

# KingProof<sup>®</sup> PP100

One component, polyurethane elastomeric waterproofing membrane.

## DESCRIPTION

KingProof PP100 is a fast-curing, cold applied, one component, thixotropic, moisture curing, modified polyurethane fluid based on elastomeric waterproofing membrane.

It produces a tough rubber - like seamless finish with excellent surface adhesion to most types of substrates and excellent elasticity.

## APPLICATIONS

Waterproofing and protection of:

- ☐ Vertical and horizontal substrates.
- ☐ Roofs.
- ☐ Cementitious substrates.
- ☐ Wet areas and irrigation channels.
- ☐ Bathrooms.
- ☐ Bitumen membranes (for repair also).
- ☐ Foundations.
- ☐ Closed spaces with high humidity like planters.

## ADVANTAGES

- ☐ Easily applied by brush, squeegee blade or airless spray.
- ☐ Fast curing.
- ☐ Excellent adhesion to almost any surface.
- ☐ Excellent thermal resistance and service temperatures.
- ☐ Stable at a wide temperature range.
- ☐ Excellent mechanical properties, high elongation, high tensile and tear strength, high abrasion resistance.
- ☐ Thixotropic consistency, easily applied on vertical surface and complex shapes without running or bubbling.
- ☐ As a pitch based system, it gives an excellent chemical resistance.
- ☐ Provides a uniform, joint free, seamless membrane.
- ☐ UV stable, does not harden or become brittle.
- ☐ Good oxidation stability.
- ☐ Can be easily repaired if damaged.

## STANDARDS

KingProof PP100 complies with ASTM C836.

## TECHNICAL PROPERTIES

Colour	Black
Specific gravity	1.20 ± 0.05
Tack free time:	3 – 5 hr @ 25°C & 55% RH
Final cure time:	48 hr @ 25°C & 55% RH
Recoat time:	Within 24 - 48 hr
Service curing time for full cured membrane properties @ 1.2 mm thickness:	7 days @ 25° C & 55 RH
Service temperature:	-40 to 80°C
Hardness shore A: ASTM D2240, DIN 53505, ISO R868	35 ± 5
Tensile strength at break: ASTM D412	≥ 1.6 MPa
Elongation: ASTM D412	> 650%
Recovery (100% elongation): 24 hr	100%
Substrate application temperature	10 to 40°C
Weathering test: BS 3900	Passed (1000 hr)
Water permeability: DIN 1048 (5 bars)	No leakage
Adhesion in Peel, after water immersion: ASTM C794	> 85 N
Water vapour transmission: ASTM E96	1.25 g/m <sup>2</sup> .hr

## METHOD OF USE

### Surface Preparation

The surface should be clean, dry, sound and free from oil, grease and wax contamination. Cement laitance, loose particles, mould release agent or curing membranes must be removed. Fill surfaces irregularities with a suitable product. New concrete structures need to dry for at least 28 days.

### PRIMING

For porous concrete substrates the following priming procedures can be adopted; mix KingProof PP100 and KINGKRETE solvent PU with a ratio of 1 : 1.

Use Aquathane Primer P for bituminous surfaces, old and failed membranes, metal, glass and timber.

# KingProof® PP100

## APPLICATION

For spraying with airless spray machine, KINGKRETE Solvent PU may be used with 5 - 10%. For any mixing done on site, low speed (300 rpm) mixer or electric drill should be used. Apply at least two coats. It is not to leave more than 24 hours between coats.

KingProof PP100 is a UV stable, and it can be left exposed to UV light. However, if extra heat and light stability is needed, Aquathane Reflect can be used to overcoat cured KingProof PP100.

It is recommended to use Aquathane Scrim as a reinforcement by embedding it into the still wet membrane, for upstand joints, complete coverage of old application, reinforcing joints on timber, etc.

## CLEANING

All tools should be cleaned after finishing with paper towels and then wipe by using KingKrete Solvent PU. Do not try to clean rollers.

## PACKAGING

KingProof PP100 is available in 20 kg buckets. KingProof Reflect silver colour is available in 5 and 25 litre buckets.

Kingproof Scrim is available in 1 m x 100 LM rolls. KingProof Primer P is available in 5 and 25 litre buckets.

## CONSUMPTION

- ☐ First coat: 0.8 - 0.9 ltr/m<sup>2</sup>.
- ☐ Second coat: 0.8 - 0.9 ltr/m<sup>2</sup>.
- ☐ Total consumption: 1.6 - 1.8 kg/m<sup>2</sup> to give 1.2 mm dry film 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.

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## KingKrete-Qatar/KingProof\_PP100\_02/v2/07\_18

### 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

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