

KingProof[®] C100

Acrylic cement modified one component waterproof coating.

DESCRIPTION

KingProof C100 is a one components; flexible polymer modified cementitious waterproof coating suitable for internal and external applications. KingProof C100 provides a hardwearing, seamless, waterproof membrane for potable water retaining structures, tanks, basements, foundations and culverts.

APPLICATIONS

- ☞ Waterproofing for water retaining structures and reservoirs.
- ☞ Waterproofing of basements, roofs, and foundations.
- ☞ Waterproofing of bathrooms and wet areas.
- ☞ Protection of concrete substrates and masonry against carbon dioxide, chloride ions, water and de-icing salts.

ADVANTAGES

- ☞ Single component, need only water additions.
- ☞ Non-toxic, approved for use in contact with potable water.
- ☞ Fungus, mould resistant.
- ☞ Excellent bond to porous and non-porous surfaces.
- ☞ Breathable.
- ☞ Durable, excellent protection against carbon dioxide, chloride ions and water.
- ☞ Cost effective, quick and easy brush or spray application.
- ☞ Suitable for internal and external applications.

METHOD OF USE

Substrate Preparation

The surfaces to be coated should be clean, sound, and free from 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. Substrate containing honey combing, damaged or deteriorated concrete should be repaired using suitable repair mortars from KINGKRETE repair systems before coating.

Priming

No special primer is required, but substrate should be pre-soaked with clean water prior to application of KingProof C100.

TECHNICAL PROPERTIES @ 25⁰C:

Mixed density:	1.85 ± 0.05 g/cm ³
Working time:	1 hr
Colour:	Grey powder
Mixing ratio:	4.7 ltr water/15 kg bag
Open time:	10 min
Initial setting:	4 - 5 hr
Application temperature:	5 - 45 ⁰ C
Flow:	
Brushable consistency @ W/P	0.31
Sprayable consistency @ W/P	0.35
Compressive strength: ASTM C109 (mortar consistency)	≥ 15 MPa @ 28 days
Tensile adhesion strength: (on concrete) ASTM 4541-02	> 1.0 MPa
Tensile strength: BS 6319, Part 7 (mortar consistency)	≥ 1.5 MPa
Flexural strength: BS 6319, Part 3 (mortar consistency)	≥ 4 MPa
Water permeability: DIN 1048 (1.5 bars)	0% @ 2 mm thickness

Mixing

To ensure proper mixing, a mechanically powered mixer or drill fitted with suitable paddle should be used. Add the 4.7 litre water to a clean container.

The powder component 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 a uniform consistency is obtained.

KingProof® C100

APPLICATION

KingProof C100 can be applied by brush, or spray machines. The mixed material should be brushed well into the surface. Strike off with brush in one direction.

Care must be taken not to spread the materials too thin. The first coat should be applied at a wet film thickness of 1mm. When the material begins to drag, do not add any water, but dampen the surface again.

A minimum of 3 - 5 hours, depending on the prevailing ambient temperature, should be given for the first coat to cure before applying the second coat. If the first coat is fully dried, pre-soaking is needed before applying the second coat.

For brush applications, the second coat should be applied in a perpendicular direction to the previous layer to ensure good bond and coverage.

To achieve a smooth finish, it is recommended to finish the surface with a trowel immediately after brushing the second coat. The total dry film thickness for both coats should be 2 mm.

REMARKS

- Ⓜ KingProof C100 should not be applied to frozen substrates or if ambient temperature is below 5°C or expected to fall below 5°C.
- Ⓜ The area must not be exposed to moving water during application.
- Ⓜ KingProof C100 can be submerged with water after 5 – 7 days of application depending on ambient temperatures and relative humidity.

CLEANING

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

PACKAGING

KingProof C100 is available in 15 kg bags.

COVERAGE

Approximately 10.6 m²/15 kg for one coat @ 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 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.

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

KingKrete-Qatar/KingProof_C100_02/v2/07_21

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.