

KOMBI S

Mineral adhesive mortars for polystyrene

25
kg

Main advantages:

- High adhesion to the base and to polystyrene;
- High resistance to the formation of contraction cracks;
- Very good vapour permeability;
- Optimal physical resistance;
- Easy method of application;
- Economic use;

Purpose:

Mineral mortars for fixing insulation panels of expanded polystyrene to bases in the **KABE THERM EPS**® insulating system. The system can be used on all typical mineral surfaces (such as concrete, cellular concrete, cement or cement-calceiferous render, sandstone, as well as on unfinished walls made from bricks, blocks, hollow bricks, and other such ceramic or sand-calceiferous materials) as well as on surfaces coated with an adherent coat of facade paint or a thin-coat render. The **KOMBI S** mortars are used for the insulation of exterior walls of buildings in the technology of jointless insulating systems (JIS).

Note: We recommend the use of the **KOMBI >** (pg. 24) adhesive and putty mortar for the fixing of insulation panels made from extruded polystyrene. The reinforced layer made of glass fibres should be applied using the **KOMBI >** (pg. 24) adhesive and putty mortars.

*) when using the product in an insulating system, the manufacturer grants a guarantee only in the case where all components of the **KABE THERM EPS >** (pg. 4) system is used.

Technical data:

Basic binding agent: hydraulic and polymer binding agents with modifiers;
Bulk density: about 1.3÷1.5 g/cm³;
Mixing proportions: about 5.5÷6.5 l of water per 25 kg of mortar;
Period of suitability of use after mixing with water: about 2 hours;
Drying time in the open: ≥30 minutes;
Colour: light grey;
Consumption: about 4.0 kg/m²;
Temperature of use (of the air and base): from +5°C to +25°C;
Packaging: Single use paper packaging containing 25 kg of the product.

Storage: Store in the tightly sealed, original packaging in a dry area ensuring protection against moisture and frost.

NOTE: Keep out of reach of children.

Period of suitability for use: 12 months from the date of production on the product packaging for factory sealed packaging.

METHOD OF USE:

Preparation of the base:

The base for fixing insulation panels must be stable (no scratches and cracks), degreased, clean, and dry as well as free from stains and efflorescence of biological or chemical origin. In the case of algae and/or fungus growth, the base should be cleaned mechanically, then washed with pressurised water and safeguarded by the appropriate algae- and fungicide according to the manufacturer's guidelines. The base must be safeguarded against capillary ascending moisture and against precipitation leakage. All loose layers not connected with the surface (loose render or flaking paint coatings) are to be removed. In the case when unevenness of the base exceeds 1 cm, the wall should be initially evened using an evening mortar. Absorbent bases are to be primed using the **BUDOGRUNT ZG >** (pg. 35) preparation prior to application of the evening mortar.

Before commencing fixing of polystyrene panels on uncertain bases, an adhesion test should be carried out. This test is based on the fixing of several (8-10) polystyrene samples (with dimensions of 10 x 10 cm) in different places on the facade and manually tearing off these samples after three days. The surface is adequate when the tear-off takes place in the layer of the polystyrene. In the case of tear-off of the entire sample with adhesive and a layer of the surface, the removal of the weak layer of the surface and priming using the **BUDOGRUNT ZG >** (pg. 35) primer is necessary. After the preparation has dried, another adhesion test should be carried out. If this test also gives a negative result, additional mechanical affixation or special preparation of the base should be considered.

Preparation of the mortar:

Gradually pour the entire contents of the mortar packaging into a container with a measured amount of water (5.5÷6.5 litres) while constantly mixing (using a low-speed mixer/drill with agitator), until a uniform mass free of pellets is obtained. After a waiting period of five minutes and further mixing, the mortar is ready for use. The period of suitability for use of the mortar mixed with water is equal to about two hours (for an ambient temperature of +20°C).

Fixing polystyrene panels:

On even surfaces, polystyrene panels may be fixed using the planar method. For this purpose, a portion of adhesive mortar should be applied to the panel, and a thin layer should be spread evenly using the straight edge of a float. During this activity, the mortar should be pressed to the panel surface using the float. Next, an additional portion of the mortar should be applied onto the panel and spread using the toothed edge of the float (minimum tooth dimensions 10 x 10 mm). After the mortar is applied, the panel should be immediately applied to the wall in the designated place and pressed so as to obtain an even surface with neighbouring panels. Panels are to be fixed in a staggered arrangement, slid in tightly against those fixed earlier. The surplus mortar that is squeezed out should be removed so that none remains on the edges of panels. Mortar that has been applied correctly should cover the entire surface of the panel, and the thickness of the layer of mortar after fixing should not exceed 1 cm. After the mortar has been bound sufficiently (a minimum of 48 hours is required), the fixed panels can be affixed using the appropriate mechanical fasteners, in accordance with the insulation design. In order to obtain an even surface of affixed panels, the entire face of the polystyrene should be sanded with a float with coarse sandpaper.

When fixing polystyrene panels on uneven surfaces, the adhesive mortar should be applied to panels using the strip-point method. For this purpose, apply the prepared mortar in strips of a width of 3÷6 cm to the entire perimeter along the outside edges of the panel, with 6÷8 cakes of mortar with diameters of 10÷12 cm uniformly distributed on the panel. The strips of mortar on the perimeter are to be formed into the shape of a prism, by running the float at an angle of 45° to the surface of the panel. After the mortar is applied, the panel should be immediately applied to the wall in the designated place and pressed so as to obtain an even surface with neighbouring panels. Panels are to be fixed in a staggered arrangement, slid in tightly against those fixed earlier. The surplus mortar that is squeezed out should be removed so that none remains on the edges of the panel. Mortar that has been applied correctly should cover at least 40% of the surface of the panel, and the thickness of the layer of adhesive mortar after fixing should not exceed 1 cm. After the mortar has been bound sufficiently (a minimum of 48 hours is required), the fixed panels can be affixed using the appropriate mechanical fasteners, in accordance with the insulation design. In order to obtain an even surface of affixed panels, the entire face of the polystyrene should be sanded with a float with coarse sandpaper.

Drying:

It is accepted that the period of initial binding of the mortar is equal to a minimum of 3 days at an air temperature of +20°C and an air humidity of 65%.

Note: Low temperature and high relative air humidity significantly lengthen the drying time of the mortar. For application of the reinforced layer, use the **KOMBI >** (pg. 24) adhesive and putty mortar.

Guidelines for application:

During the application and drying of the adhesive mortar, the weather should be free of rain, with an air temperature from +5°C to +25°C. Work on surfaces directly exposed to sunlight and strong wind should be avoided.

Note: The KOMBI mortar is a strong alkaline, eyes and skin should be protected. Protective clothing should be used during work. In case of contact with eyes, they should be washed immediately with a large amount of water; and if irritation occurs, a doctor should be contacted.