KingFloor ® PA500

Polyaspartic aliphatic flooring System.

DESCRIPTION

KingFloor PA500 is a two-component, is a high performance, solvent free, rapid curing flooring product based on the latest polyaspartic/ polyurea technologies. KingFloor PA500 provides excellent colour, has matt finish and is resistant to most fuels, oils, solvents and cleaners. KingFloor PA500 can be rapidly and consistently applied using airless spray, low pressure plural component, roller, squeegee or notched trowel application.

With a tack free time of approx. 60 min re-use times are incredibly short saving customers valuable producti on time.

APPLICATIONS

KingFloor PA500 is used as protective, decorative, high chemical resistance and hard wearing floor coating system for a wide range of applications including:

- Concrete garage floors, patios and walkways.
- Car park decks.
- Warehouse flooring.
- Automotive sales and service areas.
- Aircraft hangers.
- Restaurants kitchens and dining areas.
- Retail shops and shopping malls.
- Hospital flooring.

ADVANTAGES

- Excellent colour and gloss retention.
- Excellent abrasion resistance.
- Excellent working time.
- Excellent adhesion to concrete substrates.
- Excellent chemical resistance.
- Resistant to most chemicals, solvents, acids and caustics.
- Can be used for in-door and outdoor applications.
- Stable over a wide temperature range.
- Displays good flexibility and impact resistance compared to standard epoxies.
- Excellent for grind and seal applications.
- Cures to a very clear finish when not pigmented.

METHOD OF USE

Surface Preparation

All cementitious substrates must be structurally sound. Surfaces must be entirely free of oil, grease, paint, dust, curing agents, release agents or other surface contamination.

TECHNICAL PROPERTIES

Colour:	Clear, can be pigmented
Mixed density:	1.1 ± 0.1 g/cm^3
Pot life @ 20°C:	60 - 80 min
Tack free time:	1 hr
Pedestrain traffic time: Light Heavy	 2 - 4 hr 5 - 8 hr
Over coating time:	8 hr
Application temperature:	5 - 50°C
Shore D Hardness: ASTM D2240	85 ± 5
Tensile strength:* ASTM D638	35 ± 5 MPa
Elongation at break: ASTM D638	≥ 80%
Bond strength on concrete: ASTM D4541	≥ 3 MPa (concrete failure)
Taber abrasion resistance: (1000 g, 1000 cycle) ASTM D4060, weight loss CS17 wheel	< 28 milligram
Impact resistance: Direct/reverse 18MPa/18MPa ASTM D2794	No cracking

**when applied as a full system with recommended primer. Note: All test results and timings provided are based on tests carried out in laboratory conditions. Substrate and atmospheric temperature, humidity, condition and application thickness will all influence these results and therefore they must be used as a guide only.*

Loose or unsound material should be removed. Sweep and vacuum to remove all dust and debris.

Steel substrates should be prepared to a class 2 ½ near white blast finish with a surface profile of 80 microns.

Mask all adjacent surfaces and protect the surrounding area from overspray. Do not apply unless the substrate temperature is 3°C or greater than dew point.

Priming

KingFloor PA500, without the addition of a pigment, can be used as a primer. Alternatively, KingFloor Primer S can be used at a coverage of 5 m^2/kg.

KingFloor ® PA500

MIXING

Thoroughly power stir the B-side component. If the application requires KingFloor PA500 to be pigmented add 10% by volume of the required pigment into the B-Side component and stir thoroughly before combining the A and B components. Combine the A side and B side components and power stir again before applying to substrate.

The mixing ratio of comp. A to comp. B is 1:1 by volume. To ensure full physical characteristics are achieved within the finished coating use graduated beakers/ containers to ensure accurate 1: 1 by volume mixing of component A and component B.

APPLICATION

For the fastest and easiest application use low pressure plural component spray machine like LP-2 or LP-3.

KingFloor PA500 can be applied using a standard airless spray machine or can be applied by roller, squeegee or notched trowel/rake.

When applying two or more coats allow each coat to dry completely before applying subsequent coats. If recoat window is exceeded, sand slightly to produce a profi le, wipe with acetone and then apply the next coat.

Use a 8 – 13 mm Nap Mohair roller when rolling KingFloor PA500. When applying KingFloor PA500 with a squeegee or notched trowel the floor should be back rolled using spiked roller to assist in de-airing the coating. The recommended system thickness should be 250 – 750 microns.

CLEANING

Prior to curing, tools may be cleaned with cleaning solvents. Once hard, by mechanical means only.

PACKAGING

KingFloor PA500 is available in 20 x 20 litre buckets and 200 x 200 Litre drums.

COVERAGE

Approximately 0.1 L/m^2 to achieve a DFT of 100 µm per coat. However, coverage may vary depending on the substrate and surface porosity.

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.

K KK-SA-05.1-FL-PA500-R3-2601

KingKrete South America
www.kingkrete.com