

# KingFloor® EP100T

Heavy duty epoxy topping for floor surfaces.

## DESCRIPTION

KingFloor EP100T is a three-pack solvent free, epoxy-based topping that provides floor surfaces with a seamless, hygienic and cosmetically attractive finish. KingFloor EP100T is applied by trowel and can be coved and laid to falls and has a 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 (consult our Technical department for further details). KingFloor EP100T has a finish that provides very good slip resistance and can be supplied in a natural colour and variety of colours, it is also available in a decorative quartz finish (consult our Sales Department for details).

## APPLICATIONS

KingFloor EP100T is used to provide a hygienic, dense and extremely hard wearing surface for concrete floors for a wide range of applications such as:

- 📦 Warehouses.
- 📦 Paint workshops.
- 📦 Dairies.
- 📦 Chemical factories.
- 📦 Oil refineries.
- 📦 Freezers and refrigerated storage (at 5 mm thickness).

## ADVANTAGES

- 📦 Extremely hard wearing system.
- 📦 Solvent free.
- 📦 Non-slip.
- 📦 Available in a wide range of attractive colours.
- 📦 Available in a decorative quartz finish.
- 📦 Resist a wide range of chemicals, consult KINGKRETE technical department for more details.

## STANDARDS

KingFloor EP100T complies with EN 13813, Class SR-B2.0-AR0.5-IR10.

Mixed density:	2.1 ± 0.1 g/cm <sup>3</sup>
Compressive strength: ASTM C579	≥ 95 MPa @ 7 days
Flexural strength: EN 13892-2	≥ 30 MPa @ 7 days
Tensile strength: BS 6319-7	≥ 17 MPa @ 7 days
Pot life:	50 - 70 min
Foot traffic:	After 24 hr
Vehicular traffic:	After 72 hr
Full chemical cure:	7 days
Bond strength on C20/25 concrete: EN 1542	≥ 2 MPa @ 7 days (concrete failure)
Maximum wear depth: EN 13892-4	≤ 0.05 mm
Impact resistance: ISO 6272-2	Pass @ 10 N.m @ 7 days
Shore D hardness: ASTM D2240	≥ 80
VOC: ASTM D2369	≤ 20 g/ltr (comply with LEED)

## 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.

Concrete floors must have a minimum compressive strength of 25 N/mm<sup>2</sup> 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, for low W/C ratio concrete floors, 80% hygrometer reading or less can be achieved before 28 days age. Contact KINGKRETE Technical Department for further details.

### 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. Use lambs wool roller to apply the primer.

## TECHNICAL PROPERTIES @ 25°C:

# KingFloor<sup>®</sup> EP100T

More than one coat may be required for highly porous or textured surfaces.

Work the primer well into the surface of the concrete and whilst the primer is wet, dress the surface with Antislip Aggregates #3 at the rate of 0.5 kg/m<sup>2</sup> and allow to touch dry.

Another prime coat shall be applied just before applying the mixed KingFloor EP100T to ensure a strong bond between the primer coat and the top coat.

## MIXING

Transfer the entire contents of the colour pack into the base container and mix till a uniform colour is achieved. Add the contents of the KingFloor EP100T Hardener into the base container and using a jiffy-type mixer attached to a slow running electric drill, mix for approximately 2 minutes.

Then transfer the entire contents of the base container into a Casco or Creteangle-type mixer, ensuring that the bottom and sides are thoroughly scraped.

Start the mixer and add the entire contents of the KingFloor EP100T Filler container, ensuring that this is completely dry and lump-free. Continue mixing for approximately 2 minutes.

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

## APPLICATION

Once mixing is complete, transfer the KingFloor EP100T to the uncured primed surface and using a straight-edged steel trowel, apply it evenly.

The use of KingKrete Solvent when used to clean the trowel will also aid in producing a tight closed surface.

*Important: When applying each kit of KingFloor EP100T, leave approximately 200 mm of the closest working edge untrowelled as this will help the blending in of the next kit. Avoid excessive trowelling as this can lead to marks resembling burns on the surface.*

## REMARKS

🚫 KingFloor EP100T should not be applied on to

temperatures below 10°C or where ambient relative humidity exceeds 80%.

## CLEANING

KingFloor EP100T can be removed by KINGKRETE solvent prior setting.

## PACKAGING

KingFloor EP100T "natural" is available in 29.35 kg packs (14 litre).

KingFloor EP100T "coloured" is available in 30 kg packs (14.3 litre) including colour pack.

KingFloor Primer is available in 5 kg packs.

## THICKNESS RANGE

2 - 5 mm.

## COVERAGE

KingFloor EP100T: Approximately 2.75 - 3.00 m<sup>2</sup>/kit @ 5 mm thick.

KingFloor Primer: 5 m<sup>2</sup>/kg.

## 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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surfaces known to suffer from damp rising.

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## NOTE

Field service, where provided, does not constitute



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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.

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.

® = Registered trademark of the KingKrete-Group in many countries.

## QUALITY AND CARE

### KK-SA-05.1-FL-EP100T-R3-2601

#### 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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