



# KingProof<sup>®</sup> APP100

**High performance – APP modified waterproofing membrane polyester reinforced.**

## DESCRIPTION

KingProof APP100 is a factory preformed APP modified bituminous waterproofing and roofing membrane polyester reinforced.

Manufactured in 4 mm & 4 mm slated membranes.

## APPLICATIONS

KingProof APP100 due to its high malleability, it is specially designed for effective use in the waterproofing of below grade structures, foundations, basements, plazas, as well as in new roofing, re-roofing, maintenance roofing, flashing, and anywhere a high performance waterproof membrane is required in commercial, industrial, residential, institutional and other civil engineering applications.

## ADVANTAGES

KingProof APP100 is factory manufactured five layer membrane namely: polyethylene film or sand finished or slated finished facing, APP modified bitumen compound, non-woven polyester reinforcement weighing 160 g/ m<sup>2</sup>, APP modified bitumen compound and flammable polyethylene base film. This balanced combination of plastomeric compound and polyester reinforcement provides KingProof APP100 membranes with excellent mechanical properties.

The polyester reinforcement provides the membrane with excellent dimensional stability and puncture resistance. The specially formulated mixture of APP modified bitumen gives the membrane:

- ❑ Excellent resistance to atmospheric agents and chemical attacks.
- ❑ High malleability to accommodate difficult applications as well as structural movements.
- ❑ High flexibility for applications at below zero temperatures with no physical strains.

The plastomeric compound and the properties of the reinforcement are carefully and correctly balanced to obtain excellent tensile strength, tear resistance, elongation and puncture resistance.

KingProof APP100 is applied by propane gas torch to a prepared substrate.

The following are general guidelines for installation:

### Priming

Use D-41 PRIMER on concrete decks and up stands.

### Alignment

Unroll KingProof APP100 rolls and check for alignment before bonding. Overlaps should be minimum 100 mm along the sides and not less than 150 mm at roll ends. Re-roll KingProof APP100 and prepare for bonding.

### Bonding

Use propane gas torch to heat substrate and underside of KingProof APP100 membrane until the clear polyethylene film is burned away and the polymeric compound begins to melt (its color turns from shiny to matt). Press membrane firmly against substrate.

### Sealing

Excess compound should be smoothed and pressed into the seam (using hot trowel).

### Flashing

Flash all terminations , up stands and projections through the slab.

## PACKAGING

KingProof APP100 is available in 1 x 10 meter roll size. KingProof APP100 4 mm 23 rolls/pallet.

KingProof APP100 4 mm slated 23 rolls/pallet.

## AVAILABILITY

KingProof APP100 is available through authorized dealers in the area.

## METHOD OF USE

## TECHNICAL PROPERTIES

# KingProof<sup>®</sup> APP100

Membrane length: EN 1848-1	≥ 10 m, (-1%)
Membrane width: EN 1848-1	≥ 1.0 m, (-1%)
Membrane thickness: EN 1849-1	4.0 mm ± 5%
Tensile strength at break: EN 12311-1 Longitudinal Transversal	650 N/ 5 cm ± 20% 550 N/ 5 cm ± 20%
Elongation at break: EN 12311-1 Longitudinal Transversal	45% ± 15 45% ± 15
Tear resistance (nail test): EN 12310-1 Longitudinal Transversal	200 N ± 30% 200 N ± 30%
Resistance to static loading: EN 12730 (A)	≥ 15 kg
Impact resistance: EN 12691	≥ 900 mm
Dimensional stability: EN 1107-1	≤ ± 0.5%
Flexibility at low temperature: EN 1109	≤ 0°C
Flow resistance at elevated temperature: EN 1110	≥ 120°C
Watertightness (method A): EN 1928	≥ 60 kPa
Resistance to water vapour diffusion: EN 1931	20.000
Reaction to fire: EN 13501-1	Class E
Resistance to external fire: EN 13501-5	Class F roof

## 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.

## K KK-SAS-03.1-PF-APP100-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.