

KingFix® EPW100

Three-component, water based epoxy tile adhesive and grout with improved abrasion, water and chemical resistance.

DESCRIPTION

KingFix EPW100 is a water-based epoxy tile adhesive and grout consisting of 3 pre-weighted components of epoxy resin, hardener and selected filler that when mixed together produce a thixotropic paste suitable for permanent fixing of all types of ceramic tiles and stones in vertical and horizontal applications.

The high adhesion strength and chemical resistance of KingFix EPW100 makes it an ideal option for installing and grouting tiles in industrial and commercial areas.

APPLICATIONS

- ☒ Commercial centers.
- ☒ Low to medium duty industrial areas.
- ☒ Recreation centers.
- ☒ Other high traffic areas.
- ☒ Swimming Pools.
- ☒ Kitchens.
- ☒ Applied on both concrete & steel substrates.

ADVANTAGES

- ☒ High abrasion resistance.
- ☒ High slip resistance, for demanding vertical tiling.
- ☒ High bond strength.
- ☒ Mould and stain resistance.
- ☒ Water impermeable.
- ☒ Fast setting.
- ☒ Suitable for all ceramic tiles and stones.
- ☒ Suitable for internal, external and submerged conditions.
- ☒ Available in a wide range of colours.

STANDARDS

KingFix EPW100 complies with ANSI A118.8.

METHOD OF USE

SURFACE PREPARATION

1)As a tile adhesive

- ☒ Substrates should be clean and free from dust or any contamination.
- ☒ Steel surfaces should be free from rust or other contaminants, ideally grit blasted to a near white finish in accordance to Swedish standards SA 2 ½.
- ☒ Surfaces should be dry before tiling.

TECHNICAL PROPERTIES

| | |
|--|-----------------------------|
| Mixed density: | 1.8 ± 0.1 g/cm ³ |
| Water cleanability: ANSI A118.8,5.1 | Pass |
| Initial set: ANSI A118.8,5.2 | 5 hr |
| Final set: ANSI A118.8,5.3 | 9 hr |
| Shear strength to imperious tiles: ANSI A118.8,5.6.2 | ≥ 3.5 MPa @ 7 days |
| Shear strength to imperious tiles: ANSI A118.8,5.6.3 | ≥ 3.5 MPa @ after water |
| Compressive strength: ANSI A118.8,5.8 | ≥ 35 MPa @ 10 days |
| Tensile strength: ANSI A118.8,5.9 | ≥ 3 MPa @ 10 days |
| Flexural strength: ANSI A118.8,5.10 | ≥ 9 MPa @ 10 days |
| Water absorption: ANSI A118.8,5.11 | 5% (50% RH to immersion) |
| Application temperature: | 5 to 38oC |
| VOC: ASTM D2369 | ≤ 30 g/ltr |

2)As a tile grout

- ☒ Joint surfaces should be clean and free from dust or any contamination.
- ☒ Joints should be cleaned to the full thickness of the tile or to a minimum depth of 2/3 of the tile thickness.
- ☒ Joints should be dry before grout filling.

MIXING

To ensure proper mixing, a mechanically powered mixer or drill fitted with a suitable paddle should be used. Stir the base and the hardener individually to disperse any settlement.

The entire contents of the base and hardener should be poured into a suitable size container and mixed mechanically for 2 minutes. Add the filler to the base/hardener mixture and mix for another 3 minutes until a uniform colour is achieved.

PLACING AND FINISHING

1)As a tile adhesive

Spread the mixed adhesive to the substrate using a notched trowel. Apply with pressure a 1 to 2 mm coat using the flat face of the notched trowel onto the substrate.

Comb diagonally additional mixed adhesive up to a 3 mm total maximum thickness with the notched side of the

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notched trowel. Do not apply on large areas that cannot be covered within the open wet time of the adhesive.

2)As a tile grout

Use a masking tape on joint edges to protect tiles. Fill the mixed grout into the joints using rubber trowel or by using hand operated gun and cartridges. Excess grout should be cleaned with a proper wet cloth within the material pot life.

WORKING CONDITIONS

KingFix EPW100 should not be applied at temperatures below 5°C.

CLEANING

Cleaning should be commenced immediately before the grout reaches initial setting. After initial setting, product may be removed either by using a solvent or by mechanical means but with great difficulty.

PACKAGING

KingFix EPW100 is available in 6 kg packs.

YIELD

When used as a tile adhesive, each 6 kg pack shall cover 2.2 m² at 1.5 mm thickness.

The approximate yield of the grout can be calculated as per the following equation:

As tile adhesive: 1.65 kg/m² @ 1 mm thickness.

As grouting: The approximate yield of the grout can be calculated as per the following equation:

$$\text{Yield (m}^2\text{/kg)} = 5.1$$

$$\text{WD (0.02 + 1 + 1)}$$

L H

Where:

L: Tile length (cm)

H: Tile width (cm)

D: Average joint depth (mm)

W: Average joint width (mm)

Note: Grout yield is subject to ± 15% tolerance.

CHEMICAL RESISTANCE

| ISO 13007-2:2010 after submersion in the following chemicals: | |
|---|------------------------------|
| | After 28 days full immersion |
| Acetone | R |
| Ammonia 10% - Liquid | R |
| Diesel fuel | RS |
| Hydrochloric Acid 10% | R |
| Kerosene | R |
| Nitric Acid 10% | RS |
| Oleic acid | SS |
| Potassium Hydroxide 50% | R |
| Vinegar 5% | R |
| Vinegar 10% | R |
| Water - Distilled | R |
| Chlorinated water | R |
| Water - Fresh | R |
| Water - Sea, Salt | R |
| Xylene | R |

R: Resistant RS: Resistant with slight discoloration SS: Slight softening

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.



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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 Middle East facility are manufactured under a management system independently certified to conform to the requirements of the quality standards ISO 9001, ISO 14001 and ISO 45001.

* Properties listed are based on laboratory-controlled tests.
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NOTE

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