KingFloor ® Dissipative

Dissipative floor with resistance between 1x10'and 1x10ª Ohm.

DESCRIPTION

KingFloor Dissipative is a flow-applied 2 mm thick epoxy resin floor topping with dissipative properties. The system comprises of an epoxy primer, dissipative epoxy base and an epoxy top coat.

APPLICATIONS

KingFloor Dissipative has a resistance between 1 x 10^6 and 1 x 10^9 Ohm. KingFloor Dissipative is suitable for use in areas where a static dissipative floor is required, such as:

- Electronic manufacturing facilities.
- Hospital operation theatres.
- Hazardous dust and chemical environments.

ADVANTAGES

- Provide a dissipative floor for static electricity to pass through to earth controlling static electricity.
- Alternative smooth finish.
- Hard wearing surface that can be subjected to heavy foot traffic and forklift traffic.
- Chemical resistant.

METHOD OF USE

Substrate Preparation

The substrate must be clean, dry, even, dense and free from oil, grease, dust and other contaminations. A clean surface will ensure maximum adhesion between the substrate and the coating.

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.

ELECTRICAL PROPERTIES

Surface resistance: ASTM F150-78	5 x 10' to 1 x 10^9 Ohm

PHYSICAL PROPERTIES FOR TOP COAT:	
Compressive strength: BS6319, Part 2:1983	≥ 75 MPa @ 7 days
Flexural strength: BS6319, Part 3:1990	≥ 30 MPa @ 7 days
Tensile strength: BS6319, Part 7:1985	≥ 12 MPa @ 7 days
Cure time: Foot traffic Vehicular traffic	 24 hr @ 25ºC 48 hr @ 25ºC
Mixed density:	1.7 ± 0.1 g/cm³
Pot life:	50 - 80 min @ 25°C
VOC:	< 50 g/ltr

Priming

Concrete substrates should be primed with KingFloor Primer. 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.

KINGFLOOR DISSIPATIVE BASE COAT

Prior to mixing, stir the two components of KingFloor Dissipative (base & hardener). The entire contents of the hardener container should be poured into the base container and the two materials mixed thoroughly for at least 3 minutes.

The use of a heavy duty slow speed drill fitted with a mixing paddle is recommended. Application is done by using suitable plastic broom.

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KINGFLOOR DISSIPATIVE TOP COAT

Taking care to ensure that the bottom and sides are thoroughly scraped, transfer the entire contents of the resin and hardener and color pack into a separate mixing container.

Using a jiffy-type mixer attached to a slow-running electric drill, mix for approximately for 2 minutes. Once the KingFloor Dissipative hardener, resin and color pack have been mixed, transfer the entire contents into a Casco or Creteangel-type mixer, taking care to ensure that the bottom and sides are thoroughly scrapped.

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

Once mixing is complete, transfer the mixed materials 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 product is still wet.

While still wet, thoroughly spike roll the product.

PACKAGING

KingFloor Primer: 5 kg packs.
KingFloor Dissipative Top Coat: 15 kg packs.
KingFloor Dissipative Basecoat: 5 kg packs.

COVERAGE

KingFloor Primer: 5 m²/kg.
KingFloor Dissipative Top Coat: 3.4 kg/m². KingFloor Dissipative Basecoat: 5 m²/kg.

Actual coverage can vary depending on the substrate conditions.

Occassional Spillage. Chemical Resistance after full cure (7 days @ 25°C)	
Organic acids	
Lactic Acid 10%	RS + SS
Oleic Acid sat.	R
Citric Acid 25%	RS
Vinegar 10%	R
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	
Benzyl alcohol	R
Brake fluid	RS
Engine oil	R
Diesel	R
Kerosene	R
Detergents & Soaps	R
Inorganic acids	
Sulphuric Acid 25%	R
Phosphoric Acid 20%	RS + SS
Hydrochloric Acid 36%	RS + SS
Nitric Acid 10%	R

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

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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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