Technical Data Sheet

THERMABOND FIX

Polymer-modified, Cementitious, Adhesive Mortar for EPS Thermal Insulation Boards

Description

THERMABOND FIX is a polymer-modified, coarse-grained, cementitious adhesive for thermal insulation boards of expanded polystyrene (EPS), white or graphite.

It consists of high-quality gray cement, limestone aggregates of coarse graded granulometry, improving resins and special additives that ensure high adhesion to all common structural substrates, large application thicknesses and high mechanical strengths. It offers open working time and high thixotropy, preventing the thermal insulation boards from sliding during application. Does not contain lime in its composition. Only the addition of water is required.

It is classified as type **GP CS IV, W_c1** mortar according to **EN 998-1** and meets the requirements of the guideline for external thermal insulation systems of buildings.

Field of Application

THERMABOND FIX can be used as adhesive for thermal insulation boards of expanded polystyrene (EPS), white or graphite, in external thermal insulation systems, on walls & ceilings (pillars). Thanks to its specially designed composition and its "filling" properties, it can be applied to large thicknesses (up to 20mm), facilitating the installation of thermal insulation boards on substrates with corresponding unevenness.

In addition, it can be used as a render repairing mortar in thickness of 5-20mm, locally up to 30mm, in order to level surfaces and as a filling material for imperfections, gaps & holes resulting from plumbing, electrical, carpentry works , installation of frames, etc.

Suitable for indoor & outdoor usage.

Technical Data

Technical Characteristics		
Appearance	Cementitious powder	
Colour	Grey	
Maximum grain size	2,0mm	
Apparent density of dry mortar	1,45±0,05 kg/l	
Application Properties@ 23oC / 50% RH		
Mixing ratio	5-6 lt water per 25kg	
Apparent density of dry mortar of fresh mortar	1,85±0,05kg/l	EN 1015-6
Application temperature	5°C - 35°C	
Workable time	>90min @ 20°C	
Application thickness per layer	5 – 20mm	
Consumption as adhesive mortar	4 – 6 Kg/m^2	
Consumption as repairing mortar	1,4 – 1,5 Kg/m^2/mm	
Perfomance		
Compressive strength	≥10 N/mm^2	EN 1015-11
Flexural strength	≥3,5 N/mm^2	EN 1015-11
Adhesion to concrete	≥1,2 N/mm^2 FP:B	EN 1015-12
Adhesion to EPS	≥0,2 N/mm^2	EN 13494
Capillary water absorption	≤0,4 kg/m^2.$min^{0,5}$	EN 1015-18
Water vapour permeability coefficient, μ	≤20	EN 1015-19
Thermal conductivity (λ10, dry)	0,45 W/mK	EN 1745
Reaction to fire	Class A1	EN 13501-1

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Directions for Use

1. SUBSTRATE – PREPARATION: The application substrate should be clean, solid, free of loose parts, dust, oil, tar, lime, etc. Before application, light soaking the surface with water.

In cases of very absorbent substrates (e.g. porous concrete, old plasters/renders, etc.) it is recommended to precede the priming with a micromolecular, water-based, impregnation, acrylic primer, diluted appropriately so that it penetrates the surface, avoiding film formation on the substrate.

2. MIXING: In a clean container with pure water, gradually add the package content, under constant stirring with a low-speed electric mixer (**5 - 6 lt water** per **25Kg THERMABOND FIX**). Mix carefully until the mixture becomes homogeneous, without lumps and taking care not to leave any amount of package content on the walls or bottom of the container. Let the mixture stand for 5 minutes and then stir again.. The mixture is ready to use for the next 90 minutes at 20°C.

3. APPLICATION:

Application as a thermal insulation board adhesive on flat surfaces:

Apply **THERMABOND FIX** universally to the surface of the thermal insulation boards using a smooth metal spatula, then comb the material evenly with a notched metal spatula. Place the thermal insulation boards in the desired position by pressing sufficiently.

Application as an adhesive for thermal insulation boards on uneven surfaces:

Apply **THERMABOND FIX** in a strip around the perimeter of the thermal insulation board as well as in 2-3 center points, using a trowel or metal spatula. The adhesive should cover at least 40% of thermal insulation board's surface. Place the boards in the desired position by pressing sufficiently.

In any case, the finished boards' surface must be completely flat and leveled. Any excess adhesive mortar must be removed from the joints of the thermal insulation boards. Make sure that there is no "skin" formation on the adhesive surface, before board application, otherwise remove and refresh the adhesive layer. The final adhesive thickness must not exceed 20mm after the board has been installed.

Application as render repairing mortar:

Apply **THERMABOND FIX** to the surface using a suitable metal spatula or trowel in a thickness of 5 – 20mm per layer (locally up to 30mm). Any subsequent layer is applied after the previous one has sufficiently hardened and after the surface has been lightly wetted. Smooth the finished surface with a suitable sander, polystyrene, sponge or spatula, depending on the desired effect, and after the material begins to dry sufficiently (usually after 20-30 minutes, depending on conditions). It is recommended to use anti-alkali fiber mesh reinforcement in joints of dissimilar materials (e.g. brick with concrete, etc.) or above thermal insulation boards (e.g. on beams, columns), which is placed in the upper 1/3 of the application thickness of the material and at least 10cm on either side of the joints, in order to avoid any cracks due to uneven micro-movements of the substrate.

4. CLEANING OF TOOLS: Remove as much product as possible from tools while still fresh and clean using water. When the material hardens it is removed by mechanical means.

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Packaging - Colors

Available in 25Kg paper bag package (pallet of 60 bags), in grey color.

Storage

For 12 months from the date of production, in sealed, original packaging, at a cool, dry and well-ventilated place.

Additional Notes

INTERMIX bagged products help keep the environment clean.

- They reduce waste and material losses
- They reduce environmental pollution.
- Their packaging is fully recyclable.

Important Notes

Do not apply at substrate & environment temperatures below +5°C and above +35°C.

Do not apply in case of impeding rain for at least the next 24 hours after application.

It is recommended to protect the surfaces from strong air currents & direct, intense solar radiation using protective covers.

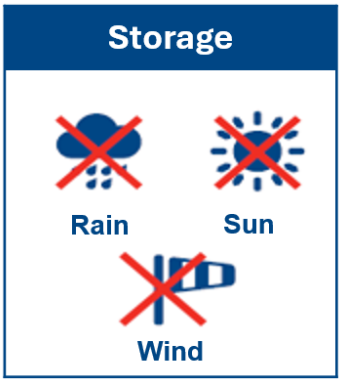
Do not add additional water and/or cement, gypsum, lime, or other materials that may affect the properties of the mortar.

Consumption

As thermal insulation boards adhesive: 4-6 Kg/m2

As render repairing mortar: 1,4 – 1,5 Kg/m2/mm.

It depends on the type of substate, the method, the tools and the application conditions.



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24

EN 998-1:2016

DoP No: INTERMIX 35

General purpose rendering and plastering mortar for external and internal use (GP/CS IV)

Reaction to fire:	Euroclass A1
Capillary water absorption:	W_c1
Water vapour permeability coefficient (μ):	μ≤20
Thermal conductivity($\lambda_{10,dry}$):	0,45 W/mK
Adhesion:	≥1,2 N/mm² FP: B

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