



CEMENT-BASED ADHESIVE, FOR THE ADHESION OF THERMAL INSULATION EPS PANELS.



PRODUCT DESCRIPTION

T BOND 500 is a high performance, polymer-modified and fiber-reinforced, cement based adhesive and base coat for thermal insulation boards. It is ideal for bonding all types of thermal insulation panels to cementitious substrates. The product can be applied on insulation boards with reinforcing fiberglass mesh, forming an ideal substrate for the subsequent coat of render.

FIELD OF APPLICATION

- Bonding all types of thermal-insulating panels directly on render, masonry and concrete on walls and ceilings.
- Smoothing thermal-insulating panels with embedded fiberglass mesh on internal and external walls (thermal insulation system)

SUITABLE SUBSTRATES

- Concrete
- Cement Mortar
- Cement Plaster/Render
- Cement Block
- Gypsum Underlayment
- Gypsum Wallboard
- Cutback adhesive

LIMITATIONS

- Do not mix with other elements.
- Do not apply on metallic or rubber sub-

strate.

- Do not apply on substrate subject to significant movement or vibration.
- Do not apply on not sufficient cured substrate.
- Do not bond the insulating panels on deteriorated substrates or damaged render.

APPLICATION PROCEDURE

a) Preparation of the support

The support must be totally dried, mechanically hard, free of oils, grease, wax, paint, and loose particles. All substrates must not be subject to shrinkage after the installation. During the spring and summer period, renders must be cured for at least one week for every centimeter of thickness. Gypsum substrates or anhydrite renders must be perfectly dry (max. residual moisture 0.5%), sufficiently hard, and free of dust and before the application of T Bond 500 the substrate must be treated with Primer CTA.

b) Preparing the product

T BOND 500 must be mixed with clean water until obtaining a homogenous mixture. After 5-10 minutes of resting, the mix should be mixed again. After this, the product is ready to be used. The water demand to be used is approximately 21-23% of T BOND 500 (equal to ca. 5.25 -5.75 liters of water). The mix, produced in this

way, is workable for at least 2 hours.

c) Applying the product

Apply T Bond 500 directly on the back side of the thermal panels in an even layer using a 10 mm notched trowel if the substrate is flat, or in a series of dots and beads if the wall is uneven. Apply perimeter band plus additional dabs in the centre of the panels

d) Installing the tiles

At least after 24 hours after the installation of the thermal panels depending in weather conditions, apply a layer of T Bond 500 with a notched trowel on the panel surface and then embed alkali-resistant glass fiber glass mesh. The mesh must be pressed down with a smooth trowel once the product is still fresh. The overlap of the mesh must be at least 10 cm. After 12-24 hours, apply a second layer of T Bond 500 to form a compact and stable surface suitable for the final coating.

COVERAGE / CONSUMPTION

- For bonding insulating panels: 4-6 kg/m² according to the bonding technique used
- Smoothing and levelling: 1.3-1.5 kg/m² per mm of thickness

PACKAGING

T BOND 500 is supplied in 25Kg paper bag.

SHELF LIFE

Original sealed bags of this product are guaranteed to be of first quality for 12 months if stored off of the ground in a dry area. High humidity will reduce the shelf life of the bagged product.

SAFETY INSTRUCTION

T BOND 500 contains cement that, when in contact with sweat or other body fluid, can cause allergic reactions to those predisposed and irritant alkaline reactions and allergic reactions to those predisposed. It can cause damage to the eyes.

Wear protective gloves, goggles and take the usual precautions for handling chemicals during use. When in case of contact with skin or eyes wash immediately with plenty of water and seek medical attention.



TECHNICAL DATA

Product identity	
Consistency:	Powder
Color:	White or Grey
Bulk density (kg/m ³):	1200
Dry solids content (%):	100
Maximum grain size:	1mm
Classification:	EN 998-1
Application data (at +23°C and 50% R.H.)	
Mix ratio:	100 parts T BOND 500 with 21-23 parts by weight of water
Consistency of mix:	very pasty
Density of mix (kg/m ³)	1400
pH of mix:	12
Pot life:	over 2 hours
Application temperature:	+5°C to +40°C
Open time:	>30 minutes
Adjustability time:	approx. 60 minutes
Final performances	
According to EN 1348 (N/mm ²)	
– Modulus of elasticity (N/mm ² (after 28 days):	6000
– Flexural strength after 28 days (N/mm ²):	3.5
– Compression strength after 28 days (N/mm ²):	6
– Adhesion strength:	1.2
– Capillary water absorption [kg/(m ² .min)]:	0.15
– Water vapour permeability coefficient (μ):	15
– Thermal conductivity (λ) (W/mK):	0.35
Temperature resistance after final cure:	from -30°C to +90°C
Reaction to fire:	A1

WARNING

Danger. Contains Portland Cement: Chromium VI < 2 ppm within the validity period of the product. H315 Causes skin irritation. H317 May cause an allergic skin reaction. H318 Causes serious eye damage. H335 May cause respiratory irritation. P261 Avoid breathing dust. P280 Wear protective gloves/protective clothing/eye protection/face protection. P302 + P352 IF IN CONTACT WITH YOUR SKIN: Wash with plenty of water/... P305 + P351 + P338 IF IN CONTACT WITH YOUR EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P310 Immediately call a POISON CENTER/doctor/...



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