

TECHNICAL SHEET 06.02.05-EN



JUBIZOL Microair fix

White water vapour permeable adhesive mortar

1. Description, Application

In the JUBIZOL MICROAIR external wall insulation system, the JUBIZOL Microair fix is used as an adhesive for the insulation covering (a board made of expanded polystyrene) and as a base coat. The product's colour is bright and is highly water vapour permeable. It is made of and based on cement and polymer binders. It has good strength characteristics and good adhesion to the insulation boards and to all types of mineral wall bases (uncoated brick and concrete walls, uncoated walls from porous concrete, all types of coated walls).

2. Technical data

Packaging		25 kg
Density (application-ready mortar mixture)		~1.6 kg/dm ³
Open time (ready-to-use mortar compound)		2-3 h
Total layer thickness for base plaster on EPS insulation boards		~3 mm
Water dilution mass		~23 %
Drying time of adhesive mortar after fixing of insulation boards T = +20 °C, relative air humidity = 65 %	For further treatment (flattening, anchoring of Insulation lining)	~24 Hours
Drying time of the base coat T = +20 °C, relative air humidity = 65 %	To achieve resistance against leaching with rainwater	~24 h
	For further treatment (application of the render finish)	~24 h
Minimum consumption for fixing the insulation boards		~3.5 kg/m ²
Maximum consumption for fixing the insulation boards		~5 kg/m ²
Average consumption of basic plaster on EPS		~4.5 kg/m ² /mm

Vapor permeability EN ISO 7783-2	coefficient μ	~15
	value Sd (d = 100 μ m)	~0.045 m
Thermal conductivity I EN 1745		~0,56 W/mK
Water absorption w24 EN 1015-18		<0.06 kg/m ² *h ^{0,5} class W2
Adhesion to concrete (after 28 days)	In dry	>0.25 MPa
	After being soaked in water (2 hours)	>0.08 MPa
	After being soaked in water (7 days)	>0.25 MPa
Adhesion to expanded polystyrene (after 28 days)	In dry	>0.08 MPa
	After being soaked in water (2 hours)	>0.03 MPa
	After being soaked in water (7 days)	>0.08 MPa

3. Installation Conditions

The temperature of the air and the wall base should be from +5 °C to +30 °C, and the relative air humidity should not be higher than 80%. Protect façade surfaces against the sun, wind and rainfall with curtains; however, do not conduct any work in rain, fog or strong wind (≥ 30 km/h) despite such protection.

4. Preparation of Surface for Fixing of Insulation Boards

With JUBIZOL Microair fix the insulation boards made of expanded polystyrene can be fixed to any base that is suitably hard, dry, and clean. The base should be level – when checking the surface with a 3m lath, the gap between the lath and the wall surface must not exceed 10mm. Larger, uneven surfaces should be levelled by coating and not by applying a thicker level of the adhesive.

No basic coats should be used before fixing the insulation covering onto a clean brick wall surface, but all other types of construction bases do require such coats. A water-diluted ACRYL Emulsion should be used for suitably coarse and normally absorbent bases. The base coat is applied with a suitable brush, with a long nap paint roller or by spraying. Fixing the insulation covering can start approximately 2 to 3 hours after applying the base coat.

The coated facade walls are a suitable base for fixing the insulation covering only if the coat tightly adheres to the wall surface, otherwise they should be removed completely or suitably repaired and patched. Under normal conditions (T = +20° C, rel. air humidity = 65%), newly applied coats are dried or matured for at least 1 day for each mm of thickness. Surfaces infected with wall mould or algae must be disinfected and cleaned before fixing. Concrete bases should be cleaned with hot water or steam. Before fixing, all poorly adhering and non-adhering decorative coats and spraying should also be removed.

For technical information on these primers, please read the technical data sheet.

5. Preparation of Insulation Lining Surface for Application of Base Coat

Two days after fixing, the insulation boards made of expanded polystyrene and any uneven insulation covering should be sanded (sand paper, no. 16). If required, the covering should be additionally anchored with two, two-part plastic nail-in anchors before applying the lower layer of the base coat.

6. Preparing the Adhesive Mortar for Application

Prepare the adhesive compound by pouring the content of a bag (25 kg), during constant stirring, into approximately 5.75 litres of water. Stir the compound in a suitable container with an electric mixer or in a mixer used for the preparation of mortars and concrete. After 10 minutes, when the compound has swollen up, stir again, and, if necessary, add a little water. Open time of the prepared compound is 2-3 hours

7. Fixing the Insulation Boards

The adhesive material is applied on one side – the back side of the boards – with a stainless painting trowel or a

coating trowel in continuous bands at the edge of the boards. Also, additionally apply it on 4 to 6 spots or in two stripes in the middle of the board (when fixing of insulation onto ideally level surfaces, the compound may be also applied a notched stainless steel smoothing trowel – width and depth of notches 8 to 10 mm – evenly across the entire surface of the boards). The quantity of the applied adhesive should be such that it spreads to at least 40 % of the board's surface when the boards are pressed onto the wall surface.

The boards should be fixed closely together, so that the adhesive does not seep into the joints. Throughout the fixing process, straightness of the outer surface of the covering is checked with a suitably long lath. Boards on adjacent rows are indented in accordance with brick connection rules, whereby the indent of vertical joints should be at least 15 cm. Brick connection rules should also be taken into account as far as corners are concerned, where boards of one wall surface should stretch over the outer surface of the lining of the neighbouring wall surface by at least a few centimetres. The 'cross bond' should be implemented in the corner. The excess part of the boards should be cut off at the corners in a straight line, but only 2 to 3 days after fixing the boards.

Any required additional anchoring of the insulation covering should be performed 2 to 3 days after fixing the boards (when the adhesive has hardened completely).

Indicative or average consumption:

JUBIZOL Microair fix ~3.5 to 5 kg/m², depending on the quality of the surface

8. Application of Adhesive Mortar into the Thermal Insulation System Base Coat

Mortar compound is applied onto the insulation covering manually or by a machine in two, and only in special cases (dug-in parts of the building and where the facade surfaces of buildings bordering on children's and school playgrounds are "very exposed to damage") in three coats. The thickness of the lower layer on the covering made of expanded polystyrene should be ~2 mm. Immediately after applying JUBIZOL Microair fix, the JUBIZOL vinyl-covered glass fibre mesh should be pressed into it. After drying for at least 2 to 3 days, the upper layer of the base coat with a thickness of ~1 mm should be applied and the facade surface should be levelled and smoothed as much as possible. The final treatment of facade may begin when the base coat is completely dry, namely 1 to 2 days after applying the upper layer.

Fluctuations in the product's colour shades among different production dates and batches is a consequence of using natural raw materials and it doesn't affect final physical and chemical characteristics of dried and hardened material!

Approximate or average consumption:

JUBIZOL Microair fix ~1.5 kg/m² for each millimetre of thickness (depending on the type of insulation covering and the method of final treatment of the facade)

The tools should be washed with water immediately after use; dried stains cannot be removed later.

9. Storage, Transportation Conditions and Durability

During transportation, protect the product against moistening. Store in dry and airy places, out of the reach of children!

Shelf life when stored in an originally sealed and undamaged packaging: at least 9 months.

10. Other Information

The technical instructions in this brochure are provided based on JUB's experience and as a guideline for achieving optimum results. JUB does not assume any responsibility for any damage caused due to incorrect selection of a product, incorrect use, or unprofessional work.

Safety measures: Follow the instructions on the safety data sheet of the product.

This technical sheet supplements and replaces all preceding versions. JUB reserves the right to change and supplement data in the future.

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