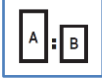


EP-404



Solvent-free, Epoxy Resin-Based Old-to-New Concrete Bonding Agent

Description

It is a two-component, epoxy-based, solvent-free bonding system for old-to-new concrete, which can be applied by brush or poured.

Advantages

- It is solvent-free
- Can be easily applied by brush, roller, or pouring
- Can be applied on damp surfaces
- No primer is required

Application Areas

- Provides adhesion between old and new concrete when pouring new concrete over existing concrete
- Used for bonding metal to concrete, screed, plaster, or other mineral surfaces
- Used for horizontal sprouting and for bonding two different materials together

Surface Preparation

The surface to be treated must be clean and free from paint, paint residues, bitumen, curing compounds, dust, and grease. Ensure that there are no loose layers on the surface; if any are present, they must be scraped off and cleaned. Any voids created during cleaning should be filled with the appropriate Hammerfast Repair Mortars, and necessary repairs should be carried out. The concrete surface to be treated must have a minimum tensile strength of 1.5 N/mm² and a compressive strength of at least 25 N/mm².

Application

Hammerfast EP-404 Component B is poured into the container of Component A, and the two components are mixed with an electric mixer for 3–4 minutes at 300–400 rpm.

Hammerfast EP-404 can be applied by brush and/or roller, by pouring, or by spraying. On damp surfaces, it should be thoroughly worked into the surface with a brush. When pouring new concrete over old concrete, the new concrete must be placed before the working time of Hammerfast EP-404 expires (before it begins to gel).

Technical Properties

Color and appearance (Component A)	Gray liquid
Color and appearance (Component B)	Cream-colored liquid
Composition / Content	Solvent-free, epoxy resin-based
Consumption / Usage rate	1,5 kg/m ²
Density	1,45±0,1 g/cm ³
Flexural strength	25-30 N/mm ²
Compressive strength	60-70 N/mm ²
Adhesive strength (Concrete)	>1,5 N/mm ²
Pot life	30-40 dak.
Placement time of new concrete	90-110 dak.
Curing time	24 hours
Chemical and physical resistance	7 days
Application temperature	+5 °C / +35 °C

Note: Values were obtained at 23±2°C temperature and 50±5% relative humidity.

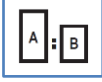
Consumption

1,5 kg/m² (for 1 mm thickness). Consumption may vary depending on surface and environmental conditions.

Important Notes

- Storing the materials at 20–30 °C one day before application facilitates easier handling.
- During application, the ambient and substrate temperature should be between +5 °C and +35 °C and must be maintained for 24 hours after application.
- It achieves resistance to heavy loads and chemical effects after 7 days.
- The substrate must be sound and clean, as this is critical for the service life of the application; therefore, the product must not be applied before cleaning is completed.
- Hammerfast EP-404 must be used within its pot life after mixing, and no foreign materials should be added during mixing.
- When pouring new concrete over old concrete, the new concrete must be placed before the working time expires (before gelling begins).
- Drying time is prolonged at low temperatures and accelerated at high temperatures.

EP-404



Solvent-free, Epoxy Resin-Based Old-to-New Concrete Bonding Agent

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 – Resin : 5 kg metal can
Component B – Hardener : 2.5 kg metal can

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

