KingRep ® ZR

One component epoxy based zinc rich primer for steel.

DESCRIPTION

KingRep ZR is a one component, epoxy based, zinc rich primer, designed to provide active anti-corrosion coating for steel reinforcement.

APPLICATIONS

KingRep ZR is used as protective and anti-corrosion coating for reinforcing steel bars.

KingRep ZR can be used on normal steel and galvanized steel as a primer for rust protection.

ADVANTAGES

- Provides a protective coating from corrosion for steel by active electro-chemical means.
- Easy application, single component.
- Cost effective, no waste and no pot life limitations.
- Excellent resistance to salt and chloride attacks.
- Compatible with all KingRep Range of concrete repair products from KINGKRETE.

STANDARDS

KingRep ZR complies with EN 1504-7 for reinforcement corrosion protection requirement principles 11.1 and 11.2.

METHOD OF USE

Substrate Preparation

The steel surface must be cleaned from any corrosion deposits and loose scale. It is recommended to use grit blasting for surface preparation. Steel brush can be used for steel cleaning. In all cases the steel should be clean and bright after cleaning.

Mixing

Stir contents thoroughly before use.

Application

Use a small brush to apply KingRep ZR on the prepared surfaces to achieve a uniform and full coverage. Particular attention should be given to the reinforcement steel back face.

TECHNICAL PROPERTIES

Colour:	Grey	
Specific gravity:	1.85 ± 0.05	
Tack free time:	35 - 45 min @ 20°C 10 - 15 min @ 35°C	
Minimum recoating time:	30 - 60 min @ 20°C 15 - 40 min @ 35°C	
Volume solid by weight: ASTM D2369	70 ± 5%	
Dry film thickness:	50 microns/coat	
Wet film thickness:	165 microns/coat	
VOC:	< 700 g/ltr	
Performance characteristics	**EN 1504-7 requirement**	**Measured value**
Corrosion protection: EN 15183	1.0 mm	≤ 0.30 mm

If an unbroken coating was not achieved by using one coat, a second coat should be applied within the over coating time.

Application should be carried out as soon as possible after finishing the surface preparation, and in all cases not exceeding 4 hours.

Notes:

KingRep ZR is not designed to be left exposed for extended period of time. Moreover under severe environmental conditions like marine or highly industrial environments, KingRep ZR is prone to the formation of insoluble white zinc oxide layer which must be removed from the surface before subsequent overcoating.

KingRep ZR should not be applied at temperatures below 5°C or exceeding 45°C.

Application of repair material should be carried out as soon as the KingRep ZR is fully dry.

Where corrosion has occurred due to the presence of chlorides, use high pressure water to clean the steel followed by grit blasting.

PACKAGING

KingRep ® ZR

KingRep ZR is available in 1 and 2.5 litre cans.

COVERAGE

The coverage rate is 6 m²/litre/coat to achieve dry film thickness of 50 microns per coat.

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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