

CIKObond EPL

Epoxy resin based concrete bonding agent

Description

CIKObond EPL is a solvent free two component epoxy based bonding agent for concrete, to bond old to new structural concrete. It can also be used as a bonding agent for various kinds of repair needs on different types of materials. CIKObond EPL is based on liquid epoxy cured with special grade hardener to achieve a longer working time. It provides excellent adhesion and bonding properties.

Properties

- Two component epoxy based slow curing bonding system.
- Small packs, easy to mix and apply.
- Exhibits excellent bond between new to old concrete.
- Extended working time to place formwork and reinforcement after applying bonding agent.

Application area

CIKObond EPL is suitable to use for internal and external applications.

- Bonding old structural concrete to new concrete.
- Used as grouting and repair mortar by extending with inert filler.

Applicable standards

CIKObond EPL complies with the specifications of ASTM C 881 type I, II, III, IV and V, Grade 2, class B,C, D, E & F; colour: pale brown.

Physical properties

Form	Two component system Part-A : Liquid Part-B : Liquid
Mixing ratio	Pre-weighed packs
Colour	Pale brown
Gel time ASTM C881	>2 hours
Consistency ASTM C881	Grade2:Medium Viscosity

Full cure	7 days at 35 ⁰ C
Viscosity (20rpm,spindle: L3)	2 to 2.5 Pa.s
Compressive Strength ASTM C579 @ 7 days	≥ 70 N/mm ²
Tensile Strength ASTM D 638	≥40 N/mm ²
Slant shear Bond Strength ASTM C-882	≥18 N/mm ²
Water Absorption BS 1881-122	0%
Modulus of Elasticity by compression ASTM C469M-14	>12 GPa

Coverage

CIKObond EPL will provide a theoretical coverage of 9 to 10 m² per litre at a dry film thickness of 100 microns

Note: The coverage depends on the floor condition and finish. Consult CIKO technical service department for assistance.

Application instructions

Surface preparation

The substrate surface must be free from dust and loose particles. Expose sound concrete surface by grit blasting or any other means. All contamination should be treated well before application of CIKObond EPL. The extended reinforcement or dowel bars must be cleaned and fixed properly.

Mixing

Mix the base [Part-A] and hardener [Part-B] components of CIKObond EPL thoroughly using a heavy duty slow speed drill-paddle assembly for three to five minutes and ensure a homogenous mix.

Application

Properly mixed materials should be spread or filled over the cleaned surface using stiff brush or spray applied on entire area without leaving any gaps. After ensuring proper application, fresh concrete must be poured during the gel time period of CIKObond EPL. In case of failure in placing fresh concrete or mortar within the gel time of CIKObond EPL, the coating must be removed by mechanical means and shall be reapplied.

Packaging

CIKObond EPL is available in 4.0 litre packs.

Shelf Life

CIKObond EPL has a shelf life of 12 months if stored in accordance with CIKO instructions.

Storage

CIKObond EPL should be stored under enclosed shaded area at temperatures between 5 – 35°C.

Precautions

CIKObond EPL should not be applied at temperatures below 5 °C.

Health & safety

CIKObond EPL should not come in contact with eyes or to be swallowed. Ensure adequate ventilation and avoid inhalation of vapours. Applicator should wear appropriate clothes, gloves and goggles. Use of barrier cream is recommended to provide additional skin protection. If comes in contact with eyes, flush with plenty of fresh water and seek medical advice.

Refer Material Safety Data Sheet for further details.

Technical Support

For any technical support, do not hesitate to contact CIKO team at any time as CIKO offers on and off site services to end users, specifier and contractors.

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- Waterproofing and damp proof coatings
- Surface treatments
- Flooring and toppings
- Grouts and anchors
- Tile adhesives and grout
- Concrete repair materials
- Adhesives and bonding agent
- Protective coating
- Joint Sealants and Moulding compounds
- Ancillaries