

KingRep[®] 20

Two component polymer modified cementitious fairing coat and cosmetic repair mortar.

DESCRIPTION

KingRep 20 is a two component cementitious polymer modified mortar. When the two components are mixed together, KingRep 20 produces a highly consistent, smooth, trowel able and shrinkage compensated mortar with no cracking when applied in a thin layer.

APPLICATIONS

- ☐ For fair-faced concrete repair.
- ☐ As a thin layer render.
- ☐ As a skim coat for pin holes and minor honeycombed concrete repair.
- ☐ As pore sealer and levelling mortar.
- ☐ To produce a uniform surface for subsequent paint finish.
- ☐ As a skim coat to concrete surfaces prior to the application of protective coatings.

ADVANTAGES

- ☐ Shrinkage controlled polymer modified cementitious repair mortar which reduces any potential cracking.
- ☐ Excellent adhesion to concrete, no independent primer or curing is required.
- ☐ Compatible with other types of protective coatings.
- ☐ Can be applied from 1.0 mm - 10 mm thicknesses.
- ☐ Suitable for internal and external applications.
- ☐ Cost effective, hand applied no formwork is required.
- ☐ Excellent bonding.

METHOD OF USE

Substrate preparation

All surfaces should be clean, sound and uncontaminated prior to the application of KingRep 20. 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 20.

Priming

No independent primer is required.

Mixing

To ensure proper mixing, a mechanically powered mixer or drill fitted with suitable paddle should be used. (Slow speed drill of 400 - 500 rpm).

TECHNICAL PROPERTIES @ 25^oC:

Colour	Grey
Working life:	20 - 40 min
Setting time:	60 – 70 min
Fresh wet density:	1.65 - 1.75 g/cm ³
Compressive strength: ASTM C109/109M-02	≥ 6 MPa @ 28 days
Flexural strength: ASTM C348	≥ 3 MPa @ 28 days
Tensile strength: ASTM C307	≥ 1.1 MPa @ 28 days
Bond strength: ASTM C1583	> 1.0 MPa
Recommended application temperature:	5 to 35 ^o C
Application thickness:	1 to 10 mm
Maximum aggregate size:	0.35 mm
VOC: ASTM D2369	< 5 g/ltr

The above results are based on a powder : liquid ratio of 1 : 0.33 by weight.

Add the entire content of the liquid component to a suitable sized container. Mix for a short period. Add the entire content of the powder component and mix for about 3 minutes till achieving a complete uniform homogeneous smooth paste.

PLACING AND FINISHING

KingRep 20 can be applied by steel trowel. The mixed mortar can be applied to the prepared substrates at thicknesses between 1 - 10 mm. The applied mortar should be allowed to stiffen before trowelling to a smoother finish. Stiffening time is available and depending on the ambient temperature and wind speed. But it will be between 10 - 20 minutes after the application.

It is preferable to wet the applied surface with water using a clean brush, then the smoothing process can take its place using a steel trowel.

CURING

Curing is not required for KingRep 20 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 polyethylene.

KingRep® 20

LIMITATIONS

- ☐ For high temperature applications (above 35°C), it is recommended that the components to be stored in a cool place before the application.
- ☐ KingRep 20 should not be used when the temperature is below 5°C and expected to fall.
- ☐ The applied area should be protected from any rains fall within 12 hours after the application.
- ☐ Any overcoating finish should be done after 36 hours or after the layer is completely set.
- ☐ Deep voids should be filled with suitable repair products prior to the application of KingRep 20.

THICKNESS AND SIZE LIMITATIONS

KingRep 20 can be applied by single application from 1 mm to 10 mm thickness.

YIELD

Approximately 12 litre per 20 kg pack.

PACKAGING

KingRep 20 Powder component is available in 15 kg.
KingRep 20 Liquid component is available in 5 kg.

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 Qatar facility 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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KingKrete-Qatar/KingRep_20_02/v2/07_19

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.