

# KingRep® 5

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

## DESCRIPTION

KingRep 5 is a one component acrylic polymer modified powder. When mixed with water KingRep 5 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.

## METHOD OF USE

### Substrate preparation

All surfaces should be clean, sound and uncontaminated prior to the application of KingRep 5. 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 5.

### 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 5 can be hand mixed using proper tools and bucket.

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

## TECHNICAL PROPERTIES @ 25°C

Colour	Grey, white
Working life:	40 - 60 min
Setting time:	2 – 3 hr
Mixed density:	1.7 ± 0.1 g/cm <sup>3</sup>
Compressive strength: ASTM C109/109M-02	≥ 10 MPa @ 28 days (wet cure)
Tensile strength: ASTM C190	1.5 MPa @ 28 days (wet cure)
Bond strength: ASTM C1583	≥ 1.5 MPa @ 28 days
Coefficient of thermal expansion:	6.5 to 12 × 10 <sup>-6</sup> m/1°C
Flexural strength: ASTM C348	≥ 4 MPa @ 28 days (wet cure)
Application temperature:	5 to 35°C
Maximum aggregate size:	0.1 mm
Recommended application thickness:	Upto 3 mm
VOC: ASTM D2369	< 10 g/ltr

*Note: Declared results above are for the grey colour.*

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 5, an addition of KingBond SBR is advisable. 50% of the total mixing water shall be replaced by KingBond SBR range.

## PLACING AND FINISHING

KingRep 5 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.

## CURING

Curing is not required for KingRep 5 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<sup>®</sup> 5

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

## YIELD

Approximately 19.5 litre per 25 kg bag.

## PACKAGING

KingRep 5 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

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### NOTE

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