

MonniBond E50

Epoxy Bonding Agent

Product Description

MonniBond E50 is a two component epoxy adhesive which is used as a bonding agent. It is solvent free, with thixotropic effect, formulated with the purpose of guaranteeing a structural adhesion between fresh and old concrete..

Uses

It is used for structural applications such as:

- ▶ Casting resumption of damaged industrial flooring
- ▶ Casting resumption of plasters
- ▶ Sealing of cracks or fissures of cement screeds, concrete with steel gluing, roads, bridges, pavements loading bays and factories

MonniBond E50 is used for internal and external applications.

Advantages

- ▶ Solvent free, therefore can be used in closed areas
- ▶ High mechanical and bonding strength
- ▶ Impermeable and no shrinks after polymerization
- ▶ It adheres perfectly to various construction materials, including concrete, stone, iron, etc.
- ▶ Adhesive bond to concrete will always exceed the tensile strength of the host concrete
- ▶ Resistant to most alkalis and diluted acids

Usage Instructions

Surface Preparation

Surface must be perfectly clean and compact. Inconsistent parts, varnishes, grease, laitance, algae, must be eliminated through sand blasting or brushing before applying MonniBond E50. All dust, unsound material, plaster, oil, paint, grease, corrosion deposits, curing compound must be removed. New concrete or cementitious surfaces should be allowed to cure and have moisture content not exceeding 5%. Old or existing floor should be refurbished mechanically to ensure clear sound substrate.

Mixing

MonniBond E50 is supplied in two pre-weighed packs (Component A - Base and Component B - Hardener) which are ready for immediate in-situ use.

Stir in both components before use. Transfer the entire contents of component B (Hardener) into the component A (Base) can and mix with low speed drill and paddle (200 - 300 rpm) for 2 - 3 minutes till obtaining a mix with uniform consistency. Scrape the sides and bottom of the can during mixing to ensure homogeneity.

Application

The product must be applied with brush or spray on the whole surface. Extra care to be taken to ensure that the whole repair area is covered in order to obtain perfect adhesion. MonniBond E50 should be tacky before the new concrete, screed or mortar is placed. The maximum over lay time should also be carefully observed.

If the maximum over lay time is missed, then MonniBond E50 must be mechanically removed and a fresh application should be made.

The new casting of fresh concrete must be executed immediately. For the fissures superior to 0.5 mm, the product can be simply poured.

Cleaning

Tools and equipment should be cleaned with SOLVENTE 10 from Monneli immediately after use. Hardened material should be removed mechanically. Spillages should be absorbed with sand or sawdust and disposed of in accordance with local regulations.

Recommendations

- ▶ Do not use during rainy days or if temperature is less than +5°C.
- ▶ Application should not be carried out when atmosphere humidity exceeds 90%, or when the surface to be coated is less than +3°C above the dew point.
- ▶ Do not expose packing to the direct sunrays

Consumption

For casting resumption, the consumption varies from 3.5-4 m²/Liter according to the irregularities of the surface.

Packaging

MonniBond E50 is supplied in 4 Liter kit of two components

Shelf Life & Storage

Store the product in a dry covered place with a temperature between +5°C and +30°C. If stored properly in original package, the shelf life will be 12 months

Health & Safety

During application, wear appropriate protective clothing, goggles, gloves and respiratory equipment if necessary.

In case of contact with skin, rinse with water and again wash thoroughly with soap and water. In case of contact with eyes, rinse with plenty of water and seek medical advice accordingly.

If ingested, obtain medical attention immediately. Do not induce vomiting.

Technical Data

Category	Typical Values
Color	Green
Density	1.2 kg/L
Pot Life	150 minutes
VOC	2.0 g/L
Tensile strength (ASTM D638)	36 N / mm ²
Compressive strength (ASTM D695-96)	55 N / mm ²
Slant Shear Strength (ASTM C882)	14 N / mm ²
Adhesive strength	>2.5 N / mm ²
Water absorption (ASTM D570)	<0.05 %
Temperature of application	+5°C to +35°C
Complete hardening	5 days at 30 °C
Maximum overlay time at 25°C	20 hours
Adhesion Characteristics Breakdown flexure test on the casting resumption executed with MonniBond E50	Breakdown of concrete at 100%.
Adhesion Characteristics Breakdown traction test on casting resumption executed with MonniBond E50	Breakdown of concrete at 100%.

Test performed at 25°C, 50 % of relative humidity and in absence of ventilation.

All values are subject to 5-10 % tolerance

Legal disclaimer

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