

Chelfix EP2000

Two Component Epoxy Base Adhesive

Product Description

It is a two-component, epoxy resin based, thixotropic structure, specially developed as a carbon fabric adhesive. It has high fiber saturation ability and adherence. It can work on vertical surfaces without flowing.

Areas of Application

- It is used in bonding of Chelfix carbon plates.
- It is used for repairing all kinds of materials such as concrete, stone and marble.
- In thin type applications.
- For all kinds of metal plates, granite materials to be adhered to glossy surfaces.
- In fine repairs.

Advantages

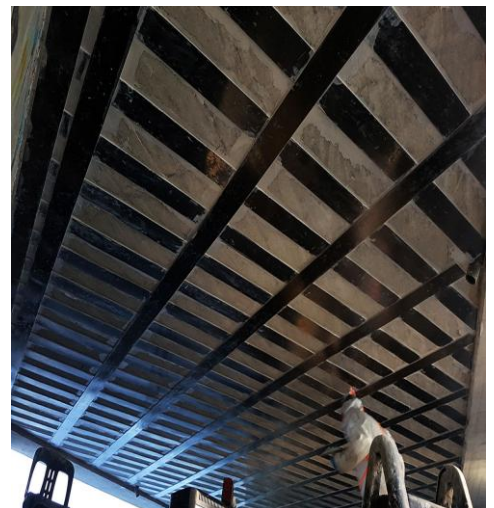
- It is a very easy material to apply.
- It is resistant to chemicals and abrasion.
- It provides excellent adhesion for concrete, steel and wood.
- It has high mechanical strength.
- It is impermeable to water and gas.
- Used on vertical and overhead surfaces.
- Does not contain solvent.
- Provides excellent adhesion to concrete.

Application Instructions

Surface Preparation: The application surface must be dry and free from all kinds of dust, dirt, weak and loose particles, cement grout residues, oil and grease. The concrete sub-floor must be solid and have sufficient compressive strength (minimum 25N/mm²) and tensile strength (minimum 1.5N/mm²).

The application surface should be cleaned using methods such as applying compressed air to maintain maximum adhesion strength.

Mixing: Chelfix EP2000 is supplied in ready-to-use sets according to mixture ratio. Before starting the mixing, make sure that the material temperatures are between +15 and +25°C. Component B must be completely poured into component A and component B must be free of any material. The mixture should be mixed with a mixer of approx. 300 rpm and a suitable mixer until a homogeneous mixture is obtained for at least 2-3 minutes, taking care not to leave any unmixed material on the sides and the edges of the package.



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Within 24 hours of Chelfix EP3000 application, Chelfix EP2000 application should be started. The material should be applied with a spatula to obtain a thickness of 1-1.5 mm on the smooth surfaces of pre-prepared carbon fiber polymer plates (Chelfix Plate). At the same time, Chelfix EP2000 should be applied with a spatula so that primed surfaces can be obtained with a thickness of 1 - 1.5 mm. The carbon fiber polymer plates with adhesive should then be fixed to their places so that they are slightly stretched in the direction of the fibers and do not swell. Then they should be pressed by roller on the carbon plates in the direction of the fibers so that there is no space between them and the concrete surface. Carbon fibers do not burn but epoxy can ignite after a certain temperature . Because of this reason, very thin epoxy is applied on the carbon plate, then the sand is spread in dry condition and plaster is applied on it. Spreading sand provides adherence between the carbon plate and the plaster to be built. When resistance against fire is requested, it should be covered with fire resistant special mortars (Chelfix R450) in appropriate thickness.

Application Notes/ Restrictions

- In order to complete the hardening of the material, do not use below the minimum allowable temperature.
- Low temperatures will slow the hardening, while higher temperatures will accelerate the hardening.
- Pot life will also vary depending on the temperatures.
- The product may irritate skin. Work clothes, protective gloves, masks and glasses must be used. Protective cream can be applied to hands before starting work. in case of grout contact with eyes, eyes should be washed immediately with warm water and consult a doctor.
- Crystallization can be observed in the product if it remains long below 0°C. If the crystals are dissolved by bringing the product back to room temperature, it can be used without any problems.
- Do not add any solvents or other foreign substances into the product.
- Before the application, the design of the reinforcement project must be done by a civil engineer. Projected and responsible.
- Ambient and surface temperature should not be below +5°C and above +40 °C when applied.
- The application should be made by experienced and competent persons.
- Care must be taken to prepare enough material to use within the study period.
- The final check of the application should be performed by the universities / independent testing organizations / inspectors.
- Parts contacted with skin and hand must be washed with water and soap. in case of contact with eyes, consult a doctor.
- Immediately after application, before hardened, the equipment should be cleaned with Chelfix Thinner. The hardened epoxy mortar can only be mechanically cleaned.

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Technical Data

Property:	
Application Information	
Color	Grey (blend)
Mixture Density	Approx. 1.85 ± 0.05 Kg/liter
Mixture Ratio	1 Unit Composition: 1 Unit B Composition (Weight)
Packaging	5 Kg/ set
General Information	
Consumption	1 m ² 3 - 4 kg for plate bonding
Shelf Life	12 months in unopened original packaging
Pot Life	Approx. 30 minutes (20°C)
Cleaning Time	Approx. 45 minutes (20°C)
Recoating Interval	2-7 days
Full Strength	7 days
Performance Information	
Adhesion (steel and concrete)	> 4 N/mm ²
Tensile Strength (TS EN 12190)	> 25 N/mm ²
Pressure Resistance (TS EN 12190)	> 90 N/mm ²
Technical information is approximate value obtained from the Chelfix Construction Chemicals Laboratory works and are valid for the performance of the finished product in 27 days, which are obtained at + 20°C temperature and 50% relative air humidity rate.	