosion protection, according to EN 1504-7. Certificate Nr. 2032-CPR-10.11.

Fields of application

FERROSEAL is used:

- To protect steel reinforcement in repair works to reinforced concrete suffering damages, as a result of an earthquake, carbonation, or defective casting.
- For preventive protection of steel reinforcement in lean building elements or in cases where the structural element is expected to work in wet surroundings.
- As a bonding layer between old and new concrete or mortar.

Technical data

Form:	cementitious powder
Color:	redbrown
Water requirement:	27% by weight
Bulk density of dry mortar:	1.40 ± 0.10 kg/l
Bulk density of fresh mortar:	1.90 ± 0.10 kg/l
Shear adhesion (coated steel to concrete): (EN 15184)	Pass ^{*1}
Corrosion protection: (EN 15183)	Pass ^{*2}
Compressive strength:	≥ 32.00 N/mm ²
Flexural strength:	≥ 8.00 N/mm ²
Pot life:	1 h at +20°C

^{*1}: The test is considered passed if the bond stress determined with the coated bars in each case is at least 80% of the reference bond stress determined for the uncoated bars.

^{*2}: The test is considered passed if the coated zones of the steels are free of corrosion and if rust creep at the ground plate edge: <1 mm.

Directions for use

1. Substrate preparation

- Reinforcement elements must be free of rust (cleaning degree SA 2 ½ according to DIN 55928-4), dust, grease etc.
- Concrete or mortar to be bonded must be free of loose materials, dust, grease etc.

2. Application

FERROSEAL is added into water under continuous stirring at a ratio of FERROSEAL:water = 2.65:1, until a uniform mass is formed with no lumps.

- **As an anticorrosive coating**, the material is applied with a brush of medium hardness in two layers. Layer thickness exceeding 1mm per coat should be avoided because of the risk of crack appearance in the material. Each new layer is applied once the previous one has dried.
- **As a bonding layer**, between old and new concrete or mortar, the material is applied in one layer approx. 2 mm thick. The new concrete or mortar is applied whilst bonding layer is still fresh.

Consumption

- Anticorrosive protection of reinforcement elements: 0.07-0.13 kg per running meter of reinforcement element, depending on the rod's diameter.
- Bonding layer: approx. 2 kg/m².

Packaging

FERROSEAL is available in 1 kg, 5 kg and 15 kg.

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Shelf-life - Storage

12 months from production date, if stored in original, unopened packaging, in places protected from moisture and frost.

Remarks

- Temperature during the application should be at least +5°C.
- The product contains cement, which reacts as alkaline with water, thus is classified as irritant.
- Consult the directions for safe use and precautions written on the packaging.



2032

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2032-CPR-10.11

DoP No.: FERROSEAL/1219-03

EN 1504-7

Reinforcement corrosion protection product for uses other than low performance requirements

Shear adhesion: Pass

Corrosion protection: Pass

Dangerous substances: comply with 5.3

ISOMAT S.A.

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