



# 4000

## Heat Insulation Plate Adhesive Mortar



Product Code : 4000  
**Quality Certificates**  
 The product conforms to the TS 13566 standard.

**Description:** A high performance, cement-based, flexible, highly stable adhesive mortar, which contains polymer additives, produced specifically for heat insulation plates (XPS, EPS, stone wool).

**Application Areas:** Indoor and outdoor, bonding heat insulation plates (expanded polystyrene (EPS) and extruded polystyrene (XPS), stone wool, polyurethane plates etc.).

### Advantages:

- Easily applied, providing perfect adhesion.
- Resistant to water and frost.
- Not affected by temperature changes.
- Flexible.
- Provides high stability, does not cause sagging and cracking.

**Preparation of the Surface:** Special attention must be given that the application surface is cured. Both the application surface and the plates must be sound and clear of materials which prevent bonding, such as dust, oil, paint, silicone, curing agents and detergents. The application surface must be kept wet.

**Preparation of the Mortar:** 25 kg of Falcon Heat Insulation Plate Adhesive Mortar is added to approximately 6.5 - 7 liters of clean water and mixed by a mixer with low speed or with a trowel until there are no lumps. Prepared mortar should be left to mature for 5 - 10 minutes, mixed again before use. The mortar must be used within 2 hours.

**Application Information:** Depending on the smoothness of the surface;  
 Method of Bonding on the Whole Surface: Apply Falcon Heat

Insulation Plate Adhesive Mortar on the whole surface of the heat insulation plate with a trowel or an appropriate notched trowel. Method of Applying As Band and Spots: Apply Falcon Heat Insulation Plate Adhesive Mortar on all sides of the heat insulation plate as a band and as spots on the mid parts of the plate with a trowel. During the application, a float has to be used in bonding the plates. Plates bonded with Falcon Heat Insulation Plate Adhesive Mortar have to be pressed strongly for a proper bonding and have to be fixed mechanically with wall plugs after 24 hours.

**Consumption:** 3 - 4 kg/m<sup>2</sup> (Varies depending on the application method.)

**Caution:** Avoid application in temperatures below +5°C and above +35°C. Avoid application on frozen areas, on areas under risk of freezing in 24 hours or on areas open to direct sunlight or wind. Never attempt to extend expired mortar by adding powder and water. To prevent heat transfer, place the heat insulation plates with minimum gap between each other. Pay attention not to use plates that lost their properties due to intensive sun exposure. The values mentioned above are obtained at 23±2°C and 50±5 relative humidity conditions.

**Packaging:** 25 kg craft bags

**Shelf Life:** Unopened packages can be stored in dry environments for up to 12 months, stacked maximum 10 packages on a pallet.

**Health and Safety:** As with all chemical products, contact with food, skin, eyes and mouth should be avoided during usage and storing. If swallowed by accident, consult a doctor. In case of contact with skin, rinse with plenty of water. Keep out of reach of children.



### Technical Properties

Appearance	: Grey colored fine powder
Powder Density	: ~ 1.30 kg/lit
Water Mixing Rate	: 6.5 - 7 lt water / 25 kg powder
Resting Period	: 5 - 10 minutes
Pot Life	: Appr. 2 hours
Open Time	: 15 minutes
Slip	: ≤ 0.5 mm
Fixing With Wall Plugs	: Minimum 24 hours later
Plaster Application Time	: 1 - 2 days later
Application Temperature	: Between +5°C and +35°C
Aggregate Size	: Amount above of 1 mm sieve ≤ 1.0% (TS EN 1015-1)
Air Content of Fresh Mortar	: ≥ 1000 kg/m <sup>3</sup> (TS EN 1015-6)
Flexural Strength	: ≥ 2.0 N/mm <sup>2</sup> (TS EN 1015-11)
Compressive Strength	: ≥ 6.0 N/mm <sup>2</sup> (TS EN 1015-11)
Adhesion Strength to the Substrate	: ≥ 0.5 N/mm <sup>2</sup> (TS EN 1015-12)
Adhesion Strength to the Thermal Insulation Plate	: ≥ 0.08 N/mm <sup>2</sup> (TS EN 13494)
Water Absorption	: After 30 minutes; ≤ 5 g ; After 240 minutes; ≤ 10 g (TS EN 12808-5)
Service Temperature	: -20°C / +70°C

Application instructions and technical data provided for the products are obtained in line with our experience and the tests we implemented according to international standards under ambient temperatures of 23 ± 2 °C and ambient relative humidity conditions of 50%±5. Higher temperatures decrease the times and lower temperatures increase them.