

# KingRep<sup>®</sup> 5E

**One component polymer modified cementitious fairing coat and cosmetic repair mortar.**

## DESCRIPTION

KingRep 5E is a one component acrylic polymer modified powder. When mixed with water KingRep 5E produces a highly consistent, smooth, fine, trowel able mortar.

## APPLICATIONS

- ☞ For fair face concrete repair.
- ☞ As a thin layer render.
- ☞ As a skim coat for pin holes and minor honeycombed concrete repair.
- ☞ As pore sealer and leveling mortar.
- ☞ To produce a uniform surface for subsequent paint finish.

## ADVANTAGES

- ☞ Shrinkage controlled polymer modified cementitious repair mortar which reduces any potential cracking.
- ☞ Easy to apply, single component which requires only addition of water.
- ☞ Excellent adhesion to concrete, no independent primer or curing is required.
- ☞ Compatible with other types of protective coatings.
- ☞ Can be applied to feather edge thicknesses.
- ☞ Suitable for internal and external applications.
- ☞ Cost effective, hand applied no formwork is required.

## STANDARDS

KingRep 5E complies with the requirement of EN 1504-3 as non-structural repair mortar of class R2.

## METHOD OF USE

### Substrate preparation

All surfaces should be clean, sound and uncontaminated prior to the application of KingRep 5E. The prepared area should be cleaned thoroughly by brush and/or compressed air. The prepared area should be soaked with water immediately prior to the application of KingRep 5E.

### Priming

No independent primer is required.

### Mixing

To ensure proper mixing, a mechanically powered mixer or drill fitted with suitable paddle should be used. However for small quantities, KingRep 5E can be hand mixed using proper tools and bucket.

## TECHNICAL PROPERTIES @ 25°C:

|                                 |                               |
|---------------------------------|-------------------------------|
| Colour                          | Grey & white                  |
| Fresh wet density:              | 1.75 ± 0.10 g/cm <sup>3</sup> |
| Maximum aggregate size:         | 0.1 mm                        |
| Application temperature:        | 5 - 35°C                      |
| Application thickness:          | Up to 3 mm                    |
| Flexural strength:<br>ASTM C348 | ≥ 3 MPa @ 28 days             |
| Tensile strength:<br>BS 6319-7  | ≥ 1.2 MPa @ 28 days           |
| VOC:<br>ASTM D2369              | ≤ 10 g/ltr                    |

| PROPERTY   | EN 1504-3<br>REQUIREMENT<br>FOR CLASS R2 | MEASURED<br>VALUE    |
|--|--|----------------------|
| Compressive strength:<br>EN 12190                    | ≥ 15 MPa                                 | ≥ 18 MPa             |
| Adhesion bond:<br>EN 1542                            | ≥ 0.8 MPa                                | ≥ 1.5 MPa            |
| Thermal compatibility<br>freeze/ thaw:<br>EN 13687-1 | ≥ 0.8 MPa                                | ≥ 1.0 MPa            |
| Chloride ion<br>content:<br>EN 1015-17               | ≤ 0.05%                                  | 0.015%               |
| Dangers<br>substance:                                |  | Complies with<br>5.4 |

For one full bag, 7.5 - 8.5 litre of fresh water should be added to a clean container.

The powder is then added slowly to the water while mixing continuously with low speed mixer/drill (400 - 600 rpm). Mixing time should be continued for 3 minutes until uniform consistency is obtained.

To enhance the scratch resistance of KingRep 5E, an addition of KingBond SBR is advisable. 50% of the total mixing water shall be replaced by KingBond SBR range.

## PLACING AND FINISHING

KingRep 5E can be applied by steel trowel. The mixed mortar can be applied to the prepared substrates at up to 3 mm thicknesses. The applied mortar should be allowed to stiffen before trowelling to a smoother finish.



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## CURING

Curing is not required for KingRep 5E in normal ambient conditions. In the case of harsh weather conditions, such as high wind and temperatures, it is recommended to cure with KingKure 100A or wet hessian with polyethelene.

## THICKNESSES AND SIZE LIMITATIONS

KingRep 5E can be applied by single application from feather edge to 3 mm thickness. Higher thicknesses can be achieved by applying multiple layers.

## YIELD

Approximately 19 litre per 25 kg bag.

## PACKAGING

KingRep 5E is available in 25 kg bags.

## CLEANING

All tools should be cleaned immediately after finishing with water. Hardened materials can be cleaned mechanically.

## 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.

® = Registered trademark of the KingKrete-Group in many countries.

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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.