

KingCoat[®] EP100W

Water-dispersed epoxy coating for curing and protection of cementitious substrates.

DESCRIPTION

KingCoat EP100W is a two-component water dispersed epoxy coating designed to cure and protect cementitious and precast concrete segments and substrates immediately after de-mouldings providing a hard, seamless, hygienic and cosmetic finish to interior concrete floors, walls, and precast segments. KingCoat EP100W can be supplied in a range of colours (consult our sales Department for details).

APPLICATIONS

KingCoat EP100W is used to cure and protect concrete segments, walls, and floors. Typical applications are:

- ☐ Precast concrete segments.
- ☐ Cementitious and concrete structures subjected to slightly aggressive chemicals.
- ☐ Hospitals and pharmaceutical factories walls.
- ☐ Food and beverage industries.
- ☐ Kitchens, restaurants, reception and public areas.
- ☐ Public buildings and retail environments.
- ☐ Protection of cementitious surfaces in confined and badly ventilated areas, where the use of solvents is prohibited.
- ☐ Light vehicular traffic areas

ADVANTAGES

- ☐ Water dispersed.
- ☐ Suitable for application on fresh concrete.
- ☐ Odourless, hygienic and cosmetic finish.
- ☐ Cures and protects precast concrete segments.
- ☐ Excellent barrier against water and the ingress of ions.
- ☐ Good protection against de-icing salts.
- ☐ Good resistance to weak acids, bases, and chemicals.
- ☐ Good abrasion resistance.
- ☐ Easy to apply.
- ☐ Easy to clean and to maintain.
- ☐ Available in a wide range of attractive colours.
- ☐ Low VOC, complies with LEED requirements.

METHOD OF USE

Surface Condition

The substrate must be clean, dry or slightly damp, 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 @ 25°C:

Appearance:	Matt finish
Colour:	Can be supplied in a range of colours
Mixed density:	1.22 ± 0.05 g/cm ³
Solid content:	
By Volume	52 ± 2%
By Weight	66 ± 3%
Pot life:	50 - 80 min
Recommended film thickness:	70 - 100 microns dry per coat
Minimum time between coats:	4 - 6 hr @ 25 ^o C 2 - 3 hr @ 35 ^o C
Maximum time between coats:	24 hr @ 25 ^o C 12 hr @ 35 ^o C
Minimum curing time before transportation of segments:	10 hr @ 25 ^o C 4 hr @ 35 ^o C
Full cure:	7 days
VOC: ASTM 2369	< 30 g/ltr (complies with LEED)

Surface Preparation

Concrete: 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.

Priming

Porous concrete substrates should be primed with KingCoat EP100W diluted with up to 10% by volume with potable water. Mixing should be carried out by heavy duty slow speed drill fitted with a mixing paddle.

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 and hardener. Add the entire contents of the base container to the mixed hardener and mix thoroughly with heavy duty drill for at least 3 minutes.

KingCoat® EP100W

COATING

Use brush or roller to apply the mixed KingCoat EP100W on the prepared surfaces.

Apply 2 coats of KingCoat EP100W at 165 to 235 g/m² per 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.

REMARKS

- Ⓜ Never leave the mixed KingCoat EP100W to stand for any length of time prior to application as this will considerably shorten its working time. KINGKRETE Technical department should be contacted for advice.
- Ⓜ KingCoat EP100W should not be applied onto surfaces known to suffer from damp rising or relative humidity greater than 80%.
- Ⓜ KingCoat EP100W should not be applied at temperatures below 10^o C.
- Ⓜ Do not apply KingCoat EP100W when rain is expected within 10 hours.
- Ⓜ In case of spray applications, airless spray machines should be used.

CLEANING

All tools should be cleaned immediately after application with water. Hardened materials must be cleaned mechanically.

PACKAGING

KingCoat EP100W is supplied in 5 and 20 kg packs.

COVERAGE

The coverage rate is 330 - 470 g/m² to achieve dry film thickness of 140 - 200 microns per two coats.

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 Qatar facility 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.

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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.

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