

Multi-function Bonding Agent

Description

PENTENS T-309 is an one-component, acrylic based liquid resin, mix with normal Portland cement or white cement, used as flexible adhesive, patching mortar, and the base coat accompany with fiberglass reinforcing mesh in PENTENS Thermal Insulation System.

Uses

PENTENS T-309 Flexibond can only apply to sound, clean, dry, well prepared, frost-free surfaces.

After mixing with cement, it may be used:

- As a base coat for PENTENS Thermal Insulation System to embed fiberglass reinforcing mesh onto the insulation board
- As a flexible adhesive for tiling, glazing
- As a flexible patching mortar

Advantages

- Easy to use, only mix with cement on the job site
- Excellent adhesion and durability
- Crack resistance
- Good flexural strength
- Good impact strength
- Freeze-thaw resistance
- Vapor permeable
- Low alkalinity

Technical & Physical Data

Form	Liquid
Color	Milky white
Mixing Ratio (by weight)	T-309 : Cement 1 : 1
Working time (at 25 ⁰ C)	40 minutes
Drying time (at 25 ⁰ C)	6 hours
Curing time (at 25 ⁰ C)	24 hours
Bond Strength on concrete (7 days)	10 kgf/cm ²
Bond Strength on polystyrene board (Pull-out-Strength)	2 kgf/cm ² Failure in polystyrene board
Consumption (exclusive of cement)	2 kg/m ²
Shelf life	12 months when unopened in original packaging and stored in a dry cool place.
Packaging	20 kg pail

Note: Consumption may vary depending on surface conditions and application technique.

Limitations

- Minimum ambient and substrate temperature is 5⁰C during application and drying period.
- Do not apply on weather exposed horizontal areas or where immersion in water may occur.
- Do not apply as a finish coating.
- Do not apply directly over wood surfaces.

Instruction for Use

Surface Preparation

Substrates: All the substrate surfaces must be clean, free from grease, oil, laitance, and remove all the dirt and contaminants, which might affect adhesion. The impurity outside the structure body should be cleaned thoroughly. It is recommended to give substrate a rough or light-broom finish for better bonding strength.

Insulation board: Insulation board must be well protected, clean, dry, and free of all bond-inhibiting materials and rasped if necessary before installation.

Mixing

PENTENS T-309 Flexibond should be mixed thoroughly with normal Portland cement or white cement by using a low speed electrical or pneumatic power stirrer. Mixing time is minimum 3-4minutes until a homogeneous mix is achieved.

Mixing Ratio:

PENTENS T-309 : 1

Cement : 1

Adjust mix if necessary by adding a small amount of clean water to achieve the desire textured finish.

Avoid re-tempering after mixing of product.

Application

As a base coat for PENTENS Thermal Insulation System:

Apply with spray equipment or apply manually with a stainless steel trowel to an approximate thickness 3mm onto the insulation board. Work horizontally or vertically in strips of 1m and immediately embed fiberglass reinforcing mesh in the wet PENTENS T-309 Flexibond by troweling from the center to the edges of the mesh. Each strip of mesh should overlap a minimum of 100mm.

Avoid wrinkles in the mesh and smooth the base coat to eliminate trowel marks.

Minimum recommended thickness of the reinforced base coat is 1.5mm when dry.

Reapply additional base coat to completely cover the mesh as soon as the first coat is dry.

Cleaning

Remove unhardened PENTENS T-309 products from tools and equipment with water immediately after use. Hardened material can only be removed mechanically.

Safety

PENTENS T-309 Flexibond contains cement and is alkaline. Suitable precautions should be taken to minimize direct contact with skin. Applicators are recommended to wear rubber gloves and goggles when using the material. If the material gets into the eyes, flush immediately with clean water and seek medical attention if irritation persists.