

# KingProof<sup>®</sup> PUW100

**One component, water based polyurethane liquid membrane for waterproofing and protection.** directly applied to porous and non-porous substrates.

## DESCRIPTION

KingProof PUW100 is an environmentally friendly, one component, water based, modified polyurethane fluid, based on pure elastomeric hydrophobic resin.

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:

- 🔧 Exposed roofs, balconies and decks.
- 🔧 Wet areas, kitchens and bathrooms (under tiles).
- 🔧 Basements and retaining walls.
- 🔧 Bridge platforms.
- 🔧 Internal and external applications.
- 🔧 For concrete, wood, metal, gypsum boards, etc.
- 🔧 Over bituminous waterproofing membranes.

## ADVANTAGES

- 🔧 Free from solvents, tar, bitumen or any hazardous substance.
- 🔧 Low VOC content.
- 🔧 Excellent adhesion to almost any surface.
- 🔧 Excellent UV Resistance.
- 🔧 One component – ready to use.
- 🔧 High tensile strength and elongation.
- 🔧 Crack bridging capabilities.
- 🔧 Good chemical resistance.
- 🔧 The white colour reflects much of the solar energy reducing the internal temperature of the building.

## STANDARDS

Conforms to the requirements of LEED EQ Credit 4.2: Low  
- Emitting Materials: Paints & Coatings: VOC < 100 g/l.

## METHOD OF USE

### Substrate Preparation

Surfaces to receive KingProof PUW100 should be clean, sound and free from oil, grease, dirt and loose particles. Substrates should be dry, with no standing water. Spalled surfaces, cracks and defected concrete should be repaired. New concrete substrates should be at least 14 days old.

### Priming

KingProof PUW100 does not require priming, it can be

## TECHNICAL PROPERTIES

Colour	Grey, white & black
Specific gravity	1.25 ± 0.05
Solid content	
By Volume	50 ± 2%
By Weight	60 ± 2%
Tensile strength: ASTM D412, Die C	> 2 MPa @ 23°C
Elongation at break: ASTM D412, Die C	>400%
Shore A Hardness: ASTM D2240	60 ± 5
Water permeability*: DIN1048 (5 bars)	Nil
Adhesion to concrete: ASTM D4541	> 1.9 MPa
Crack bridging: ASTM C1305	3 mm @ 23°C
Service Temperature:	-5 to +70° C

\*Tested at 500 microns DFT.

For extremely porous surfaces, it is recommended to dilute KingProof PUW100 with water 1:1 and apply it as a primer coat @ 5 m<sup>2</sup> /ltr and allow it to dry.

## APPLICATION

KingProof PUW100 can be applied by brush, roller or airless spray. For airless spray, around 15% dilution with water is recommended. For any mixing done on site, low speed (300 rpm) mixer or electric drill should be used. Apply at least two coats.

The second coat shall be applied in a similar way to the first layer but preferably perpendicular to the previous layer to ensure good bond and coverage.

## NOTES

- 🔧 KingProof PUW100 should not be subjected to permanent water immersion.
- 🔧 Do not apply KingProof PUW100 on substrates that have rising damp.
- 🔧 KingProof PUW100 should not be applied over green concrete or freshly laid cementitious screed/mortar.
- 🔧 For highly trafficable areas, it is recommended to

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cover KingProof PUW100 with a proper topcoat material.

- Do not apply more than 0.65 kg/ m<sup>2</sup> per coat for layers without reinforcement.

## CONSUMPTION

First coat: 0.55 - 0.65 ltr/m<sup>2</sup>.

Second coat: 0.55 - 0.65 ltr/m<sup>2</sup>.

Total consumption 1.1 - 1.3 ltr/m<sup>2</sup> to give approximately 500 microns dry film thickness.

## CLEANING

All tools should be washed and cleaned immediately after use with clean water. Hardened material could only be removed mechanically.

## PACKAGING

KingProof PUW100 is available in 20 kg and 25 kg buckets.

## 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.

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### 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.