KingFloor ® SL150

0.5 – 1.5 mm thick epoxy self-leveling topping for floor surfaces

DESCRIPTION

KingFloor SL150 is a solvent free, epoxy-based self-leveling topping that provides floor surfaces with a seamless, hygienic and cosmetically attractive finish. KingFloor SL150 is applied by trowel to horizontal surfaces and has very good durability towards pedestrian and vehicular traffic.

It also has very good resistance to many of the chemicals commonly found in an industrial environment (consult our Technical Department for further details).

It can be supplied in a variety of colours (consult our Sales Department for details). KingFloor SL150 cures to a durable, hard wearing surface.

APPLICATIONS

KingFloor SL150 is used to provide a hygienic, dense and hard wearing surface for concrete floors for a wide range of applications such as:

- Aircraft hangars.
- Hospitals.
- Pharmaceutical factories.
- Showrooms.
- Laboratories.
- Medium or light duty industrial plants.
- Kitchens.

ADVANTAGES

- Provides hygienic floor.
- Hard wearing system.
- Solvent free.
- Available in a wide range of attractive colours.
- Resist a wide range of chemicals, consult KINGKRETE technical department for more details.

STANDARDS

KingFloor SL150 complies with EN 13813, SR-B1.5-AR0.5- IR2.9.

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.

TECHNICAL PROPERTIES @ 25ºC:

Compressive strength: BS 6319, Part 2	> 80 MPa @ 7 days
Tensile strength: BS 6319, Part 7	> 15 MPa @ 7 days
Flexural strength: BS 6319, Part 3	> 30 MPa @ 7 days
Shore D hardness: ASTM D2240	> 80 @ 7 days
Foot traffic:	After 24 hr
Vehicular traffic:	After 48 hr
Bond strength: BS EN 13892-8	> 1.5 MPa (concrete failure)
Pot life:	50 - 70 min
Mixed density:	1.6 ± 0.1 g/cm³
Taber abrasion resistance: (1000 g, 1000 cycle) ASTM D4060, weight loss H22 wheel CS17 wheel	 530 milligram 60 milligram
Maximum wear depth: BS EN 13892-4	0.05 mm
Impact resistance: ISO 6272-2	> 2.9 N.m
VOC: ASTM D2369	< 40 gr/ltr (complies with LEED)

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 by using hygrometers.

Concrete relative humidity should be less than 80% for concrete of 28 days old or more.

Surface Preparation

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

In case of areas deeply contaminated by oil or grease, such areas should be treated with hot compressed air.

Priming

Concrete substrates should be primed with KingFloor Primer S. The primer should be allowed to cure for 24 hours. Use lambs wool roller to apply the primer. More than one coat may be required for highly porous or textured surfaces.

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MIXING

Prior to mixing, stir the individual components of KingFloor SL150, taking care to ensure that the bottom and sides are thoroughly scraped. Transfer the entire contents of the Base and Hardener into a separate mixing container.

Using a Jiffy-type mixer attached to a slow-running electrical drill, mix for approximately 2 minutes. Once mixed, transfer the entire contents into a Casco or Creteangle-type mixer, taking care to ensure that the bottom and sides are thoroughly scraped.

Start the mixer and transfer to it the entire contents of the KingFloor SL150 Filler container, taking care to ensure that these are completely dry and lump-free. Continue mixing for approximately 2 minutes.

Notes:

- *Never mix KingFloor SL150 by hand as this could lead to areas of uncured material.*
- *In certain cases the Base of the product can be supplied uncoloured and needs the addition of a colour pack. In such cases, mix the components of the Base, Hardener and colour pack using same procedure above, then add the filler component accordingly.*

APPLICATION

Smooth Finish

Once mixing is complete, transfer the KingFloor SL150 to the prime surface at the required thickness by rack. Care should be taken when joining the lanes, to achieve a smooth connection. It is recommended to mask off edges with tape which is then removed while KingFloor SL150 is still wet.

Finishing

While still wet, thoroughly spike roll the KingFloor SL150.

Antislip Finish

Once mixing is complete, transfer the KingFloor SL150 to the prime surface at the required thickness by rack. While applied KingFloor SL150 still wet, fully blind with the chosen grade of Antislip Aggregates (Slip resistant aggregate No.2 or 3). Once cured, all excess aggregates shall be removed before applying further top coats.

Apply one or two coats of KingCoat A100 at approximately 0.15 - 0.20 ltr/m^2/coat.

Occassional Spillage. Chemical Resistance after full cure (7 days @ 25°C), ASTM D1308 (spot test @ 1 hr)	
Organic acids	
Lactic Acid 10%	RS + SS
Oleic Acid sat.	RS
Citric Acid 25%	RS
Inorganic Bases	
Sodium Hydroxide 50%	R
Ammonia Solution 10%	R
Potassium Hydroxide 50%	R
Aqueous Solutions	
Sodium Chloride sat	R
Tap water	R
Chlorinated water	R
Dead sea water	R
Solvents	
White spirit	R
Xylene	R
Toluene	R
Acetone	R
Oils & Fuels	
Brake fluid	RS
Engine oil	R
Diesel	R
Kerosene	R
Detergents & Soaps	R
Inorganic Acids	
Sulphuric Acid 25%	RS
Phosphoric Acid 20%	RS
Hydrochloric Acid 10%	RS
Nitric Acid 10%	R

R: Resistant
RS: Resistant with slight discoloration
SS: Slight softining

REMARKS

- KingFloor SL150 should not be applied on to surfaces known to suffer from damp rising.
- KingFloor SL150 should not be applied at temperatures below 10°C or where ambient relative humidity exceeds 80%.

CLEANING

KingFloor SL150 can be removed by KINGKRETE solvent prior setting.

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PACKAGING

KingFloor SL150 is available in 17 kg packs (10.5 litre).
KingFloor Primer S is available in 5 kg packs.

THICKNESS RANGE

KingFloor Primer S:
0.2 kg/m^2 to achieve 175 microns dry film thickness.

KingFloor SL150:
0.8 kg/m^2 to achieve 500 microns dry film thickness.
1.6 kg/m^2 to achieve 1000 microns dry film thickness.
2.4 kg/m^2 to achieve 1500 microns dry film thickness.

SYSTEM APPLICATION AND COVERAGE

A)Typical Smooth Finish:
KingFloor Primer S: 1 coat @ 175 microns (DFT).
KingFloor SL150: 500 - 1500 microns (DFT) per layer.

B)Typical Antislip Finish (Indoor and Outdoor):
KingFloor Primer S: 1 coat @ 175 microns (DFT).
KingFloor SL150: 500 - 1500 microns (DFT) per layer.
Antislip Aggregate No.2 or 3: 1 - 3 kg/m^2.
KingCoat A100: 1 - 2 coats @ 75 - 100 microns (DFT) per coat.

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.

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KingKrete South Asia
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