KingFloor ® PU200

Solvent free flexible polyurethane car park decking system.

DESCRIPTION

KingFloor PU200 is a hard wearing, solvent free, flexible polyurethane coating system primarily designed for use in car parks. It has excellent resistance to petrol, battery acid, diesel, brake fluid, de-icing salts, etc. Other applications include walkways, balconies, etc. KingFloor PU200 is formulated for easy application by squeegee, roller or brush.

The KingFloor PU200 consists of three layers:

- Gripdeck Primecoat E, a primer with excellent adhesion to concrete, screed and asphalt substrates.
- Gripdeck LDS, self-leveling, solvent free flexible PU system.
- Gripdeck Wearcoat TG, a pigmented wearing course with excellent resistance to abrasion and chemical attack. This is for indoor applications.
- Repcoat P, for outdoor application, which is specifically formulated for color stability and will not discolor on exposure to sunlight or other sources of UV light. It is available in a wide range of colors.
- Quartz Aggregate, a hard-wearing quartz for producing an anti-slip finish.

APPLICATIONS

KingFloor PU200 is designed for use in applications, such as:

- Car park decks.
- Car park ramps and turning circles.
- Traffic aisles and parking bays.

ADVANTAGES

- Excellent chemical resistance.
- Excellent resistant to petrol, battery acid, diesel and brake fluid.
- Resistant to de-icing.

SYSTEM SPECIFICATION

The combination of products specified depends on the area within the car part to which the Gripdeck is being applied.

COVERED DECKS

- Gripdeck Primecoat E.
- Gripdeck LDS + full blind of Quartz Aggregate.
- Gripdeck Wearcoat TG.Alternatively, consult with KINGKRETE's Technical Department.

EXPOSED DECKS

- Gripdeck Primecoat E.
- Gripdeck LDS + full blind of Quartz Aggregates.
- Repcoat P.

METHOD OF USE
GRIPDECK PRIMCOAT E

Surface Preparation and Priming

To obtain a proper bond the substrate must be structurally sound clean, dry (less than 75% RH measured using a hygrometer, unless it is a suspended deck free to dry from below) and free from dust, laitance, oils, paints or other forms of contamination. Grit blasting, grinding or scarification can be used to remove laitance and surface contamination.

Areas known to have been subject to heavy contamination should be thoroughly inspected before applying Gripdeck Primecoat E. This is especially important where deposits of oil or grease have collected.

Any irregularities within the substrate should be made good before the application of the Primecoat E. Small defects may be made good using Gripdeck Primecoat E mixed with dry fine sand.

If the substrate has a relative humidity reading greater than 75%, Strongcoat DPM should be used, followed by Gripdeck Primecoat E.

Mixing

Gripdeck Primecoat E comprises two components; a resin and hardener which are supplied pre-weighed in the correct proportions. Under no circumstances should part mixing be carried out.

Taking care to ensure that the bottom and sides are thoroughly drained, pour the contents of the hardener portion into the resin container.

Using a power whisk attached to a slow speed electric drill, mix for approximately 2 minutes, scrape down and re-mix for a further 1 minute, avoiding the entraining of excessive air, until a uniform consistency is obtained. Allow to stand for 1 minute. If the filler is to be used, add this to the mixed material and mix for a further 1 minute.

Note: Never mix Gripdeck Primecoat E by hand as this could lead to areas of uncured material.

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APPLICATION

Once mixing is complete, spread the Gripdeck Primecoat E onto the floor using a squeegee and/or medium pile roller, ensuring it is worked well into the surface.

OVERCOATING

Gripdeck Primecoat E may be overcoated as soon as it becomes tack free. If overcoating of the Gripdeck Primecoat E exceeds 30 hours, light scarification of the surface should be undertaken before further applications of Primecoat E or Wearcoat.

Technical Properties @ 25°C:	Primecoat E	Gripdeck LDS	Wearcoat TG	Reocoat P
Working time:	180 mins.	30 mins.	60 mins.	200 mins.
Mix density:	1.1 gm/ cm³	1.55 ± 0.05	1.6 gm/ cm³	1.45 ± 0.05
Tack free time:	12 hrs.	4 hrs.	4 hrs.	12 hrs.
Maximum overcoating time:	36 hrs.	12 hrs.	24 hrs.	Indifinite (Surface should be clean)
Full cure:	7 days	7 days	7 days	7 days
Adhesion to concrete:	> 1.0 MPa (substrate failure)	> 1.0 MPa (substrate failure)	> 1.0 MPa (substrate failure)	> 1.0 MPa (substrate failure)
Adhesion to asphalt:	> 1.0 MPa (substrate failure)	> 1.0 MPa (substrate failure)	> 1.0 MPa (substrate failure)	> 1.0 MPa (substrate failure)
Tensile strength: BS6319, Part 7	Not tested	> 10 MPa	10 MPa	Not applicable
Shore D hardness:	Not tested		80	> 50
Volume solids:	100%		100%	50 ± 5%
Application temperature range:	Do not apply if the ambient or floor temperature is to fall below 5ºC during the first 24 hrs. or if rain or condensation is likely)			

GRIPDECK LDS AND ANTISLIP FINISH (No. 2)

Surface Preparation

All surfaces should be properly prepared and primed with Gripdeck Primecoat E before application of the Gripdeck Wearcoat.

Mixing

Gripdeck LDS comprises three components, a resin, hardener, and filler which are supplied pre-weighed in the correct proportions. Under no circumstances should part mixing be carried out.

Taking care to ensure that the bottom and sides are thoroughly scraped, transfer the entire contents of components into a separate mixing container. Using a power whisk attached to a slow speed electric drill, mix for approximately 3 minutes ensuring the mixing head is pushed around the sides and bottom of the mixing container.

Note: Never mix Gripdeck LDS by hand as this could lead to areas of uncured material. Premixing of the resin component will aid mixing.

APPLICATION

On completion of mixing immediately apply the Gripdeck LDS at the required thickness to the Gripdeck Primecoat

E. While Gripdeck LDS is still wet, seed till fully blinded with Quartz Aggregates (No. 2) at a rate of 3 - 4 kg/ m² and allow to dry. All excess aggregates shall be removed before applying the final top coat.

GRIPDECK TG AND REPCOAT P

For indoor applications, Gripdeck TG is solvent free system and is applied on top of the Anti-slip finish system, resin and hardener. The resin is the colored component.

Repcoat P is a solvent based system and is applied for indoor and outdoor applications. it consists of two components base (colored), and hardener.

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CLEANING

Tools should be cleaned with Quickmast Solvent immediately after use.

PACKAGING

Gripdeck Primecoat E is available in 5 and 20 kg packs.
Gripdeck LDS is available in 16 kg packs.
Gripdeck Wearcoat TG is available in 5 and 15 kg packs.
Repcoat P is available in 5 ltr. packs (7.25 kg) and 5 ltr. packs (21.8 kg).
Quartz Aggregate is available in 25 kg bags.

COVERAGE

The coverage obtained will vary depending on the porosity and texture of the surface to which the Gripdeck materials are applied and, if applicable, the type and size of aggregate used. As a guide, the minimum coverages should be as follows:

Gripdeck Primecoat E: 0.25 – 0.30 kg/m². Gripdeck LDS: 3 kg/ m² for 2 mm thickness.
Wearcoat TG: 0.4 kg/ m^2 on a smooth surface, and 0.7 kg/ m2 on a sand blind.
Repcoat P: 0.29 - 0.33 kg/ m².
Quartz Aggregate and Gripdeck Aggregate: 3 - 4 kg/ m^2.

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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