KingFloor ® EP Screed

Two-component transparent epoxy binder for creating aggregate screed system.

DESCRIPTION

KingFloor EP Screed is a two-component, solvent-free transparent epoxy binder designed for creating aggregate surface systems.

The system provides a wide variety of finishes which are dependent on the type, colour and size of the used aggregates along with their mixing proportion with the resin. The system can be applied at 5 - 50 mm thickness based on the size of aggregate used.

APPLICATIONS

KingFloor EP Screed is used to provide an extremely hard wearing natural looking floors for a wide range of applications such as:

- Public footpaths.
- Driveways and car parks.
- Pool surrounds.
- Garden paths.
- Decorative landscaping.
- Shopping centers.
- Residential buildings.

ADVANTAGES

- Hard wearing system.
- Solvent free.
- Non-slip.
- Permeable.
- Natural appearance.
- Low maintenance.
- Enhances the natural color of aggregate used.
- Permeable (dependent on mix design and application).
- Resistant to a wide range of chemicals, consult with KINGKRETE technical department for more details.

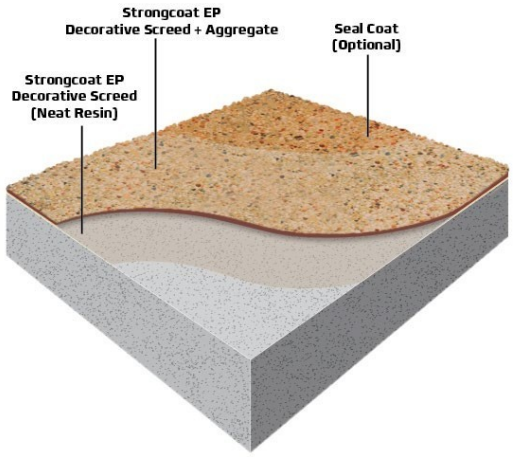
METHOD OF USE

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 system.

TECHNICAL PROPERTIES FOR THE NEAT MIXED RESIN (WITHOUT AGGREGATE) @25°C

Appearance:	Transparent liquid
Mixed density:	1.1 ± 0.1 g/cm^3
Pot life:	30 - 50 min
Compressive strength: BS 6319, part 2	≥ 38 MPa @ 7 days
VOC: ASTM D2369	≤ 20 g/ltr (comply with LEED)



Concrete floors must have a minimum compressive strength of 25 N/mm² and a maximum concrete relative humidity of 75% (max. moisture content of 4%), relative humidity can be measured by using hygrometers.

Concrete relative humidity should be less than 75% for concrete of 28 days old or more, for low W/C ratio concrete floors, 75% hygrometer reading or less can be achieved before 28 days age.

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.

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PRIMING

Prepared substrates should be primed using the mixed resin only without the addition of aggregates. Use lamb wool roller to apply the primer at a coverage rate of 5 - 6 m2/kg.

Work the primer well into the surface of the concrete and whilst it is wet, dress the surface with aggregate to be used at a rate of 0.2 - 0.5 kg/m2 and allow to dry, this will help in the spreading and application of the screed mix.

Mixing

Transfer the entire contents of the hardener pack into the base container and mix using a jiffy-type mixer attached to a slow running electric drill, mix for approximately 2 minutes .

Pour the mixed resin into a casco or cretangle-tyoe mixer. Start the mixer and add the required amount of aggregates. continue mixing. Continue mixing for approximately 3 minutes until a uniform mix is achieved and the aggregates are well-coated with the resin mix.

Important: Never mix by hand as this could lead to areas of uncured material.

APPLICATION

Once mixing is complete, transfer KingFloor EP Screed to the primed surface and using a straight-edged steel trowel or a screed laying box, apply it evenly.

After application and depending on the aggregate size and shape and the needed surface finish, a hand mechanical trowel can be used to provide a more compacted and levelled surface.

Note: Excess compacting will affect the permeability of the screed.

REMARKS

- KingFloor EP Screed should not be applied on to surfaces which are known to suffer from damp rising.
- KingFloor EP Screed should not be applied at temperatures below 10°C or where ambient relative humidity exceeds 80%.
- KingFloor EP Screed may yellow under UV exposure.

SEALING

If a sealed surface is required, the following seal coat options are possible:

Enhanced glossy finish for indoor applications: KingFloor EP Screed binder is used, after mixing properly pour the product onto the floor and spread it out evenly and uniformly in 1 - 2 coats using a roller or roller until all the pores on the coating surface are completely coated.

Glossy finish for outdoor applications:

KingCoat A100 Clear; which is a two component aliphatic polyurethane clear coat, is used. KingCoat A100 Clear should be applied by roller or brush until all the pores on the coating surface are completely coated. For more information, refer to KingCoat A100 datasheet or consult KINGKRETE's Technical Department.

UV stable matte finish:

KingFloor Seal C; which is a two-component water based, polyurethane screed sealer, is used. KingFloor Seal C should be applied by roller or brush until all the pores on the coating surface are completely coated. For more information, refer to KingFloor Seal C datasheet or consult KINGKRETE's Technical Department.

Note: The application of a sealer can impair the slip resistance of the floor; based on size and shape of aggregates used, when subject to wet conditions. Sealer will also impair permeable properties of the system.

CLEANING

KingFloor EP Screed can be cleaned by using KINGKRETE solvent prior setting.

PACKAGING

KingFloor EP Screed (neat resin) is available in 30 kg packs.

MIXING RATIO

The mixing ratio for the resin mix with the aggregate is highly dependent on the aggregate size and shape, a recommended start-up mix ratio is as follows:
Resin “base and hardener” 1 kg: Aggregate 8 - 10 kg.

THICKNESS RANGE

5 - 50 mm, depending on aggregate size and shape.

COVERAGE

The actual coverage rate of KingFloor EP Screed

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depends on the size of the aggregate and the mixing proportion between the resin and aggregate. However, the approximate coverage rate of the mixed product is in range of 10 m^2 per 100 kg mixed screed at 5 mm thickness.

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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