

KingFloor[®] PU Seal Extra

Solvent based, PU floor and wall coating.

DESCRIPTION

KingFloor PU Seal Extra is a hard wearing, solvent based, modified PU flexible coating, designed to provide a hard, semi-gloss coating to concrete floors, walls, ceiling and other substrates.

APPLICATIONS

KingFloor PU Seal Extra is used as protective, decorative and hard wearing coating for floors or walls in many applications including:

- ☐ Soft drink and beverage production areas.
- ☐ Dairies production areas.
- ☐ Show rooms.
- ☐ Industrial and commercial kitchen walls.
- ☐ Warehouses.
- ☐ Hospitals and pharmaceutical factory walls.
- ☐ Fish and meat processing plant walls.
- ☐ General food processing and manufacturing plants.
- ☐ Light vehicular traffic areas.
- ☐ Normal metal surfaces.
- ☐ UV resistant. Color change may occur under direct sunlight without affecting the performance.

ADVANTAGES

- ☐ Excellent chemical and mechanical resistance.
- ☐ Available in a wide range of attractive colors.
- ☐ Cost effective.
- ☐ Easy application.

STANDARDS

KingFloor PU Seal Extra complies with BS476, Part 7 : 1987, Class 1 Spread of Flame.

METHOD OF USE

Substrate Preparation

The substrate must be clean, dry, even, dense and free from oil, grease, dust and other contaminants. A clean surface will ensure maximum adhesion between the substrate and the coating. For metal surfaces, it should be blasted to bright finish.

Concrete floors must have a minimum compressive strength of 25 N/mm² and a maximum concrete relative humidity of 80% (max. moisture content of 4%), relative humidity can be measured using a hygrometer. Concrete relative humidity should be less than 80% for concrete 28 days old or more.

TECHNICAL PROPERTIES

Mixed density:	1.08 gm/ cm ³ @ 25°C
Pot life:	3 hrs. @ 25°C 1 hr. @ 35°C
Minimum time between coats:	6 hrs. @ 25°C 4 hrs. @ 35°C
Maximum time between coats:	24 hrs. @ 25°C 16 hrs. @ 35°C
Dry film thickness:	85 microns/ coat
Curing time:	7 days @ 25°C 5 days @ 35°C
Water absorption: ASTM D570	< 1%
Scrub resistance: ASTM D2486/2000	> 5000 cycle
Adhesion: ISO 2409/1992	Excellent
Opacity: (Grindo pac)	5 m ² / ltr.
Abrasion resistance: ASTM D4060/01 1000 cycle 1000 gm using CS-17 wheel	< 100 Mg

Surface Preparation

Unsound layers and contaminated concrete surfaces must be prepared using mechanical surface removing equipment.

Acid etching can be used only in well ventilated areas. Areas deeply contaminated by oil or grease, such areas should be treated by hot compressed air.

Mixing

To avoid inconsistent workability and pot life, make sure that the materials to be used are stored in shaded area and protected from extremes of temperatures, for at least 24 hours prior to application. Prior to mixing, stir individual components of Resin, Hardener and color pack. Add the entire contents of the color pack into the base container and mix with heavy duty drill for 2 minutes till a uniform color is achieved. Add the entire contents of the hardener container to the mixed color pack and base and mix thoroughly for at least 3 minutes.

COATING

KingFloor® PU Seal Extra

Use brush or lambs wool roller, or airless spray machine to apply the mixed KingFloor PU Seal Extra onto the prepared surfaces. Apply 2 coats of KingFloor PU Seal Extra at 7 - 8 m²/ kg/ coat, second coat should be applied at a right angle to the first coat.

The second coat may be applied as soon as the first coat has initially dried. Drying time will depend on the substrate and the ambient conditions.

If the over coating time is exceeded the first coat must be abraded with sand paper prior to the application of the second coat.

Adequate ventilation must be provided to ensure that necessary drying and curing of the material is achieved.

REMARKS

- ☐ Higher traffic areas should receive extra coats or a higher build system.
- ☐ KingFloor PU Seal Extra should not be applied at temperatures below 10°C or where ambient relative humidity exceeds 85%.
- ☐ KingFloor PU Seal Extra should not be applied onto surfaces known to suffer from rising damp.
- ☐ In case of spray applications, airless spray machines should be used.

CLEANING

Tools and equipment can be cleaned with KINGKRETE-Solvent. Dried KingFloor PU Seal Extra may be removed mechanically.

PACKAGING

KingFloor PU Seal Extra is available in 5 kg packs (4.6 liters) and 20 kg packs (18.4 liters).

COVERAGE

The coverage rate is 40 m²/ 5 kg pack/ coat to achieve dry film thickness of 85 microns/ coat.

Chemical Resistance Chart

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.

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.



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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.

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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.

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