



AT 109 C

Water Based Epoxy Bonding Bridge

Pack Size
8.05Kgs

TDS Technical Data Sheet



Product Description

AT 109 C is a two-component, water-based epoxy bonding bridge that provides a structural bond between new and old concrete. It is an admixture for cement-based materials and acts as a structural penetrating sealer. This product is non-flammable, has a negligible odour, and is surface tolerant, making it suitable for various applications. It is water-thinned and easy to clean up.

Features and Benefits

- **Water-Based Epoxy Bonding Bridge:** Ensures a strong bond between new and old concrete surfaces.
- **Penetrating Structural Sealer:** Effective as a deep penetrating sealer for structural integrity.
- **Forms a Structural Bond:** Suitable for bonding new render or concrete to aged substrates.
- **Can be applied to Damp Surfaces:** Versatile for various conditions without completely dry surfaces.
- **Compatible with Fresh Cement or Concrete Products:** Works well with fresh construction materials.
- **Excellent Adhesion:** Bonds effectively to most substrates, including brick, masonry, concrete block, concrete, compressed fiberboard, stone, and timber.
- **Non-Flammable and Negligible Odor:** Safe for use in sensitive locations with minimal disruption.
- **Convenient Mixing Ratio:** Equal part mixing for ease of use.
- **Water-Thinned and Easy Clean-Up:** Simplifies the application and cleaning process.

Typical Applications

- **New to Old Concrete Bonding Bridge:** Enhances the bonding characteristics between new and old concrete.
- **Concrete Repair Mortar Admixture:** Improves the strength and performance of repair mortars.
- **Concrete Curing Membrane:** Retains moisture to aid in the curing and sealing concrete.

Limitations

Temperature Constraints: Apply only when the surface temperature is between 10°C and 35°C. Below ten °C, curing will halt but will resume as temperatures rise.

Humidity Constraints: High humidity (>85%) can adversely affect curing time. Ensure good ventilation during the curing process.

UV Exposure: Prolonged exposure to UV light can cause yellowing.

Surface Preparation: The cured coating forms a glazed surface that must be well-sanded before applying any product. The surface may darken slightly over time when used as a penetrative sealer.

Application Instructions

Surface Preparation: Ensure all surfaces to be treated are structurally sound and free from contaminants. Remove all previous coatings and clean the surface thoroughly.

Installation:

1. Individually mix each component to achieve homogeneity.
2. Thoroughly mix the two components in a 1:1 volume ratio using a power stirrer until a homogeneous mix is obtained.
3. Only mix the amount that can be used within the product's pot life, avoiding excessive aeration during mixing.

Application as a New-to-Old Concrete Bridge:

1. Apply one coat by brush, roller, or spray at a coverage rate of 7 square meters per litre.
2. Ensure the bonding bridge remains wet or tacky when placing new render or concrete.
3. Immediately follow with the placement of new render or concrete and finish as required.

Application as Concrete Repair Mortar: Mix AT 109 C with an equal volume of cement and add fine particle grade river-washed sand to achieve the desired consistency (typically 2-3 times the volume of cement added). Use a wet trowel during finishing to avoid drag-up and achieve a smooth finish.

Application as Concrete Curing Membrane: Apply one coat by brush, roller, or spray at 3 square meters per litre coverage rate. Note that surfaces must be sanded before coatings or adhesives are applied after the film has cured.

Technical Data

No. of Coats	1 (for all applications)
Coverage:	7 m ² /L (bonding bridge), 0.6 m ² /L of 6mm topping (repair mortar), three m ² /L (curing membrane)
Pot Life (25°C):	1 hour
Cure Time (25°C):	Hard Dry: 24 hours Complete Cure: 7 days
⊠ Bond Strength (MPa)	5 (bonding bridge and repair mortar)
VOC Content	18 g/L

Pack Size

8.05Kgs



Data Reliability

All technical data provided in this document are based on laboratory tests. Actual performance may vary due to factors beyond our control.

Regional Compliance

Product specifications may vary based on local regulations. Please refer to the local Product Data Sheet for precise information.

Legal Disclaimer

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