

KingProof® C400

Two-component, acrylic-modified, flexible cementitious waterproofing and protective coating.

DESCRIPTION

KingProof C400 is a two-component, acrylic-modified cementitious coating applied by brush, roller or trowel to waterproof and resurface concrete, masonry and most other construction substrates. It provides an effective barrier to waterborne salts and atmospheric gases and, once applied, forms a hard-wearing, seamless, waterproof membrane suitable for roofs and foundation protection.

APPLICATIONS

- ▣ Refacing and evening out variations in concrete surfaces
- ▣ Waterproof lining for water-retaining structures
- ▣ Coating of seawater channels
- ▣ Sealing and coating of tie-bar holes to ensure water tightness
- ▣ Foundation protection
- ▣ Waterproof coating for wet areas and sunken slabs
- ▣ Backing to marble and granite to prevent water ingress and surface staining
- ▣ Protection of concrete against carbonation and chloride attack

ADVANTAGES

- ▣ Protects against carbonation – a 1 mm coating provides anti-carbonation cover equivalent to over 800 mm of concrete
- ▣ Waterproof – suitable for internal and external waterproofing
- ▣ Excellent adhesion – bonds to porous and non-porous surfaces
- ▣ Flexible – accommodates the thermal movement of concrete structures
- ▣ Suitable for contact with potable water – can be used to line concrete water tanks
- ▣ Vapour permeable – repels water while allowing the concrete to breathe, preventing osmosis
- ▣ Compatible with damp surfaces – can be applied to 24-hour-old concrete, giving immediate protection

STANDARDS

KingProof C400 has been tested for suitability for contact with potable water and for resistance to water penetration under pressure, initial surface absorption and carbonation, in accordance with recognised international test methods.

TECHNICAL PROPERTIES

Colour	Grey
Density	1,940 kg/m ³
Volatile organic compound (VOC) content	0.5 g/ltr
Water-vapour transmission	Sd < 1.5 m
Water penetration under pressure	7 bar – no leakage at 2 mm DFT
Chloride-ion diffusion resistance	Not measurable after 24 months of testing
Elongation at break	> 5% (unbonded)
Coverage	1.94 kg/m ² per 1 mm thickness
Recommended thickness	2 mm DFT

METHOD OF USE

Surface Preparation

Correct substrate preparation is critical for optimum performance. Surfaces must be structurally sound (direct tensile strength greater than 1.5 MPa), clean and free from laitance, loose particles, oil, grease, old coatings, curing compounds and any other contamination. Mechanical wire brushing may be suitable for small areas. Prior to application, fill holes and irregularities with a suitable KingKrete repair mortar to achieve a smooth, level surface.

Mixing

KingProof C400 is supplied in pre-measured units and should be mixed on site in clean containers. Slowly add the powder component to the liquid component and mix using a slow-speed (300 rpm) drill fitted with a suitable paddle until homogeneous. Mix only as much material as can be used within one hour. Do not apply to dry concrete: saturate the surface with clean water and apply while still damp (saturated surface dry).

Application

Apply using a short, stiff-bristle brush or roller; trowel application may be undertaken where required. For heavy 6 – 10 mm depressions and honeycombing, use less gauging liquid and mix to a stiffer consistency. Where more than one coat is required, apply each subsequent coat after the previous coat has dried; for general resurfacing each coat should be a minimum of 1 mm thick. Spray application is recommended for large areas.

KingProof® C400

Two-component, acrylic-modified, flexible cementitious waterproofing and protective coating.

PACKAGING

KingProof C400 is available in 20 kg double packs, consisting of 5 kg liquid (component A) and 15 kg powder (component B).

STORAGE

KingProof C400 has a shelf life of 6 months in original, unopened packaging when stored indoors between 5°C and 35°C, out of direct sunlight. Do not allow the material to freeze, as this will render it unusable.

HEALTH AND SAFETY

As with all chemical products, avoid contact with the eyes, skin and mouth and use in well-ventilated areas. Treat any splashes to the eyes and skin immediately. For further information, refer to the Safety Data Sheet.

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 Middle East facility are manufactured under a management system independently certified to conform to the requirements of the quality standards ISO 9001, ISO 14001 and ISO 45001.

* Properties listed are based on laboratory-controlled tests.

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

Ref: KK-08080-MEA-R01 | Issue: 01.2026

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.