

TECHNICAL SHEET 06.03.04-EN



JUBIZOL Ultralight fix

Light adhesive mortar

1. Description, Application

Within JUBIZOL PREMIUM and JUBIZOL NATURE ETICS, JUBIZOL Ultralight fix is used as an adhesive for insulation lining (boards made of expanded polystyrene, hard boards and lamellas made of mineral wool) and as an base coat on the insulation lining. It is based on cement, polymeric binders and expanded polystyrene beads. In addition to having good strength characteristics, the dried product is also exceptionally elastic, highly water vapour permeable and adheres well to insulation boards as well as to all types of wall surfaces (non-coated brick and concrete walls, uncoated walls made of aerated concrete, all types of coated walls and fibre cement boards).

2. Technical data

Packaging	20kg	
Density (application-ready mortar mixture)	~1.36 kg/dm ³	
Open time (ready-to-use mortar compound)	2-3 h	
Total layer thickness for base plaster on EPS and XPS insulation boards	~4,5-6 mm	
Total layer thickness for base plaster on MW insulation boards	~5,5-8 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)	48 h
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 (for each mm of thickness)
Minimum consumption for fixing the insulation boards	~3 kg/m ²	

Maximum consumption for fixing the insulation boards		~4 kg/m ²
Average consumption of basic plaster on EPS		4.5 kg/m ²
Average consumption of basic plaster on MW		7 kg/m ²
Vapor permeability EN ISO 7783-2	coefficient μ	~20
	value Sd (d = 100 um)	~0.1 m
Thermal conductivity I EN 1745		~0,33 W/mK; P = 50 % (tab. value EN 1745)
Water absorption w24 EN 1015-18		<0.03 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 and extruded polystyrene and on lamellas made of mineral wool (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
Adhesion to boards made of mineral wool (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

Using JUBIZOL ULTRA LIGHT FIX/JUBIZOL Ultralight fix, insulation boards made of expanded polystyrene and also solid boards and lamellas made of mineral wool can be fixed onto any surface which is solid enough, dry and clean. The base should be flat - when checking with a 3 m long lath, the gap between the lath and the wall surface must not exceed 10 mm. Level larger uneven parts by plastering and not by a thicker layer of the adhesive.

Do not apply any primers on clean brick wall surfaces before fixing the insulation lining. However, as far as other types of construction surfaces are concerned, such coats are obligatory. Use water-diluted ACRYL Emulsion for suitably rough and normally absorbent surfaces. Apply the primer with a suitable brush, a long-bristle painting roller or spray it. Fixing of insulation lining may begin approximately 2 to 3 hours after the application of a primer.

The coated façade walls make a suitable surface for fixing of insulation lining only if render finishes are well-adhered to the wall surface. Otherwise, remove them completely or process them appropriately and mend them. In normal conditions (T = +20°C, relative air humidity = 65 %), let the newly applied render finishes dry or mature for at least 1 day for each mm of their thickness. It is obligatory to disinfect and clean surfaces infected with wall mould or algae prior to fixing. Clean concrete surfaces with hot water or steam. Prior to fixing, remove all badly-adhered and non-adhered decorative coats and slurries from the surface.

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

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

Sand (sandpaper no. 16) any uneven parts of the insulation lining two days after the fixing of insulation boards made of expanded polystyrene. If necessary, additionally anchor the lining with two-part plastic nail-in anchors prior to applying the lower coat of the base coat.

It is not necessary to specially prepare insulation linings made of mineral wool (solid boards made of mineral wool, lamellas made of mineral wool).

6. Preparing the Adhesive Mortar for Application

Prepare the mortar compound by pouring the content of a bag (25 kg) into approximately 5.75 liters of water during constant stirring. 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 it again, and, if necessary, add a little water. Open time of the prepared compound is 2-3 hours

7. Fixing the Insulation Boards

FIXING OF BOARDS MADE OF EXPANDED POLYSTYRENE AND SOLID BOARDS MADE OF MINERAL WOOL:

apply adhesive mortar on one side – the back side of boards – with a stainless painting trowel in continuous bands at the edge of boards and additionally on 4 to 6 spots or in two stripes in the middle (in the case of fixing of insulation lining onto ideally level surfaces, mortar may be applied with a notched stainless steel smoothing trowel – width and dept of notches 8 to 10 mm or JUBIZOL ULTRALIGHT FIX trowel with rounded teeth 12 mm – evenly across the entire surface of boards). The quantity of the applied adhesive should be such so as to spread across at least 40 % of the surface of boards when they are pressed onto the surface.

Fix boards closely together so that the adhesive does not dribble into joints. Throughout fixing, check straightness of the outer surface of the lining with a suitably long lath. Indent boards in adjacent rows in accordance with brick connection rules with the indent of vertical joints being at least 15 cm. Comply with brick connection rules also 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 for at least a few centimeters and perform the so called crossing in the corner. Cut off the excess part of boards in corners in a straight line, but only 2 to 3 days after fixing.

Additionally strengthen boards made of mineral wool into the wall surface already in the fixing phase using four two-, three- or multi-part plastic nail-in anchors. Perform potentially necessary additional anchoring of the insulation lining made of expanded or extruded polystyrene 2 to 3 days after fixing (when the adhesive has completely hardened).

FIXING OF LAMELLAS MADE OF MINERAL WOOL:

apply adhesive mortar on one side – onto the back of a lamella – with a notched stainless steel smoothing trowel (width and depth of notches 8 to 10 mm) evenly across the entire surface. In the case of lamellas with factory applied slurry, the adhesive compound can be applied onto the wall surface instead on the lamella in the same manner. In this case and especially on larger wall surfaces, spraying, where the adhesive compound is applied spirally onto the wall surface, has also proven to be economical. Irrespective of the manner of adhesive application, fix lamellas closely together so that the adhesive does not dribble into joints. Throughout fixing, check straightness of the outer surface of the lining with a suitably long lath. Indent lamellas in adjacent rows in accordance with the brick connection rules with the indent of vertical joints being at least 15 cm. Comply with brick connection rules also as far as corners are concerned, where amellas should stretch over the outer surface of the lining of the neighbouring wall surface for at least a few centimeters and perform the so called crossing in the corner. Cut off the excess part of lamellas in corners in a straight line, but no sooner than 2 to 3 days after fixing.

Approximate or average consumption:

JUBIZOL Ultralight fix ~3 to 4 kg/m², depending on the surface quality

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

Apply mortar compound onto the insulation lining manually or mechanically in two and only in specific cases in three coats (parts of buildings built into the ground if insulation lining is made of expanded polystyrene and in cases of façade surfaces of buildings bordering playgrounds and similar which are “extremely exposed to damages”). Thickness of the lower coat of the lining made of expanded polystyrene is ~3-4 mm, and that on the lining made of mineral wool ~4-6 mm. Immediately after the application of JUBIZOL Ultralight fix, imprint JUBIZOL vinyl-covered glass fibre mesh into it. After the surface has dried for a day for each millimetre of its thickness, apply the upper coat of the base coat in thickness of ~1.5-2 mm. Then level and smooth the facade surface as much as possible. Façade final treatment may begin 1 to 2 days after levelling and smoothing.

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 Ultralight fix ~1.22 kg/m² for each millimetre of thickness (depending on the type of insulation lining and the manner of the facade final treatment)

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

9. Storage, Transportation Conditions and Durability

Protect the product against moistening during transport. Store in dry and airy places, and out of reach of children! Shelf life when stored in an originally sealed and undamaged packaging: at least 12 months.

10. Other Information

Technical instructions in this brochure are given based on our experiences and are given as a guideline for achieving optimal results. We cannot take any responsibility for the damage, caused by 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 editions. We reserve the right to change and supplement data in the future.

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