

# KingProof® PUB100

One component, polyurethane-bitumen liquid membrane for flashing, waterproofing and protection.

## DESCRIPTION

KingProof PUB100 is a quick-curing, one component, thixotropic, bitumen-extended polyurethane fluid based on pure elastomeric hydrophobic polyurethane resin and is extended with chemically polymerised virgin bitumen.

It produces a hydrophobic, elastic membrane with very strong adhesion to most types of substrate, as well as bituminous, and excellent mechanical and chemical resistance properties. It is ideal for application on vertical surfaces: no running, no blubbing.

## APPLICATIONS

Waterproofing and protection of:

- ☐ Foundations.
- ☐ Wet areas (Bathrooms, kitchens, etc.).
- ☐ Shaded roofs (i.e. unexposed to UV).
- ☐ Vertical and horizontal substrates.
- ☐ Cementitious substrates.
- ☐ Irrigation channels.
- ☐ Gypsum and cement boards.
- ☐ Asphalt membranes (for repair also).

## ADVANTAGES

- ☐ Fast curing.
- ☐ Excellent adhesion to almost any surface.
- ☐ Excellent thermal resistance and service temperatures.
- ☐ Cold Resistance: the film remains elastic down to minus 40°C.
- ☐ 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.
- ☐ Excellent chemical resistance.

## LIMITATIONS

- ☐ KingProof PUB100 should not be applied over unsound substrates.
- ☐ KingProof PUB100 is not recommended for areas exposed to UV rays.

## STANDARDS

KingProof PUB100 complies with ASTM C836.

## TECHNICAL PROPERTIES @ 23°C & 55% RH

Colour	Black
Specific gravity	1.20 ± 0.05
Tack free time:	8 – 10 hr
Recoatable time:	12 - 24 hr
Light pedestrian traffic time	48 hr
Final cure	7 days
Shore A Hardness: ASTM D2240	25 ± 5
Tensile strength: ASTM D412	≥ 3.5 MPa
Elongation at break: ASTM D412	≥ 470%
Adhesion to concrete: ASTM D4541	≥ 1.0 MPa
Crack bridging: ASTM C1305	Pass
Hydrolysis resistance: (KOH 8% 10 days)	Pass
Service temperature	-40 to 80°C

## 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. Maximum moisture content should not exceed 5%. New concrete structures need to dry for at least 28 days.

Important: Do not wash surface with water.

### PRIMING

It is recommended to prime all kinds of substrates using KingProof Primer PW. The primer is designed to significantly improve the adhesion between KingProof PUB100 and all kind of non-porous substrates such as steel, glassy tiles and aluminum. It will also stabilize and fortify weak and porous substrates prior to the application of KingProof PUB100.

KingProof Primer PW should be applied using a brush or roller at a rate of 0.16 liters/m<sup>2</sup> to achieve around 70 - 75 micron DFT.

Leave the primer to cure for 24 hours before the application of KingProof PUB100.

## NOTE

# KingProof® PUB100

It is always recommended to test the adhesion between the substrates and KingProof PUB100 on small area onsite prior to proceeding the works in order to ensure that the substrate is well prepared and compatible with the product.

## APPLICATION

For spraying with airless spray machine, KingProof PUB100 can be diluted by 5 - 10% using KINGKRETE Solvent PU (consult KINGKRETE's technical department for further details). For any mixing done on site, low speed (300 rpm) mixer or electric drill should be used. Apply the material with roller or brush. Apply at least two coats. Do not leave more than 24 hours between coats.

## 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 PUB100 is available in 5 and 20 kg packs.

## CONSUMPTION

- ☐ First coat: 0.7 - 0.9 kg/m<sup>2</sup>.
- ☐ Second coat: 0.7 - 0.9 kg/m<sup>2</sup>.
- ☐ Total consumption: 1.4 - 1.8 kg/m<sup>2</sup> to give 1.0 - 1.3 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 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.

### KK-SA-03.1-PF-PUB100-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.