KingFloor ® PU Seal

High build PU coating for floor surfaces.

DESCRIPTION

KingFloor PU Seal is a two components solvent free modified polyurethane-based high-build flexible coating that provides floor surfaces with a seamless, hard wearing hygienic and cosmetically attractive finish.

KingFloor PU Seal is applied by brush or roller and has very good durability towards pedestrian and vehicular traffic. It also has very good resistance towards many of the chemicals commonly found in an industrial environment. (See the chemical resistance table).

KingFloor PU Seal can be supplied in a variety of colors and slip resistant finishes can be produced for every demanding situations.

ADVANTAGES

- Excellent chemical resistance.
- Resistant to de-icing.
- Semi-flexible, can bridge minor cracks.
- Water tight.
- Comes in a variety of standard colors.
- UV resistant. Sligh color change may occur under direct sunlight without affecting the performance.

METHOD OF USE

Surface Preparation

The surface must be clean, dry (less than 75% RH measured by hygrometer) and free from dust laitance, oils, paints or other forms of contamination. Grit blasting can be used to remove laitance and surface contamination.

Priming

Surfaces must be primed with KingFloor Primer prior to application of KingFloor PU Seal.

Note: More than one coat of KingFloor Primer may be required for highly porous or textured surfaces.

Mixing

Taking care to ensure that the bottom and sides are thoroughly scraped, transfer the entire contents of the color into the base, mix until achieve a uniform color, then add the hardener.

Note: Never mix KingFloor PU Seal by hand as this could lead to areas of uncured material.

TECHNICAL PROPERTIES @ 25^{0}C:

Mixed density:	1.4 gm/ cm³
Over coating time: (when 2 coats are needed)	Within 24 hrs.
Pot life:	≈ 120 mins.
Initial cure:	24 hrs.
Full cure:	7 days
Compressive strength: BS6319, Part 2:1983	> 50 MPa
Flexural strength: BS6319, Part 3:1990	> 30 MPa
Tensile strength: BS6319, Part 7:1985	> 12 MPa
Water absorption: ASTM D570	< 1%

Application

Once mixing is complete, transfer the KingFloor PU Seal to a roller tray, and using a medium-pile simulated sheepskin roller, apply it evenly over the surface.

SLIP RESISTANT FINISHES

Whilst the KingFloor PU Seal primer is still wet, completely blind it with an appropriate grade of Aggregate with a coverage rate of 0.5 - 0.8 kg/ m².

Allow the KingFloor PU Seal primer to cure for the specified time then vacuum off the excess aggregate. Then the KingFloor PU Seal is applied on the Antislip substrate with an approximate application rate of 0.5 kg/ m².

LIMITATION

- KingFloor PU Seal system should not be applied onto surfaces known to suffer from damp rising or RH greater than 80%.
- KingFloor PU Seal should not be applied at temperatures below 8ºC.
- For temperatures above 35ºC the following steps need to be done:
  i. Material needs to be stored in a cool place away from direct sunlight.
  ii. Equipments to be into direct contact with the material, needs to be cool.
  iii. Application during the coolest time of the day is preferable.

CLEANING

KingFloor ® PU Seal

Once mixing and application are complete, tools can be cleaned with KINGKRETE solvent.

PACKAGING

KingFloor PU Seal Primer is available in 5 kg packs.
KingFloor PU Seal is available in 5 kg packs (3.6 liters) and 15 kg packs (10.7 liters).
Antislip Aggregates is available in 25 kg bags.

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.

Chemical Resistance Chart

KingFloor PU Seal will resist spillages of a wide variety of chemicals. And a result of continuous submersion for 7 days can be seen in the following table @ 25ºC:

Hydrochloric Acid 36%	Resistant*
Nitric Acid 10%	Resistant*
Phosphoric Acid 20%	Resistant*
Sulphuric Acid 20%	Resistant*
Lactic Acid 10%	Resistant*
Oleic acid	Resistant*
Citric Acid 25%	Resistant*
Sodium Hydroxide 50%	Resistant*
Potassium hydroxide	Resistant*
Sodium Chloride (sat.)	Resistant*
Brake fluid	Resistant*
Engine oil	Resistant*
Kerosene	Resistant*
Ammonia Solution 10%	Resistant*
White spirit	Resistant*
Xylene	Resistant*
Acetone	Resistant*
Chlorinated water	Resistant*
Vinegar	Resistant*
Dead sea water	Resistant*
Diesel	Resistant*

Note: Discoloration does not affect the material physical properties.

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.

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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.

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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.

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