

# KingProof® C1000

**Elastomeric acrylic cement modified waterproof coating for roofs.**

## DESCRIPTION

KingProof C1000 is a two component polymer modified cementitious, elastomeric waterproof coating for roofs and wet areas.

## APPLICATIONS

- ☐ For roofs waterproofing and wet areas.
- ☐ For waterproofing of water retaining structures and reservoirs.
- ☐ To provide protection for concrete substrates and masonry against carbon dioxide, chloride ions, water and de-icing salts.

## ADVANTAGES

- ☐ Highly flexible with fibre reinforcement.
- ☐ Waterproof, suitable for roofs and water retaining structure and basements.
- ☐ Breathable, water vapour preamble.
- ☐ Durable, excellent resistance to UV attack.
- ☐ Excellent protection against carbon dioxide, chloride ions and water.
- ☐ Non-toxic, suitable for drinking water.
- ☐ Cost effective, quick and easy brush or spray application.
- ☐ Suitable for internal and external applications.
- ☐ Able to withstand foot traffic.
- ☐ Able to withstand high positive and negative pressures.

## STANDARDS

KingProof C1000 is suitable for use in contact with potable water when tested in accordance to BS6920.

## METHOD OF USE

### Substrate Preparation

The surfaces to be coated should be clean, sound, and free from any contamination. Remove any traces of curing compound, laitance, organic growth or any other loose materials. This is best obtained by using high pressure water or light grit blasting.

Honey combing, damaged or deteriorated concrete exists, the substrate should be repaired using suitable low permeability repair mortar from KINGKRETE repair systems before commencing the coating.

### Priming

No primer is required, but substrates should be pre-soaked with clean water prior to application of KingProof C1000.

## TECHNICAL PROPERTIES @ 25°C:

Mixed density:	1.75 ± 0.05 g/cm <sup>3</sup>
Working time:	45 min
Colour:	Grey or white
Mixing ratio:	5.1 kg liquid polymer with 10.9 kg powder
Minimum application temperature:	5°C
Bond strength: ASTM D4541-02	> 1.6 MPa
Static crack accommodation:	1 mm
Permeability (2 mm thickness): DIN 1048	Pass @ positive water pressure > 12 bars Pass @ negative water pressure > 6 bars
Elongation at break: (without reinforcement) @ 4 mm thickness ASTM D412	> 15% dry curing after 28 days > 10% wet curing after 28 days
Maximum grain size:	0.5 mm
Initial setting:	40 - 50 min
Final setting:	2 - 3 hr

### Mixing

To ensure proper mixing, a mechanically powered mixer or drill fitted with suitable paddle should be used.

The 5.1 kg of KingProof C1000 liquid should be added to a clean container. The 10.9 kg powder is then added slowly to the liquid while mixing continuously with low speed mixer/ drill (400 - 600 rpm). Mixing time should be continued for 3 minutes until a uniform consistency is obtained.

### Application

KingProof C1000 can be applied by brush or spray. The mixed material should be brushed well into the surface. Strike off with the brush in one direction. Care must be taken not to spread the material too thin. When the material begins to drag, do not add any water, but dampen the surface again.

Leave the first coat overnight to cure before applying the second coat. The second coat shall be applied by brush in a similar way to the first layer but preferably perpendicular to the previous layer to ensure good bond and coverage.

Areas subjected to foot traffic fibre glass mesh (2\*2) needs to be installed between the two coats of KingProof C1000.

# KingProof<sup>®</sup> C1000

## REMARKS

KingProof C1000 should not be applied to frozen substrate or if ambient temperature is below 5°C or expected to fall below 5°C.

## CLEANING

All tools should be cleaned immediately after finishing by clean water. Hardened materials should be cleaned mechanically.

## PACKAGING

KingProof C1000 is available as 16 kg packs (5 kg polymer & 11 kg powder).

## COVERAGE

Approximately 9 m<sup>2</sup> for 1 mm thickness.

## 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.

## K KK-SAS-03.1-PF-C1000-R3-2601

### 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.