KingCoat ® E300

High build polyurethane and epoxy floor and wall coating.

DESCRIPTION

KingCoat E300 is a composite system compose of three layers; epoxy primer, epoxy under coat, and a U.V resistant polyurethane top coat.

KingCoat E300 provide a hard abrasion resistance coating with outstanding chemical resistance suitable for floors, walls, ceiling and other substrates. KingFloor Primer S, 600UC and 600P are supplied as "two component" products in pre-weighed base and hardener packs, ready for site mixing.

APPLICATIONS

KingCoat E300 is designed for applications such as:

- Car parks, showrooms and warehouses.
- Heavy duty protective coating for concrete and steel.
- Heavy duty wall and floor coating in food processing plants, grain silos, dairies, breweries, hospitals, and pharmaceutical industries.
- High chemical resistant protective coating for power stations, oil refineries, and sewage treatment plants.
- Production, maintenance and assembly areas.

ADVANTAGES

- Excellent UV resistance.
- Excellent resistance to a variety of chemicals.
- Easy to clean with a smooth, hard and glossy finish.
- Exhibits good mechanical properties.
- Resistant to sewage effluents.

METHOD OF USE

Substrate Preparation

Concrete surfaces:

The Substrate should be sound, clean and free from contamination. Surface Laitance should be removed by grit blasting or water jetting. All exposed blow holes should be filled with epoxy paste using KingRep EP10.

Steel surfaces:

All surfaces should be grit blasted to reach a bright finish meeting the requirement of Swedish Standard SA 2 1/2.

TECHNICAL PROPERTIES @ 25^{0}C

	KingCoat E300	KingCoat E300P
Specific gravity:	1.60 ± 0.1	1.45 ± 0.05 (forcoloured) 1.03 ± 0.05 (for clear colour)
Solid content:	100%	75 ± 5% (for coloured) 50 ± 5 (for clear colour)
Colour:	White, S. grey & blue	Grey, dark grey, red, green and clear
Abrasion resistance:	Excellent	Excellent
Bond strength: ASTM D4541-85	> 2 MPa	-
Pot life:	100 min @ 25°C 45 min @ 35°C	4 hr @ 25°C 2 hr @ 35°C
Re-coatable time:	Minimum 5 - 16 hr @ 25°C	-
Full cure:	After 7 days @ 25°C	After 7 days @ 25°C
Chemical resistance:	Refer to DPC chemical resistance table	-
Compressive strength: BS6319, Part 2 : 1983	≥ 85 MPa	-
Tensile strength: BS6319, Part 7	≥ 25 MPa @ 14 days	-
Taber abrasion resistance: (1000 g, 1000 cicle) ASTM D4060, weight loss CS17 wheel	70 milligram	-
Minimum application temperature:	-	5°C
Over coating time:	-	Within 24 hrs
Volume solids:	-	50 ± 5%
VOC:	< 10 g/ltr	-

PRIMING

KingCoat ® E300

Concrete substrates should be primed with KingFloor Primer S. Use lambs wool roller to apply the primer. Work the primer well into the surface of the concrete. KingFloor Primer S should be applied at the rate of 0.25 kg/m² to give a dry film thickness of 125 microns.

KINGCOAT E300UC

Mixing

To ensure proper mixing, a mechanically powered mixer or drill fitted with suitable paddle should be used. Stir the content of each component separately to disperse any settlement. Add the entire content of the hardener to the base and mix for 3 minutes and until uniform color and consistency are achieved.

Application

KingCoat E300 UC can be applied by brush; roller or airless spray machine. The first coat should be applied to obtain a continuous uniform coating. The second coat should be applied within the over coating time to achieve the maximum adhesion between the two coats.

Two coats of KingCoat E300UC should give 400 micron dry film thickness.

KingCoat E300P should be applied over the applied KingCoat E300UC within 24 hours, otherwise a light abrasion should be conducted on the dried KingCoat E300UC and cleaned thoroughly before applying KingCoat E300P.

KINGCOAT E300P

Mixing

To ensure proper mixing, a mechanically powered mixer or drill fitted with suitable paddle should be used. Stir the content of each component separately to disperse any settlement. Add the entire content of the hardener to the base and mix for 3 minutes and until uniform color and consistency are achieved.

Application

KingCoat E300P is used as a top and UV resistant coat. KingCoat E300P can be applied by brush, roller or airless spray. KingCoat E300P should be applied at the rate of 0.145 kg/m^2 to obtain a continuous uniform coating of a dry film thickness of 75 micron.

CLEANING

All tools should be cleaned immediately after application using KINGKRETE Solvent. Hardened materials must be cleaned mechanically.

PACKAGING

KingFloor Primer S is available in 5 kg packs. KingCoat E300UC is available in 5 & 20 kg packs. KingCoat E300P is available in 7.25 kg packs.

COVERAGE

KingFloor Primer S: 0.20 kg/m2 to achieve 125 micron dry film thickness.
KingCoat E300UC: 0.33kg/m^2/coat to achieve 200 micron dry film thickness. (Two coats required to achieve 400 micron).
KingCoat E300P: 0.145 kg/m^2/coat to achieve 75 micron dry film thickness.
Total system dry film thickness = 600 microns.

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

KingCoat ® E300

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

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