PC-Conbond® EP

Twocomponent, Solventfree, Epoxy Bonding Agent for concrete bonding.

PC-Conbond® EP is a solvent-free universal bonding agent comprising two components. To optimize bonding efficacy, it is advisable to apply the bonding coat in a wet-on-wet fashion. For enhanced mechanical adhesion in the subsequent coat, it is recommended to sprinkle sand onto the wet surface before application.

FEATURES

- Long pot life and open time allows sufficient time for placement of new concrete.
- Excellent adhesion to most structural materials.
- Can be applied on moist surface also.
- Unaffected by moisture.
- Highly effective even on damp surface.
- Solvent free.
- Workable at low temperatures.
- High tensile strength.
- Once the two components of the material is mixed the material must be used within approx 4 hours.

PRODUCTS PROPERTIES

Physical Properties	Typical Value
Composition	Chemical Base : Epoxy
Colour	Part A: White liquid Part B: Blackish brown liquid Part A+B mixed: light grey liquid
Specific Gravity at 27^{0}C	1.3 ±0.1
Solid content, % (w/w)	>98
Mixing Ratio, Pack –A:B (by wt.)	2:1
Pot life, minutes at 27^{0}C, 100 g mass	>40
Application Temperature, ^{0}C	5 to 40
Coverage (Theoretical)	0.3-0.8 kg/m^2 per coat depending surface profile
Initial cure at 270C, for pedestrian traffic	After 24 hours
Slant- Shear Bond Strength, at 14 days, N/mm^2	12 (minimum) or concrete failure
Compressive Strength, 14 days, MPa	>70

PACKAGING

comes in 3 kg (±0.2) and 6 kg sets

SHELF LIFE

12 Months from the date of Manufacture if stored in Unopened Packaging. Protect from Rain, Direct Sunlight, Heat and Frost.

USES

PC-Conbond® EP is a specialized construction product that necessitates application by trained professionals. This structural bonding agent is utilized to join existing and new concrete surfaces in various construction applications, such as roof slabs, retaining walls, water tanks, columns, and balcony extensions. Moreover, it serves as an effective bonding agent for steel and iron materials.

SURFACE QUALITY

Mortar and concrete should ideally mature for a minimum of 28 days, a duration subject to environmental factors and desired strength. It is essential to confirm the strength of the substrate, whether concrete or mortar, before proceeding. Moreover, the substrate surface, whether concrete or mortar, must be meticulously cleaned and devoid of frost or stagnant water. In the case of a concrete substrate, it should be structurally sound, with any loose particles promptly eliminated.

SURFACE PREPARATION

Substrates must be sound, dry, clean and free from laitance, ice, standing water, grease, oils, old surface treatments or coatings, and all loosely adhering particles to achieve a laitance- and contaminant-free, open-textured surface. Cement laitance must be removed, and the surface to be treated must be mechanically roughened. It must be cleaned and prepared thoroughly to an acceptable quality, i.e., by wire brushing, blast cleaning, or vacuuming.

MIXING

The ratio of Part A to Part B is 2:1 by weight. Begin by pre-batching the units and mixing them together for a minimum of 3 minutes using the supplied spatula until achieving a smooth consistency and a uniform grey color. It is essential to prevent aeration during mixing. Subsequently, transfer the entire mixture into a clean container and stir for approximately 1 more minute at a low speed to minimize air entrapment. Only mix the quantity that can be utilized within the designated pot life.

APPLICATION

Application Conditions and Limitations: Following mixing, apply the solution directly to the prepared substrate using a brush or roller. For damp surfaces, thorough brushing is essential. It is advisable to pour new concrete within 4-5 hours, provided that the material retains its tackiness.

PC-WC GLOBAL FZ-LLC

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TECHNICAL DATA SHEET UPDATED IN SEPTEMBER 2024
TDS/PC-CONBOND®EP/24

All technical data in this Product Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.
The information, particularly the recommendations relating to the application and end-use of PC-WC products, are given in good faith based on PC-WC's current knowledge and experience of the products when properly stored, handled and applied under normal conditions by PC-WC recommendations. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any written recommendations, or any other advice offered. The user must test the product's suitability for the intended application and purpose. PC-WC Global FZ-LLC reserves the right to change the properties of its products. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Our technical assistance is at the disposal of the users. Consult the latest update of the technical data sheet on our **website www.pc-wc.com**