KingProof® PUT100

Transparent aliphatic polyurethane liquid membrane for waterproofing and protection.

DESCRIPTION

KingProof PUT100 is a one component, high solids, polyurethane coating that cures by reacting with the humidity in the atmosphere to form a transparent, strong elastic film with excellent UV resistance.

KingProof PUT100 is based on pure elastomeric hydrophobic polyurethane resin that provides excellent mechanical, chemical and thermal resistance properties.

APPLICATIONS

KingProof PUT100 is designed for waterproofing and protection of:

- Exposed roofs, balconies.
- Tiles.
- Natural stone.
- Wood, metal and galvanized steel.
- Internal and external applications.
- Terraces.
- Concrete.

ADVANTAGES

- Transparent.
- One component – ready to use.
- Excellent weather and UV resistance.
- Excellent thermal resistance.
- Easily applied.
- Excellent mechanical properties.
- Cold Resistance: the film remains elastic down to -40°C.
- Good chemical resistance.
- Water vapor transmission.
- Can be applied in thick, bubble-free, coats.

LIMITATIONS

- Do not use on unsound substrates.
- Since KingProof PUT100 cures with moisture, low humidity conditions will extend the tack-free time and recoat time.

TECHNICAL PROPERTIES

Colour:	Transparent
Density:	1.00 ± 0.05 g/cm³
Tack free time:	6 - 8 hr
Recoating time:	6 - 24 hr
Service temperature	-40 to 80°C
Tensile strength: ASTM D412	≥ 20 MPa @ 7 days
Elongation: ASTM D412	≥ 150% @ 7 days
Shore D Hardness: ASTM D2240	45 ± 5 @ 7 days
Water vapour transmission: ASTM E96 (Water method)	0.8 g/m².hr

METHOD OF USE

Substrate Preparation

All surfaces should be clean, dry, sound and free from oil, grease and wax contamination, surfaces must be free of any dust or loose particles before product application. Use suitable methods like vacuuming or sweeping. Maximum moisture content should not exceed 5%.

Any possible surfaces irregularities or defects should be repaired before application. Consult KINGKRETE's Technical Department for the best repair material.

For Concrete Surfaces: The surface must be structurally sound, free from oil, grease and other forms of contamination. Cement laitance, loose particles, release agent or curing membranes must be removed.

REMARKS

- New concrete structures need to dry for at least 28 days.
- Concrete substrate should be below 85% Relative humidity.
- Concrete substrate temperature should be between 5 - 35°C.

APPLICATION

KingProof PUT100 should be applied over the prepared surface using a roller in 2 successive layers with a minimum total consumption of

0.8 litre/m2.

For nonporous substrates:

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Apply KingProof PUT100 as soon as KingProof Primer PU coat dries (after 15 - 20 min). Do not leave more than 24 hours between coats.

For Porous substrates:

Apply KingProof PUT100 onto the substrate after a minimum of 12 hours and not later than 2 days from applying KingProof Primer PU. Do not leave more than 24 hours between coats.

PRIMER

The following priming options are available depending on the substrate surface:

For nonporous substrates:

Non porous substrates such as glazed ceramic tiles should be primed using KingProof Primer PU.

Apply KingProof Primer PU at rate of (50 - 60 ml/m²), wipe the entire surface with the primer using a clean cloth, do not leave any pools of fluid and do not leave any untreated spots.

For porous substrates:

Porous substrates such as marble and natural stones should be primed using KingProof Primer PU.

Apply KingProof Primer PU at maximum rate of (200 ml/m²) using brush or roller, do not leave any pools of fluid and do not leave any untreated spots.

MIXING

Stir KingProof PUT100 well before use, mix for 2 - 3 minutes manually or use a slow speed mixer fitted with suitable paddle until a uniform consistency is achieved.

No thinning is required but KINGKRETE Solvent PU may be used.

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 PUT100 is available in 20 litre pails.

CONSUMPTION

Minimum total consumption: 0.8 - 1.0 litre/m², to achieve a dry film thickness of 0.65 – 0.85 mm. Consumption will depend on substrate type and texture.

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 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.

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Ref: KK-08041-MEA-R01 | Issue: 01.2026

STATEMENT OF RESPONSIBILITY

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NOTE

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