

Fiber-reinforced adhesive for thermal insulation boards

Description

KELYFOS BOND is a fiber-reinforced, cement-based adhesive, enhanced with polymers (resins), with no vertical slip and extended open time. Provides high initial and final adhesive strength, flexibility and resistance to moisture.

Certified according to EN 998-1 and classified as a GP CS IV W2 rendering mortar. CE marked.

KELYFOS BOND forms part of KELYFOS external thermal insulation system. CE marked according to ETAG-004. Certificate No.: ETA-11/0387.

Fields of application

KELYFOS BOND is used for bonding thermal insulation boards of extruded or expanded polystyrene, to facades made of concrete, render, or masonry.

Moreover, KELYFOS BOND can be applied to facade insulation boards reinforced with fiberglass mesh, serving as the ideal substrate for the subsequent coat of render

KELYFOS BOND forms part of external thermal insulation system, when used in combination with KELYFOS FINISH-A, KELYFOS FINISH-S and KELYFOS FINISH-C renders and extruded polystyrene thermal insulation boards RAVATHERM XPS & RAVATHERM XPS X.

Technical data

Form:	cementitious powder
Color:	white
Water demand:	5.5 – 6.0 l/ 25 kg bag
Bulk density of dry mortar:	1.50 ± 0.10 kg/l
Bulk density of fresh mortar:	1.65 ± 0.10 kg/l
Pot life:	at least 6 h
Compressive strength:	≥ 12.50 N/mm ²
Flexural strength:	≥ 4.50 N/mm ²
Adhesion to concrete:	≥ 1.00 N/mm ²
Adhesion to XPS:	≥ 0.20 N/mm ²
Capillary water absorption:	≤ 0.2 kg/m ² min ^{0.5}

Thermal conductivity (λ_{10,dry}):

0.45 W/(m·K)

Water vapor permeability coefficient (μ):

15

Reaction to fire (EN 13501-1):

A1

Application temperature: from +5°C to +35°C

Directions for use

1. Substrate preparation

The surface to be covered should be free of dust, grease, loose particles, paints, etc. It is recommended to dampen the surface before application.

2. Application

As adhesive:

KELYFOS BOND is slowly added to water under continuous stirring, until a homogeneous paste is formed. A low-speed mixer is recommended for mixing. The mixture should be left to rest for about 5 minutes before is stirred again for a bit.

Smooth substrate: The adhesive is evenly spread on the board and combed over the entire surface using a notched trowel (notch size 10-12 mm).

Uneven substrate: The adhesive is applied in strips around the edges of the board and in selected dabs in the center using a trowel.

Next, thermal insulation boards are firmly pressed to the desired position.

As reinforced mortar:

First, the material is applied with a smooth trowel at a maximum thickness of 3-4 mm. Then, a reinforcing fiberglass mesh is placed and firmly embedded into the fresh base coat layer with a smooth trowel. Finally, the surface is smoothed out and the excess adhesive is removed.

Consumption

As adhesive: 3.0-4.0 kg/m², depending on trowel notch size and substrate type.
As reinforced mortar: approx. 1.5 kg/m²/mm.

Packaging

KELYFOS BOND is supplied in 25 kg paper bags.

Shelf life - Storage

12 months from production date if stored in original, unopened packaging in dry and frost-free conditions.

Remarks

- Due to cement content, KELYFOS BOND reacts with water forming alkaline solutions, thus is classified as irritant.
- Very porous surfaces, such as aerated concrete, gypsum boards, chipboards, etc. must be previously primed with water-based, acrylic primer.
- Please consult the directions for safe use and precautions written on the packaging before use.

CE

2884

RAVAGO HELLAS S.M.S.A
115, Neraziotissis str., Maroussi 15124,
Athens Greece

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KELYFOS

External Thermal Insulation Composite
System with rendering
Insulation product – Extruded Polystyrene
(XPS)

DoP No.: KELYFOS / 2106-23

2884-CPR-00122/1

ETA 11/0387
EAD 040083-00-0404

CE

RAVAGO HELLAS S.M.S.A
115, Neraziotissis str., Maroussi 15124,
Athens Greece
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EN 998-1

**General purpose rendering mortar (GP)
for external use**

DoP No.: KELYFOS BOND/2301-01

Reaction to fire: Class A1

Adhesion: 1.0 N/mm² – **FP:** A

Water absorption: W2

Water vapor diffusion coeff.: μ 15

Thermal conductivity: ($\lambda_{10, dry}$) 0.45 W/mK

Durability (against freeze/thaw): evaluation based on provisions valid in the intended place of use of the mortar