KOMBI WM1

Mineral adhesive mortar for mineral wool





Main advantages:

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

Purpose:

Mortar for fixing of mineral wool insulating panels to the base in KABE THERM MW* ► (pg. 12 and 13) insulating systems. Used for fixing of panels made from facade (with disordered fibres) or lamellar (with oriented fibres) mineral wool. The system can be used on all typical mineral surfaces (such as concrete, cellular concrete, cement or cement-calciferous render, sandstone, as well as on unfinished walls made from bricks, blocks, hollow bricks, and other such ceramic or sand-calciferous materials) as well as on surfaces coated with an adherent coat of facade paint or a thin-coat render. The KOMBI WM1 > (pg. 25) mortar is used for the insulation of exterior walls of buildings in the technology of jointless insulating systems (JIS).

Note: This product is meant for unitary use in a structure. For application of the reinforced layer, the **KOMBI WM2** (pg. 26) adhesive and putty mortar should be used.

*) when using the product in an insulating system, the manufacturer grants a guarantee only in the case where all components of the KABE THERM MW > (pg. 12) or KABE THERM MW > (pg. 13) system are used.

Technical data:

Basic binding agent: hydraulic and polymer binding agents with modifiers;

 $\label{localization} \begin{tabular}{lll} \begin{$

Period of suitability of use after mixing with water: about 2 hours (for a temperature of +20°C and relative humidity of 50%);

Drying time in the open: \geq 20 minutes;

Colour: light grey; Consumption: • for fixing of facade mineral wool panels – about 5.0 kg/m²;

 for fixing of lamellar mineral wool panels – about 5.5 kg/m² Temperature of use (of the air and base): from $+5^{\circ}$ C to $+25^{\circ}$ 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: 6 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, 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 pulling up of moisture and against seepage of water coming from atmospheric precipitation. 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 or adhesive mortar. Before commencing fixing of thermal insulation panels on uncertain bases, an adhesion test should be carried out. This test is based on the fixing of several (8-10) mineral wool samples (with dimensions of 10 x 10 cm) in different places on the facade and manual tearing off of these samples after 3 days. The surface is adequate when the tear-off takes place in the layer of the thermal insulation. 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

Preparation of the mortar:

Gradually pour the entire contents of the packaging into a container with a measured amount of clean and cool water (6.5-7.0 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 a temperature of +20°C and relative air humidity of

Fixing facade mineral wool panels:

Using the prepared adhesive mortar, lute the panel in places of later mortar application using the strip-point method. 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 $6 \div 8$ cakes of mortar with diameters of $10 \div 12$ 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 the 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 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 slabs can be affixed using the appropriate mechanical fasteners, in accordance with the insulation design.

Fixing lamellar mineral wool panels:

Lute the entire surface of the panel on the side to be fixed with the prepared adhesive mortar using a smooth stainless steel float. Then, a thin, uniform layer of adhesive mortar should be applied to the thus prepared surface using a toothed float (tooth dimensions 12 x 12 mm). After the application of the mortar, the panel should immediately be applied to the wall in the planned position and pressed with the float. 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. Mineral wool should be fixed in layers from bottom to top with the observation of a staggered panel arrangement. After the mortar has been bound sufficiently (a minimum of 48 hours is required), the fixed slabs can be affixed using the appropriate mechanical fasteners, in accordance with the insulation design.

Drying:

It is accepted that the period of initial binding of the mortar is equal to a minimum of three days at an air temperature of +20°C and a relative air humidity of 65%. After this period has passed, the application of the layer reinforced with glass fibre mesh may commence. In order to even out possible unevenness, the surface of the affixed panels may be sanded using a float with coarse

Note: Low temperature and high relative air humidity significantly lengthen the drying time of the mortar. ,The KOMBI WM2 adhesive and putty mortar should be used for the application of the

Guidelines for application:

Low temperature and high air humidity can significantly lengthen the drying time of the mortar. 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. Wash tools with water just after concluding work. Work on surfaces directly exposed to sunlight, strong wind, and high air humidity should be avoided. For the purpose of protection of the not fully dried reinforced layer against the harmful effects of atmospheric conditions, the use of the appropriate protective meshes on the scaffolding is recommended.

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.

