

PLYSET THERMO BOND**▪ Description**

Cement-based adhesive mortar for thermal insulation boards

▪ Application area

-Used in all buildings for bonding polystyrene boards (XPS, EPS, mineral wool) in external thermal insulation applications.

▪ Application properties

-Pot life: max. 2 hours
-Working time: max. 10-15 minutes
-Waiting time before plastering over the bonded insulation board: 2 days

▪ Surface preparation

-Plyset Thermo Bond application surfaces must be cleaned of dust, dirt, oil and other residues that may impair adhesion.
-If there are defects on the surface, repair mortar is used to repair them.
-The surface must be cured and sound.
-Porous surfaces must be moistened before application.
-The applied substrate must be a sound supporting layer and properly aligned.

▪ Application conditions

-Ambient temperature between +5 °C and +35°
-Must not be applied on frozen or thawing surfaces, or on surfaces at risk of frost within 24 hours.
-Must not be applied under direct sunlight, strong wind or on hot surfaces.

▪ Warnings and Recommendations

-Foreign substances must never be added.
-After application, all tools used must be washed with water before drying.
-Not applied on weak, low-strength substrates.

▪ Application tools

Hand mixer, steel trowel, notched trowel

▪ Application

-The mixing container must be clean and free of residues from the previous batch.
-The cleanliness of the water and materials used must be ensured.
-The mortar must be prepared at a ratio of 5.5-6 liters of water to 25 kg Plyset Thermo Bond .
-First add water to the container, then slowly sprinkle in the powder. Mix until a homogeneous mixture is obtained.
-A low-speed mixer must be used to homogenize the mixture.
-After obtaining a homogeneous mixture, let the mortar mature for 5-10 minutes.
-Before starting application, mix again for 1-2 minutes.
-Once the mixture is homogeneous, no powder, water or other substance must be added.
-Plyset Thermo Bond must be applied according to the flatness of the substrate; if the substrate is flat, comb the back of the board, and if the substrate is uneven, apply mortar in dabs on the back of the board
-During bonding, the alignment of the boards must be checked with a leveling rule or spirit level.
-The prepared mortar must be used within 3 hours.
-Mortar in the container that has exceeded its pot life or has crusted over must be discarded.
-After application, hands and tools must be washed thoroughly with water.
-Depending on ambient temperature and surface conditions, mechanical anchoring must be carried out after at least 24 hours.

▪ Consumption

Approximately 3-5 kg/m²

• Performance Information

-Bulk density of fresh mortar: ≥ 1000 kg/m³
-Sieve analysis: residue on 1 mm sieve $\leq 1.0\%$
-Flexural strength: ≥ 2 N/mm²
-Compressive strength: ≥ 6 N/mm²
-Bond strength to thermal insulation board: ≥ 0.08 N/mm²
-Water absorption (30 min): ≤ 5 g
-Water absorption (240 min): ≤ 10 g

- Bond strength to substrate: $\geq 0.5 \text{ N/mm}^2$
- Fire class: A1
- Temperature resistance: $+5^\circ\text{C}$ and $+30^\circ$
- Note: Application properties values were obtained from laboratory tests ($23 \pm 2^\circ\text{C}$ and $50\% \pm 5$ humidity, with no air movement) and may vary under different environmental conditions. Performance information values were measured under the conditions specified in the relevant product standard and may vary under different conditions.

- **Reference Standards**

- EN 998-1 Class: GP
- CE

- **Packaging**

- 25 kg in Kraft bag,
- 64 pieces per pallet, 1600 kg

- **Physical state**

- Gray powder

- **Storage Conditions**

- During storage, no more than 10 Kraft bags should be stacked.
- Storage must be in covered areas, away from direct sunlight.
- Bags must be stored off the ground and protected from moisture.
- Under these conditions, the product can be stored for 12 months from the date of production.
- Improper storage conditions or exceeding the shelf life may impair the product properties.