

EPBOND EP

Old to new concrete bonding epoxy resin



Description:

EPBOND EP is based on solvent free epoxy resins. It is supplied as a two part material in pre weighed quantities for ready onsite mixing and use. The physical properties of the product allow its use in applications requiring resistance to creep and stress relaxation, maintenance of mechanical properties at ambient temperatures and high load bearing strength. Applications include the structural bonding of plastic (fresh) concrete to hardened (existing) concrete; bonding of concrete, masonry, stone. The product bonds to dry, damp and wet surface and act as a bonding agents in non-load and load bearing applications from new to old concrete.

Uses:

- In application for bonding harden concrete to harden concrete and fresh concrete to harden concrete
- In area where extensions of concrete structure is required in all types of high and lowraise building buildings
- It can be used either in internal or in external condition
- Can be used in road ,bridge, factories construction works

Advantages:

- EPBOND EP can be applied by brush i.e. ease in application
- Enables to place the concrete up to gel time of EPBOND EP, without risk of de lamination
- Bond strength is more than the tensile strength of

- good quality concrete
- Acts as a 'barrier coat' to the migration of chloride ions from host concrete
- Exhibits high mechanical strength

Product Standard Compliance:

- ASTM C881: Type I, Type II, grade 2 class C
- ACI 548.13-14

Company Standard Compliance:



Technical Information:

Properties	Specification
Pot life	6 to 8 hrs @ 20°C
Compressive strength @ 7 days (As per ASTM D695)	>50 N/mm ²
Tensile Adhesion 7 days (As per ASTM D638)	>20 N/mm ²
Flexural strength 7 days (As per ASTM D670)	>35 N/mm ²
Water absorption (As per ASTM D570)	0.05%
pH	7 to 8
Full cure	5 day @35°C 4 days @ 45°C

Application Procedure:

- Clean all surfaces and remove any dust, unsound material, plaster, oil, paint, grease, corrosion deposits or algae. Roughen the surfaces, remove any laitance and expose the aggregate by light scrubbing or grit-blasting.
- Any steel reinforcement and formwork should be prepared, cut to size and shape, and made ready for assembly before mixing commences.
- Care should be taken to ensure that EPBOND EP is thoroughly mixed. The 'hardener' and 'base' components should be stirred separately before mixing to disperse any settlement. The entire contents of the 'hardener' tin should then be poured into the 'base' tin and the two materials thoroughly mixed using a suitable slow-speed drill and mixing paddle for 2 minutes until a fully uniform colour is obtained.
- EPBOND EP should be applied as soon as the mixing process has been completed. It should be brush or roller applied to the prepared surfaces, being sure to achieve an unbroken coating across the entire substrate.
- EPBOND EP is suitable water miscible epoxy bond coat of bonding old to new concrete. It should be tacky before the new concrete, screed or mortar is placed. The maximum overlay times (see Properties) should also be carefully observed.

Coverage:

Approximately 2.5 to 3.5 m²/liter

(Actual coverage will depend upon the texture and porosity of the substrate being covered.)

Packaging:

EPBOND EP available in 4 kg set.

Storage & Shelf-life:

Shelf life is 12 months in unopened packs stored at room temperature i.e. 27°C the liquid component must not be allowed to freeze.

Precautions:

Health and Safety :

Contact with skin and eyes should be avoided. Gloves should be used when handling these products. If contact with the resin occurs, wash immediately with a strong detergent or a resin removing cream. Eye contamination must be immediately washed with plenty of water and medical treatment sought.




Fire:

EPBOND EP is inflammable. No naked flame should be allowed near the site. Do not smoke during use.

Additional information:

Redwop manufactures a wide range of products specifically designed for the repair and refurbishment of damaged reinforced concrete. This includes repair mortars, fluid micro-concretes, chemical resistant epoxy mortars and a comprehensive package of protective coatings. In addition, a wide range of complementary products are available. This includes joint sealants, waterproofing membranes, grouts and anchors and specialised flooring materials. Separate datasheets are available on these products.

	It is the practice of increasing efficiency with which buildings use resources- energy, water and materials-while reducing building impacts on human health and the environment.
	ISO 45001 is the world's international standard for occupational health and safety, issued to protect employees and visitors from work-related accidents and diseases.
	ISO 9001:2015 is a globally recognized standard for quality management systems (QMS). It helps organizations of all sizes and sectors to: Improve performance, Meet customer expectations, Demonstrate commitment to quality, and Identify and improve processes that lack consistency.
	ISO 14001 is the internationally recognized standard for environmental management systems (EMS). It provides a framework for organizations to design and implement an EMS, and continually improve their environmental performance.

	This symbol is used to identify Redwop products which give off a low level of volatile organic compounds (VOC) as certified by GEV (Gemeinschaft Emissionskontrollierte Verlegewerkstoffe, Klebstoffe und Bauprodukte e.V.), an international organization for controlling the level of emissions from products used for floors.
	Our Commitment To The Environment Redwop products assist Project Designers and Contractors create innovative LEED (The Leadership in Energy and Environmental Design) certified projects, in compliance with the U.S. Green Building Council.
	ISO/IEC 17025 enables laboratories to demonstrate that they operate competently and generate valid results, thereby promoting confidence in their work both nationally and around the world.

Country: India

format: RCPL/QA/025-00

issue Date: 2024-12-01 11:35:31