KingBond ® EP50PC

Solvent free, two part epoxy adhesive for concrete surfaces.

DESCRIPTION

KingBond EP50PC is fast set, medium viscosity, solvent free, two part epoxy adhesive.
KingBond EP50PC is a two component product. Components are black and white in color, when mixed at 1:1 ratio turn into a uniform grey color paste that bonds to asphalt and concrete surfaces.

APPLICATIONS

KingBond EP50PC is a fast set, high strength adhesive primarily designed for bonding pre-cast segmental concrete units. It can be used as a general purpose fast set epoxy paste for filling gaps, holes and surface irregularities, and for bonding of steel elements and natural stone.

ADVANTAGES

- Fast set.
- Easy to use.
- Rapid adhesive strength development.
- High tensile and shear strength.
- 1:1 mixing ratio, making mixing easy and minimizing waste.

STANDARDS

KingBond EP50PC complies with AASHTO M237, Type 2, slant shear, bond strength and gel time.

METHOD OF USE

Surface Preparation

All substrate surfaces should be clean and free of dust, lose material and contamination.

Mixing

One part of the base component should be mixed to one part of the hardener component. To avoid waste only mix sufficient quantities that can be used within the pot life. Components should be scooped from the tins and mixed together thoroughly using a spatula or palette knife in a suitable tin or board, until a uniform grey paste is obtained.

TECHNICAL PROPERTIES @ 25^{0}C:

Bond strength to concrete: ASHTO 237	Failure in concrete
Slant shear strength: ASHTO 237	Failure in concrete
Specific gravity:	
Base	1.45
Hardener	1.50

Application

The mixed adhesive is applied to both surfaces, then the two substrates are joint together within the mentioned pot life of the mixed adhesive.

CLEANING

Tools should be cleaned with DCP solvent immediately after use. Hardened material can be removed mechanically.

PACKAGING

KingBond EP50PC is available in 5 and 20 kg Base component and 5 and 20 kg Hardener component.

THEORETICAL COVERAGE

3 - 3.5 kg (mixed)/ m² @ 2 mm thickness.

POT LIFE

Pot life will vary depending on temperature and size of mix; extending at lower temperatures and smaller thickness of application. Pot life and set time given in table above were determined using a 200 g mix.

At temperatures above 25°C the material workability increases as does the rate of strength development. At temperatures lower than 25°C the material workability decreases and strength development slows.

Temperature (ºC)	Pot life (minutes)
20	25 - 30
30	8 - 11

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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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