# **Technical Data Sheet**



## **Multimörtel**

White universal mortar for bonding and reinforcing insulation boards in the ALLFAtherm thermal insulation systems and as feltable finishing render/plaster. Suitable for the restoration of old ETIC-systems and rendered/plastered façades and as renovation mortar.



### **Product characteristics**

Properties	<ul> <li>Fibre-reinforced universal mortar</li> <li>Normal rendering/plastering mortar as per DIN EN 998-1</li> <li>Reaction to fire: "non-combustible" or "fire-retardant" according to the configuration of the individual systems</li> <li>Weatherproof, water-repellent as per DIN V 18550</li> <li>Good felting properties</li> <li>High compression strength</li> <li>High diffusion capability</li> <li>Excellent adhesion</li> <li>Easy processing</li> <li>Adhesive and reinforcing mortar in one product</li> <li>Suitable for the application by machine equipment</li> <li>Long open time</li> <li>Very high stability</li> <li>Ecologically compatible</li> </ul>
Areas of application	Exterior and interior
Suitable substrates in detail	<ul> <li>For the application as adhesive and reinforcement mortar in ETICS</li> <li>As renovation mortar on existing, sound render surfaces.</li> <li>As thin-layer bonding finish</li> <li>Aas feltable finishing plaster</li> <li>Appropriate for the application on plinth areas within ETIC systems.</li> <li>In all ALLFAtherm insulation systems.</li> <li>As crack repair (heavy-duty reinforcement) on façade surfaces.</li> </ul>
Material description	
Binder	Lime
	Cement
	Synthetic resin dispersible polymer powder
Density	Approx. 1.5 kg/dm <sup>3</sup> kg/dm <sup>3</sup>
Layer thickness	Thickness of reinforcement layers from 3 to 7 mm. For the application as render/plaster in ETICS the corresponding approval for ETICS must be followed.
Mortar group	P II according to DIN V 18550
Resistance to pressure	Class CS III as per DIN EN 998-1
Adhesive tensile strength	≥ 0,08 N/mm² as per DIN EN 998-1
Average consumption (short text)	Fixing insulation boards with adhesive Spot-and-bead method: aprox. 3 - 4 kg/m <sup>2</sup> Mechanical bead method (meander-shaped): approx. 6 - 7 kg/m <sup>2</sup> All-surface adhesion: 4 - 6 kg/m <sup>2</sup>

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	Reinforcement approx. 4.5 kg/m <sup>2</sup>
	Felt plaster approx. 1.6 kg/m² per mm layer thickness
Colour shade	Natural white
Storage	Cool and dry on wooden grids
Substrates	
Suitable substrates	All usual mineral substrates (plasters/renders, concrete, masonry)
	Solid, mineral and organic existing paint layers
	Insulation boards complying with the current ETICS approvals
Substrate conditions	<b>Fixing insulation boards with adhesive</b> The substrate has to be firm and sound, grease- and frost-free. Remove coarse, protruding mortar or concrete parts, level out larger unevenesses using an appropriate mortar. Check existing render for stability and cavities and exist- ing coatings for bearing strength. Non bearing renders and coatings have to be entirely removed. If necessary, substrates have to be primed. The adhesion on bearable existing paint layers or synthetic resin plasters is also possible, however, this requires an additional mechanical fixing.
	<b>Reinforcement</b> The substrate must be clean, dry, frost-free, firm and sound as well as free from efflorescences, algae, moss, fungal attack, sinter layers and release agents. Follow the building regulations (in Germany VOB, Part C, DIN 18363, Section 3). Mount the insulation boards level as well as flush and plumb in the corner area. The reinforcement can be effected once the bonding of the insulations boards has hardened (after 3 days at the earliest at + 20 °C and 65% relative humidity).
Substrate conditions	The reinforcement takes place, once the bonding of the insulations boards has hardened (after 3 days at the earliest at + 20 °C and 65% relative humidity) onto clean and dry insulation boards that were mounted level, without offset, as well as flush and plumb in corner areas. For the renovation of rendered façades damaged by cracks, the substrate must be clean, dry, firm and sound and free from efflorescences, sinter layers and release agents. Remove coarse, protruding mortar or concrete parts, level out larger unevenesses using an appropriate mortar. Check existing render for stability and cavities and existing coatings for bearing strength. Non bearing renders and coatings have to be entirely removed. If necessary, substrates have to be primed.
	<b>Existing paint layers (basement ceilings)</b> Existing paint layers have to be firm and sound. In case of doubt, the carrying capacity has to be checked by trying to tear off a piece of tissue. For this purpose embed a piece of tissue (about 50 x 50 cm) into the adhesive mortar, with a projection of 10 - 20 cm. Try and tear it off after a sufficient drying time (at least 7 days). If the adhesive mortar peels off extensively from the substrate, this substrate is not suitable for a sole adhesion of insulation boards. An additional anchoring using a sufficient number of dowels (such as ceiling insulation screwed plug DDS-Z) will be necessary or the removal of the existing paint layer. If necessary the substrate has to be primed before applying the adhesion.
Application	
Application method	Application by spraying or trowel
Spraying data	Standard continuous mixers
	Mixing pumps with an output of at least 10 L, e.g. inotec inoCOMB Picco Business,PFT Ritmo M + L, PFT G4, M- Tec plastering machine m 300 or mono mix, etc. Accessories: compressor, base render sprayer, air valve 12 - 16 mm.
Coating system	Priming with heavy reinforcement: If necessary apply a primer coat with Kieselit-Grundierfarbe or Grundierfarbe WP.
	Finishing coat: After curing of the reinforcement layer, apply a priming coat in system with the following finishing render.
Application	Mix bag content (25 kg) into approx. 6 litres of clean tap water, avoiding lump formation. After a curing time of approx. 5 minutes stir thoroughly again.
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#### **Bonding Insulation Boards**

Apply the mortar to the back of the insulation board using the spot-and-bead method. This involves a bead of adhesive around the outside and individual spots over the remaining area of the insulation boards. When bonding mineral wool insulation boards it might be necessary to apply a first thin mortar layer to improve the initial adhesion. Mount the insulation boards level, flush and plumb in mutually offset layers. There should be no protruding boards. If necessary, smooth down EPS insulation boards by sanding. Take care to ensure that none of the mortar enters the board joints. Plugging may only take place once the mortar has hardened (about 48 hours).

#### **Embedding Mesh**

Prepare Multimörtel as stated above and apply generously with the smoothing trowel in an even layer. Place cut-tosize Gittermatte (glass fabric mesh) lengths overlapping by 10 cm (also at corners and edges), starting from the top. Press them on and spread mortar over the whole surface. The application takes place "wet-on-wet". Alternatively the reinforcement can be carried out in several working steps. For this apply the mortar with a notched trowel (notching: 10 x 10 mm) as first step. After an appropriate drying time apply again mortar for embedding the fabric. The fabric mesh must lie centrally up to the the upper third of the evenly thick reinforcement layer. Before full-coverage embedding of the mesh, embed corner angles (Eckwinkel) centrally in the mortar, ensuring overlap (10 cm) to protect corner areas of windows and doors, etc. At corners and openings in buildings also use the corner reinforcing components Gewebe-Eckpfeil or Sturzeckwinkel (specially shaped corner angel for lintels). To increase the impact protection of the thermal insulation before reinforcing with Gittermatte (fabric mesh) place the reinforcing fabric VWS-Panzergewebe into the mortar. Panzergewebe must not overlap, but should form butt joints instead. Then apply Gittermatte over it.

#### Felting

Once the mortar has begun to set use a moist sponge float to felt down. If required, wet again.

#### **Repair Mortar**

Wet damaged areas first (prime first if necessary). Fill the damaged areas with the stirred material and allow to dry. Priming of the full area should take place before further treatment.

Application hints	The following regulations have to be observed : the technical data sheet of each product, the relevant valid building approvals, the current ALLFAtherm application brochure "Verarbeitung von ALLFAtherm-Dämmsystemen", DIN 55699 and in Germany BFS Fact Sheet No. 21 and the guidelines reffered therin, as well as Technical System Information "Compendium ETICS and Fire Protection" published by the professional association Wäremedämmverbundsysteme (ETICS).
	Do not apply under a glaring sun, during strong wind or on warm substrates.
Note	The figures given for parameters are average values. Due to the use of natural raw materials in our products, the actual value determined on the individual supplied product may differ slightly without affecting its suitability. These date refer to the white respectively standard product. Tinting may cause deviations.
Practical hints	<b>Dark Colour Shades on ETICS</b> Colour shades with a light reflectance value $\geq$ 20 are possible on ETICS without limitations. On request, darker shades are possible based on a specific TSR-formulation. Please observe the information regarding colour stability with brilliant and intensive hues.
Tool cleaning	Immediately after use with water

### Tool cleaning

#### Information

Product code	ZP01	
Hazard statements and safety advice	This mineral powder product reacts alcaline. Causes skin irritation. Causes serious eye damage. May cause respir- atory irritation. If medical advice is needed, have product container or label at hand. Keep out of reach of children. Do not breathe dust or mist. Wash hands thoroughly after handling. Wear protective gloves/ eye protection. If in eyes:Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor.	
	Always wear long trousers "Avoid prolonged skin contact with the plaster. Rinse affected areas immediately with plenty of water. The longer fresh plaster remains on your skin the greater the risk of severe skin damage. Follow the manufacturer's instructions for safety and health during application.	
Observe safety data sheets	bserve safety data sheets Further details: See Safety Material Data Sheet (MSDS)	
VOC content (in gram per litre)	< 1 g/l	
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# **Multimörtel**

Waste disposal Only completely emptied containers should be given for recycling. Dispose dried/hardened product residues as construction site/demolition waste.

Container size						
Content	EAN code	Article no.				
25 KG	4002822013011	979895				

This data sheet cannot deal with all types of application arising in practice. Therefore, we cannot be held responsible for their content. These instructions do not release the purchaser / applicator from his responsibility of professionally examining the substrate and determining the suitability of the product in consideration of the project characteristics. In case of queries please request the technical assistance of ALLIGATOR FARBWERKE.

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