

# Strong Bond

Fiber-reinforced, adhesive & base coat, cement-based mortar for thermal insulation boards



- » Fiber reinforced mortar.
- » Resistance to moisture and frost.
- » Contains quartz aggregates.
- » Excellent workability.
- » Excellent adhesion to the substrate.
- » Fine grain finish.
- » High mechanical strength and resistance to elastic deformation.
- » Suitable for outdoor & indoor usage.

**Strong Bond** is a fiber-reinforced, one-component cementitious resin mortar. Contains cement, quartz aggregates, limestone fillers and improving additives. It offers excellent adhesion, high mechanical strength and flexibility.

It is classified as a **GP CS-IV W2** rendering mortar according to **EN 998-1** and as part of certified external thermal insulation system **CLIMAWALL<sup>®</sup>** by **BIOCLIMA<sup>®</sup>** according to **EAD 040083-00-0404**, as adhesive and base coat mortar.

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## FIELD OF APPLICATION


**Strong Bond** is used as an adhesive for thermal insulation boards, such as expanded polystyrene (**EPS White/Graphite**), extruded polystyrene (**XPS Etics GF**), mineral wool (**Mineral Wool**) etc. of the Exterior Thermal Insulation System **CLIMAWALL®** by **BIOCLIMA®**. In addition, it is used as a base coat, for thermal insulation boards, reinforced with alkali resistant glass fiber mesh, thus being the ideal substrate for the finishing render that will follow. It also can be used, in combination with alkali resistant glass fiber mesh and **ClimaTop®** finishing renders, as an anti-cracking protection layer, in order to cover connections of different types of masonry (e.g. aerated concrete with concrete, bricks with concrete or aerated concrete, etc.), to cover wall drilling channels made by electricians or plumbers, to reinforce edges of openings (doors and windows) in order to prevent future cracks, to smooth surfaces, to protect entire parts of a building structure against possible cracks, etc. Suitable for outdoor & indoor usage.


## TECHNICAL DATA


(Measurement conditions 20°C and 65% Relative Humidity)

Colour	Grey, White
Water ratio	6,00 l water in 25kg Strong Bond
Maximum grain size of mortar	600µm
Bulk density of dry mortar	1,55±0,05kg/l
Bulk density of fresh mortar	2,00±0,05kg/l
Application temperature	From +5°C to +35°C
Pot life	2 hours and 30 min
Consumption	4-6 kg/m <sup>2</sup> as adhesive
	4-5 kg/m <sup>2</sup> as base coat

In accordance to <b>EN 998-1:2016</b>	
Compressive strength, EN 1015-11	≥ 14 MPa
Water absorption coefficient EN 1015-18	$c \leq 0,14 \text{ kg}/(\text{m}^2 \cdot \text{min}^{0.5})$
Adhesive strength on substrate EN 1015-12	≥ 0,90 N/mm <sup>2</sup>
Water vapor permeability of hardened mortar (μ) EN 1015-19	15/35
28 days adhesion to XPS	≥ 0,14 N/mm <sup>2</sup>
28 days adhesion to EPS	≥ 0,12 N/mm <sup>2</sup> (failure EPS)
Thermal conductivity (λ <sub>10</sub> , dry), EN 1745	0,82 W/mK
Reaction to fire EN13501-1	Euroclass A1

 1488	<b>Druckfarben Hellas S.A.</b> Megaridos Ave., Kallistiri area, GR-19300 Aspropyrgos, Greece
	<b>22</b> DoP No 02.03 <b>ClimaWall® EPS</b> EAD 040083-00-0404 <b>ETA 21/1047</b>

 1488 / 1871	<b>Druckfarben Hellas S.A.</b> Megaridos Ave., Kallistiri area, GR-19300 Aspropyrgos, Greece
	<b>22</b> DoP No 02.02 <b>ClimaWall® Mineral</b> EAD 040083-00-0404 <b>ETA 21/0875</b>

 1488	<b>Druckfarben Hellas S.A.</b> Megaridos Ave., Kallistiri area, GR-19300 Aspropyrgos, Greece
	<b>22</b> DoP No 02.01 <b>ClimaWall® Extra</b> EAD 040083-00-0404 <b>ETA 21/0876</b>

## Fiber-reinforced, adhesive & base coat, cement-based mortar for thermal insulation boards

### DIRECTIONS FOR USE:

**1. SUBSTRATE - PREPARATION:** Strong Bond has very good adhesion to all standard substrates such as concrete, bricks, plasters, cement blocks, cement boards, gypsum boards, aerated concrete etc. The substrate must be sound, even, free from loose and foreign parts (e.g. residues of mud, plasters, paints, oils, etc.), without large cracks. Also, the substrate must be stable, free from shrinkage, deformation tensions and vibrations. Light soaking with water before use is recommended. On highly absorbent surfaces (e.g. aerated concrete, gypsum boards) priming is recommended using micromolecular acrylic primer **Eco Dur Aqua** by **KRAFT PAINTS**.

**2. MIXING:** In a clean container add 6-6.5lt of clean water and gradually empty the contents of a 25Kg bag of **Strong Bond** product. Stirring constantly with a low-speed mixer so that a homogeneous paste is obtained. Allow the mixture to rest for about 5 minutes and repeat stirring for a while. The mixture is ready to use for the next 2.5 hours. It is forbidden to add extra water to correct the workability of the mortar. This will reduce strength and increase shrinkage.

**3. APPLICATION:** **Application as adhesive / Level Surfaces:** Strong Bond is applied to the thermal insulation board with the smooth side of spatula and then combed with the serrated side in order to be uniformly applied on the whole surface. **Uneven surfaces:** Strong Bond is spread with a trowel around the perimeter of the thermal insulation

board and on 2-3 center points. Press firmly the thermal insulation boards on the wall to ensure uniform spread and contact of the adhesive. Minimum board coverage 40% is obligatory. The final surface must be completely smoothed. Open time is 20 minutes after the adhesive is applied. Any surplus adhesive must be removed from the board joints. If the adhesive dries before application of the thermal insulation board, remove it and apply a fresh layer.

**Application as base coat (anti-cracking protection):** Over the whole surface of the thermal insulation boards apply a uniform layer of **Strong Bond** using trowel and reinforce with glass fiber mesh **Clima Net 160**. The mesh must be overlapped approx.10cm in the joint area. At building openings (windows, door reveals etc.), diagonal reinforcement must be carried out. It could be applied another thin layer of mortar, in a way that it completely covers the mesh and provides an even surface. Total width of the layer should be between 2-3mm. During the application and also during the next 24 hours the ambient temperature and the substrate temperature must be between +5°C and +35°C. After the mortar dries completely, apply ClimaTop® Primer and finishing renders on the surface.

**4. CLEANING OF TOOLS:** Immediately after the application tools must be cleaned with warm water and soap or a detergent solution. Remove as much material as possible from tools before cleaning.

### IMPORTANT NOTES:

Stir the product before use and at regular intervals during application with a low-speed mixer. Do not apply at temperatures below +5 °C and above +35 °C as well as at humidity levels above 65%. Do not apply in case of frost

forecast for at least next 24 hours after application. Do not apply in case of impending rain or in direct intense sunlight and wind currents.

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## CONSUMPTION:

The consumption of **Strong Bond** is about 4 - 6kg/m<sup>2</sup> as an adhesive and 4 - 5 kg/m<sup>2</sup> as a base coat. It depends on the type of thermal insulation boards, type of substrate and also tools, conditions and method of application.

## PACKAGING - SHADES:

The product is packaged in 25Kg valve paper bags in White or Grey shade.

## STORAGE:

Stored on wooden palettes in a dry environment with temperature above 5°C for 12 months from the production date.

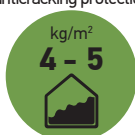
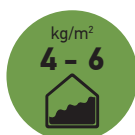
## HEALTH, SAFETY & ENVIRONMENTAL INFORMATION

Read label before use. For further information please consult the Material Safety Data sheet.

Poison Centre Telephone +30 210 7793 777.

AS ADHESIVE

AS BASIC COAT  
(anticracking protection)



With its guarantee

**KRAFT**  
PAINTS

DRIVEN BY INNOVATION

07/2022 THIS TECHNICAL DATA SHEET SUPERSEDES ALL PREVIOUS EDITIONS RELEVANT TO THIS PRODUCT

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**DISCLAIMER:** The above technical data, information, recommendations and guidance are based on scientific and technical knowledge, laboratory studies and long experience. However, the above information is considered to be as indicative and should be reviewed in any case in relation to each specific application conditions. Consequently, the suitability of each product in any application must be evaluated after referring to the updated Technical Data Sheet and to the website [www.kraftpaints.gr](http://www.kraftpaints.gr), as well as after contacting the technical support department, in case of necessity. Our company guarantees the quality of the product itself, whilst in any case the user/applicant is exclusively responsible for any undesirable failures after using the product.

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