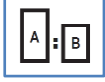


EP-400 G



Solvent-free, epoxy resin-based carbon fiber fabric adhesive

Description

It is a two-component, low-viscosity, thixotropic, solvent-free, epoxy resin-based carbon fiber fabric adhesive.

Advantages

- It is solvent-free.
- It is thixotropic and does not sag.
- It wets and bonds carbon fibers very well.
- It can be used for both horizontal and vertical bonding applications.
- It has high adhesive strength.
- After curing, it is resistant to moisture, corrosion, and chemicals.
- It is durable and long-lasting.

Areas of Use

It is used for bonding carbon fiber fabrics to medium and lightly damaged columns and beams, as well as to corrosion-damaged bridges, viaducts, columns, and beams.

Surface Preparation

The plaster and similar coatings on the columns and beams to be treated should be removed by breaking them off. Then, the edges of the columns and beams should be chipped, and chamfers should be made using Hammerfast RM-150 repair mortar. After the chamfered corners have dried, Hammerfast EP-110 should be applied to the surfaces as a primer. Immediately after the primer completes its initial curing, bonding should be carried out using EP-400 G.

The concrete surface to be treated must have a minimum tensile strength of 1,5 N/mm². The compressive strength must be at least 25 N/mm². On damp substrates, the moisture content must not exceed 5%.

Application

After the surface is prepared and necessary repairs and cleaning have been completed, EP-400 G Component A (Resin) and Component B (Hardener) are mixed together until a homogeneous mixture is obtained. The mixture is then applied to the previously primed surface using a roller or brush.

The fiber-reinforced polymer fabric is stretched in the direction of the fibers and applied onto the adhesive in a single layer, ensuring no air bubbles are trapped. After bonding, EP-400 G is applied over the fabric to complete the lamination.

To prepare the surface for the final plaster or mortar layer, sand is sprinkled onto the EP-400 G-coated surface.

Technical Properties

Color and appearance (Component A)	Blue viscous liquid
Color and appearance (Component B)	Transparent fluid liquid
Composition / Content	Solvent-free, epoxy-based
Consumption / Usage rate	1.2 L/m ²
Density (Mixture)	1.25±0.1 g/cm ³
Heat resistance / Thermal resistance	-20 °C / +60 °C
Flash point	None
UV resistance	Low
Compressive strength	70 N/mm ²
Flexural strength	40 N/mm ²
Adhesive strength / Bonding strength	4 N/mm ² (Concrete failure)

Note: These values are measured at a temperature of 23 ± 2 °C and a relative humidity of 50 ± 5 %.

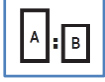
Consumption

For bonding a single layer of fiber fabric, the consumption is 1,2 L/m².

Important Notes

- During application, the ambient and substrate temperature should be between 10–30 °C and must be maintained for 24 hours after application
- It achieves resistance to heavy loads and chemical effects after 7 days
- It can be applied on surfaces with up to 4 % moisture, but must not be applied at higher moisture levels
- Cleaning and repair of the substrate are critical for the service life of the application, so the product must not be applied before these are completed
- After application, contact with water and chemicals must be avoided until full curing is achieved.

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Safety Precautions

- Keep out of reach of children.
- Do not eat or swallow.
- Keep away from foodstuffs.
- Do not inhale directly or allow contact with skin.
- May cause allergic reactions.
- In case of eye contact, rinse thoroughly with plenty of water and consult a doctor.
- Use gloves, goggles, and protective clothing during application.
- Wash hands thoroughly with water after application.
- For detailed safety information, read the Material Safety Data Sheet (MSDS).

Storage and Shelf Life

When stored in its original, unopened packaging, in dry and moisture-free conditions, protected from direct sunlight and frost, and at temperatures between +10 °C and +30 °C, the shelf life of Components A and B is 12 months from the production date. If not in use, the packaging must be tightly sealed. Pallets should not be stacked.

Packaging

Component A: 3.5 kg plastic bucket
Component B: 1.5 kg plastic bucket

Cleaning of Tools

Clean the equipment immediately after application using epoxy thinner or a suitable cleaner. Cured material must be removed mechanically.

Quality Certificates

- CE
- ISO 9001
- ISO 14001

