



Technical 18.01.2015

## POLISTIROL ECO PLUS

Adhesive and sealant for polystyrene thermo insulating boards, for indoors and outdoors

### Use:

Adhesive mortar for thermal or acoustic insulation works with expanded or extruded polystyrene thermo insulating boards for facades and for gluing polystyrene or rigid polyurethane decorative elements to interiors and exteriors, on concrete, plasterworks, brick and other similar. Product does not apply on wood, plastic, metal, etc.

### Characteristics:

- High resistance
- High adherence
- Easy processing

### Technical data:

Item No.:	PS ECO PLUS
Material foundation:	Cement, mineral aggregates, polymers, plasticizer
Adherence to concrete base:	Min. 0,5 N/mm <sup>2</sup>
Adherence to brick base:	Min. 0,5 N/mm <sup>2</sup>
Adherence to polystyrene base:	Min. 0,08 N/mm <sup>2</sup>
Reaction to fire:	Class A1
Bucket time:	About 2 hours
Open gluing time:	Min. 20 minutes
Bucket time:	Approx. 2 hours
Open time:	20 minutes
Air/substrate temperature when placing:	Min. +5°C max. +35°C
Consumption:	Gluing approx. 2.5-3.5 kg / m <sup>2</sup> Filling with grouter 6 x 6 approx. 2,5 – 3,9 kg / m <sup>2</sup> Filling with grouter 8 x 8 approx. 3.9 – 5.5 kg / m <sup>2</sup>
Packaging:	Paper bag resistant to humidity
Delivery:	20 kg, 23 kg, 25 kg, 30 kg
Storage / Validity:	12 months from date of fabrication on the packaging, according to Directive 1907/2006/EC and GR 932/2004, at 20°C and 65% relative humidity. Store in dry spaces on wooden pallets.

Technical data and those related to consumption are determined in standard conditions. There may be differences depending on conditions of applications.

**Base:**

Surface of the support layer must be resistant, clean, dry, without cracks or fissures, adherent and compact, free of grease, dusts, loose debris, salts or other materials than can form a separator layer. Fragile areas and mortar residues must be removed. Inspect the surface by gently tapping with a hammer before plating, to determine the resistance of the base, respectively to see if it is resistant enough for gluing the thermo insulating boards.

WARNING: ON HIGHLY ABSORBENT SURFACES, SUCH AS ACC, OLD OR NEW BRICK BUT HIGHLY ABSORBENT, ETC., BEFORE GLUING WITH POLISTIROL, PRIME THE SURFACE WITH A CEMENT SPRITZ AND LET TO HARDEN FOR 24 HOURS.

**Processing:**

Mix homogenously approx. 0,24-0,26 liters of water/kg of product with an electric mixer with a shaft for adhesives. Leave to rest 5 to 10 minutes and then give a brief, vigorous mix one more time.

For flat, plastered surface, as well as when you apply extruded polystyrene, adhesive is applied over the entire surface of the polystyrene boards, with a 10-12 mm serrated grouter, and then the thermo insulating board is pressed against the surface that needs insulation.

For uneven surfaces, adhesive is applied over the polystyrene board in points with approximately equal distances, 15-20 cm, and on the edges (marginal) with a 3-4 cm wide strap, so that the contact surface with the base through the adhesive is 40-45% from the surface of the polystyrene board (check regularly).

The marginal strap on the thermo insulating board has a very important role, because in its absence, cracks can result all over the surface of the thermo system, thermal insulation can be reduced significantly due to free circulation of air current between the wall and the thermo insulating board, and in case of fire, it can extend rapidly due to the air current forming behind the board.

The polystyrene board is pressed against the surface to be insulated. Final flat surface is obtained by pressing multiple boards on the surface, with a long, wooden or metal smoothing board.

Open gluing time when you can adjust the position of the board, is approx. 20 minutes. The open time for adhesion can be reduced in conditions of high temperature or air currents. In this situations, when you gently touch the adhesive layer, it no longer gets stuck on your fingers, and you see a thin film formed at the surface of the material. In this situation, the adhesive is laid once more on the base and is leveled again with the grouter, to break the film formed.

24 hours after applying the thermo insulating and acoustic boards (72 hours for applying with adhesive in certain points and on the edges), they are fixed with 4-6 pins/sm. Wall doweling can be done on the surface (front) or hidden.

Apply adhesive on the polystyrene board and level it with an 8 x 8 mm / 10 x 10 mm serrated grouter. Starting at the top of the surface, layout a coated glass fiber netting for the thermo system, with 5 x 5 mm up to 10 x 10 mm meshes and press the layer previously applied and leveled with the smoothing board. With the right side of the grouter, introduce it evenly into the adhesive. Netting rows are overlapping on portions of minimum 10 cm. At the corners of doors and windows, additional reinforcing is done, diagonally, with 20 cm long and wide reinforcing mesh strips. We recommend to use a reinforcing mesh resistant in an alkaline environment and with a minimum weight of 145 gr/sm. Surface obtained is finished with the polystyrene adhesive, until you obtain a flat surface, ready to be finished with decorative plasters.

Surface is finished after minimum 72 hours (recommended 7 days) with any type of standard decorative material that does not contain organic solvents. For optimum results, we recommend using decorative plasters from the ADEPLAST COLOR SYSTEM range. Waiting time is taken into account at 20°C and 65% relative humidity. Low temperatures and high air humidity prolong this drying and hardening period. Between September 15 and March 15, consider extending the period time with one day.

**Important:**

- Consideration must be given to additional measures for the protection of surfaces against fast dehydration, bad weather or frost;
- **During application and hardening, avoid exposure of the surface to direct sunlight and strong air currents;**
- Comply with the information in the technical security sheet;
- This technical sheet replaces all previous versions. Information in this technical sheet represent our experience with this product up to this day. This technical sheet does not clear the user of the product from making his own decision and evaluation including by samples, regarding the appropriateness of using the product. SCHOMBURG / ADEPLAST products as well as their aggregate raw materials are continuously monitored in our own laboratories for consistent quality. Our advisory service is available for questions regarding product application and demonstrations. Comply with the information in the security technical sheet.