

KingRep[®] Primer CM

Corrosion inhibitor concrete bonding slurry and steel reinforcement primer.

DESCRIPTION

KingRep Primer CM is a single component polymer modified cementitious primer and tack coat designed to enhance the bond between the Cempatch range of repair mortars and existing concrete substrates.

KingRep Primer CM is also designed to protect the steel reinforcement by providing a highly alkaline passivating layer around the reinforcement and by the use of migrating corrosion inhibitor technology, which minimises further corrosion to surrounding steel reinforcement.

APPLICATIONS

KingRep Primer CM is ideally designed as a corrosion protection for steel reinforcement in the concrete repair systems. And as a bonding slurry between KINGKRETE cementitious systems and concrete substrate.

ADVANTAGES

- ☐ Single component, easy to use.
- ☐ High bond strength to concrete and steel.
- ☐ Good physical properties and mechanical strength.
- ☐ Polymer modified system with low VOC.
- ☐ Protection of steel through Migrating Corrosion Inhibitor technology.
- ☐ Good resistance to water and chloride penetration.
- ☐ Safe and environment friendly product.

METHOD OF USE

Substrate Preparation

The Substrate should be mechanically prepared by bush hammering, grit blasting, steam cleaning, etc. to produce a clean exposed aggregate finish, free from dust, oil, grease, paint, laitance, etc

All rust and scale should be removed from any exposed steel reinforcement by grit blasting techniques or equivalent approved methods to a bright steel condition.

Mixing

Mix by slowly adding the powder component to water at a rate of 2.5 liters per 8 kg of powder and mix until a smooth, even consistency is obtained.

TECHNICAL PROPERTIES @ 25°C:

| | |
|---|---------------------------------|
| Colour: | Grey powder |
| Mixing ratio: | 2.5 ltr. water/ 8 kg bag |
| Mixed density: | 1.75 ± 0.05 gm/ cm ³ |
| Open time: | 10 mins |
| Working time: | 1.5 - 2 hrs |
| Initial setting: | 4 - 5 hrs |
| Application temperature: | 5 - 35°C |
| Flow | |
| Brushable consistency @ W/P | 0.31 |
| Sprayable consistency @ W/P: | 0.35 |
| Minimum application thickness: | 2 mm (with two coats) |
| Compressive strength: BS EN12390-3-2002 | ≥ 35 MPa @ 28 days |
| Flexural strength: BS6319, Part 3 | ≥ 6 MPa |
| Tensile strength: BS6319, Part 7 | ≥ 2.5 MPa |
| Tensile adhesion strength: (on concrete) ASTM 4541-02 | > 2 MPa (concrete failure) |
| Water permeability: DIN 1048 (5 bars) | 0% |

APPLICATION

For use as a reinforcement primer apply by brush two coats of approximately 1mm thickness, allowing each coat to reach initial set prior to application of the second coat.

For use as a bonding primer, all surfaces must be wetted to a saturated surface dry condition, before applying KingRep Primer CM which should be brushed onto the pre-dampened substrate using a stiff brush and thoroughly worked into the surface.

Application of the repair mortar should be undertaken whilst the primer is still tacky. Should the primer dry before the application of the mortar then it must be removed and a further re-application carried out.

CLEANING

All tools shall be cleaned immediately after application using fresh water. Hardened materials must be cleaned mechanically.

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PACKAGING

KingRep Primer CM is available in 8 kg bags. Each bag will yield 6 liters of fresh slurry, so one bag will spread 6m²@ 1mm thickness/ coat.

COVERAGE

Approximately 5 – 8 m²/ liter when used as a primer.
Approximately 4 – 6 m² / liter when used as a curing aid.

STORAGE

Shelf life is 1 year when stored under cover, out of direct sunlight and protected from extremes of temperature.

Failure to comply with the recommended storage conditions may result in premature deterioration of the product or packaging. For specific storage advice consult KingKrete's Technical Services Department.

HEALTH AND SAFETY

As with all chemical products, care should be taken during use and storage to avoid contact with eyes, mouth, skin and foodstuffs. Treat splashes to eyes and skin immediately. If accidentally ingested, seek medical attention. Reseal containers after use. Use in well ventilated areas and avoid inhalation.

NOTE

Field service, where provided, does not constitute supervisory responsibility. For additional information contact your local KingKrete representative.

KingKrete Inc. reserves the right to have the true cause of any difficulty determined by accepted test methods.

QUALITY AND CARE

All products originating from KingKrete's manufacturing facilities are manufactured under a management system independently certified to conform to the requirements of the quality standard ISO 9001.

* Properties listed are based on laboratory-controlled tests.

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STATEMENT OF RESPONSIBILITY

The technical information and application advice given in this KingKrete Inc. publication are based on the present state of our best scientific and practical knowledge. As the information herein is of a general nature, no assumption can be made as to a product's suitability for a particular use or application and no warranty as to its accuracy, reliability or completeness either expressed or implied is given other than those required by law. The user is responsible for checking the suitability of products for their intended use.

NOTE

Field service where provided does not constitute supervisory responsibility. Suggestions made by KingKrete Inc. either orally or in writing may be followed, modified or rejected by the owner, engineer or contractor since they, and not KingKrete Inc. are responsible for carrying out procedures appropriate to a specific application.