KingFloor ® UN200

Epoxy roller coatings and self-levelling floor toppings.

DESCRIPTION

KingFloor UN200 is a two component multi-use epoxy resin. It can be used either as a smooth roller coating, textured roller coating, self-levelling floor topping or as a broadcast system.

APPLICATIONS

- Floor coatings with different surface finishes.
- Self-levelling floor toppings with either smooth or broadcast surface finishes.
- KingFloor UN200 can be used to over-coat KingFloor UN100 flooring systems as a decorative and protective final layer of the flooring system.

ADVANTAGES

- Excellent adhesion.
- Aesthetic look.
- Can be used for multiple applications.

SYSTEM COMPONENTS

A) For use as a smooth roller coating
Primecoat: 1 - 2 coats of KingFloor UN100 (optional)*
Coating: 1 - 2 coats of KingFloor UN200

B) For use as a textured roller coating
Primecoat: 1 - 2 coats of KingFloor UN100 (optional)*
Coating: 1 coat of KingFloor UN200 + Kingkrete Extender

C) For use as a coarser roller coating with improved slip resistance
Primecoat: 1 - 2 coats of KingFloor UN100
Coating: 1 coat of KingFloor UN200 + KingFloor UN200 Filler #3 (0.1 - 0.8 mm) + Kingkrete Extender

D) For use as a low thickness self-levelling floor topping
Primecoat: 1 - 2 coats of KingFloor UN100
Floor topping: 1 coat of KingFloor UN200 + KingFloor UN200 Filler #5 (top cut 0.1 mm)

TECHNICAL PROPERTIES @ 25ºC:

Mixed density: (neat resin)	1.45 ± 0.1 g/cm^3
Solids content:	100%
Compressive strength: BS 6319-2	Resin (filled 1:1) > 48 MPa @ 7 days
Flexural strength: BS 6319, Part 3	Resin (filled 1:1) > 35 MPa @ 7 days
Tensile strength: BS 6319, Part 7	Resin (filled 1:1) > 13 MPa @ 7 days
Abrasion resistance: (1000 g, 1000 cycle) ASTM D4060, weight loss CS17 wheel	Resin (filled 1:0.4) < 145 milligram
Shore D hardness: ASTM D2240	≥ 80
Foot traffic:	After 24 hr
VOC: ASTM D2369	< 50 g/ltr

E) For use as a medium thickness self-levelling floor topping
Primecoat: 1 - 2 coats of KingFloor UN100
Floor topping: 1 coat of KingFloor UN200 + KingFloor UN200 Filler #4 (0.1 - 0.3 mm)

F) For use as a broadcast system
Primecoat: 1 - 2 coats of KingFloor UN100
Floor topping: 1 coat of KingFloor UN200 + KingFloor UN200 Filler #4 (0.1 - 0.3 mm)
Aggregate dressing: Antislip Aggregate #2 or #3
Sealcoat: 1 coat of KingFloor UN200
* Priming low to medium absorbent substrates is not necessarily required.

METHOD OF USE

Substrate Preparation
Concrete substrates should be fully cured and achieve a minimum compressive strength of 25 N/mm2 and a minimum pull-off strength of 1.5 N/mm2.

The concrete substrate should be below 75% RH and have less than 4% moisture content. Alternatively, KingFloor DPM should be used after consulting with KINGKRETE's Technical Department.

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COVERAGE

Component	Mixed Resin : Sand : Kingkrete Extender mixing ratio	KingFloor UN200 Filler (Quartz Sand Gradation)	Coverage Rate	Thickness
A) Smooth roller coating	1 : 0 : 0 (no sand or extender needed)	-	0.30 - 0.35 kg/m^2/coat	200 – 240 microns/coat
B) Textured roller coating	1 : 0 : 0.015 (no sand needed)	-	0.50 - 0.80 kg/m^2	350 - 550 microns
C) Coarser roller coating with improved slip resistance	10: 1 : 0.015	KingFloor Filler #3 (0.1 - 0.8 mm)	0.6 - 0.9 kg/m^2	400 - 600 microns
D) Low thickness self- levelling floor topping	1 : 0.4 : 0 (no sand needed)	KingFloor Filler #5 (Top cut 0.1 mm)	1.65 kg/m^2/mm	1 mm
E) Medium thickness self-levelling floor topping	1 : 1 : 0 (no extender needed)	KingFloor Filler #4 (0.1 - 0.8 mm)	1.95 kg/m^2/mm	1.5 - 3 mm
F.1) Broadcast System	1 : 1 : 0 (no extender needed) Broadcast Antislip Aggregate #2 or #3 and seal with KingFloor UN200 sealcoat	KingFloor Filler #4 (0.1 - 0.3 mm)	1.95 kg/m^2/mm and 6 kg/m^2 for Antislip Aggregate #2 or #3	Depending on Antislip Aggregate used
F.2) Sealcoat	1 : 0 : 0 (no sand or extender needed)		0.5 kg/m^2	340 microns

SURFACE PREPARATION

Concrete surfaces must be degreased using degreasing products, torching or any other suitable method which assures the surface is free from any oil traces.

Concrete surfaces are to be mechanically prepared to remove laitance and achieve a flat surface, grit blasting or surface profiling equipment are preferred. Acid etching can be used after consulting with KINGKRETE's Technical Department.

Surface defects such as voids and blowholes should be repaired before application. Consult KINGKRETE's Technical Department for the best repair material.

Surfaces must be free of any dust or loose particles before product application. Use suitable methods like vacuuming or sweeping. If possible, apply the product on a small test area before actual application to check for any problems with the surface preparation.

PRIMING

If a primer is needed according to the system components section, KingFloor UN100 primer shall be applied using a brush, roller or squeegee to obtain a continuous primer coat. If needed, apply an additional coat of KingFloor UN100, and allow to dry before the primer is covered with other flooring systems. For further details, please refer to KingFloor UN100 technical data sheet.

MIXING

Prior to mixing, stir individual components of KingFloor UN200. Add the KingFloor UN200 hardener

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to the base and using a jiffy-type mixer attached to a slow running electric drill, mix for approximately 2 minutes.
Once the KingFloor UN200 hardener and base have been mixed, transfer the entire contents into a Casco or Creteangle-type mixer, taking care to ensure that the bottom and sides are thoroughly scraped.
Start the mixer and transfer to it the entire contents of the KingFloor UN200 quartz sand and Don Extender if necessary, taking care to ensure that these are completely dry and lump-free. Continue mixing for approximately 2 minutes.

Note: Never mix KingFloor UN200 by hand as this could lead to areas of uncured material.

APPLICATION

A, B & C) Coatings
Apply KingFloor UN200 as coating using a roller or brush to the required thicknesses.

D & E) Self-leveling floor toppings
Pour the mixed material onto the primed surface and spread using a trowel or rake at the required thickness and allow to attain a smooth finish. While still wet, thoroughly spike roll KingFloor UN200 in two directions to help eliminate the entrapped air.

F) Broadcast system
Pour the mixed material of the medium thickness self-levelling floor topping onto the primed surface and spread using a trowel or rake at the required thickness and allow to attain a smooth finish.
While still wet, thoroughly spike roll KingFloor UN200 to help eliminate the entrapped air. While still wet, broadcast with Antislip Aggregate #2 or #3 to excess and wait until it gets dry, then remove excess aggregate. Apply KingFloor UN200 sealcoat with a roller at the required thickness.

CLEANING

KingFloor UN200 can be removed by KINGKRETE solvent prior setting.

Sulphuric Acid 25%	Resistant
Phosphoric Acid 20%	Discoloration
Hydrochloric Acid 10%	Resistant
NaOH 50%	Resistant
Brake Fluid	Resistant
NaCl saturated	Resistant
Citric Acid 25%	Slightly discoloration
Lactic Acid 10%	Discoloration
Xylene	Resistant

PACKAGING

Option 1
Base: 25 kg.
Hardener: 5 kg.
Base and hardener: 30 kg.

Option 2
Base: 220 kg drum.
Hardener: 44 kg drum.
Base and hardener: 1 drum (220 kg) base and 1 drum (44 kg) hardener = 264 kg.

Option 3
Base: 220 kg drum. Hardener: 132 kg drum.
Base and hardener: 3 drums (220 kg) base and 1 drum (132 kg) hardener = 792 kg.

Contact KINGKRETE for the proper KingFloor UN200 Filler packaging details based on the flooring system required.

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.

Chemical Resistance spot test @ 1 hour (after full cure 7 days) ASTM D1308

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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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