



TECHNICAL DATA SHEET

MULTIPOR TOPWALL

1. PRODUCT DESCRIPTION

Fibre-free, solid, purely mineral, monolithic facade insulation board made of calcium silicate hydrates. European Technical Assessment (ETA): ETA-05/0093.

2. FIELD OF APPLICATION

Facade insulation boards for KEIM external thermal insulation composite systems according to system approval: Z-33.43-857

Generally approved by the building authorities for: exterior walls; interior walls; ceiling surfaces, indoors; basement ceilings.

Suitable for: Masonry or concrete, rendered and unrendered.

Application type according to DIN 4108-10: WAP; DI; WI.

The entire ETIC system is non-combustible A2 according to DIN 4102. Permissible building height according to the State Building Code.

Not suitable for: horizontal and inclined surfaces exposed to weathering; cold self-adhesive plastic membranes; metallic substrates; existing ETICS substrates.

3. PRODUCT PROPERTIES

- easy to use
- good heat insulation
- in a handy format
- fibre-free
- no hazardous emissions
- fire behaviour: non-flammable, class A1 according to EN 13501-1
- sound in terms of building biology
- especially stable in dimension
- dimensionally accurate and non-shrinking
- mineral
- completely recyclable
- resistant to aging
- The insulation panels comply with the high standards of the VDPM e.V. (association for insulation systems, renders and mortars)
- Externally monitored by the Kiwa GmbH MPA Berlin-Brandenburg

MATERIAL CHARACTERISTICS:

- Rated value of thermal conductivity:	0.045 W/mK
- Nominal value of thermal conductivity λ_D :	0.043 W/mK
- Panel size:	600 x 390 mm
- Panel thickness:	60 - 300 mm
- Edge formation:	dull
- Sorption moisture:	≤ 6 M.-%
- Compressive strength:	≥ 300 kPa
- Tensile strength perpendicular to the panel plane:	TR80 ≥ 80 kPa
- Thickness tolerance:	T1 ± 2 mm
- Width tolerance:	W2 ± 2 mm

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- Length tolerance:	L2 ±2 mm
- Squareness:	S ≤ 4 mm/m
- Planarity:	S ≤ 2 mm
- Colour shade:	light grey

4. APPLICATION INSTRUCTIONS

SUBSTRATE PREPARATION:

The substrate must be strong, dry, clean, sound and free from adhesion-reducing residues. The permanent compatibility of any existing coatings with the adhesive mortar must be examined by an expert. Unevenness of up to 1 cm/m may be bridged. Larger unevenness must be mechanically levelled or by applying a render in accordance with DIN EN 998-1. Strongly sanding or unevenly absorbent surfaces should be primed with Indulaqua primer. Observe the Technical Data Sheet of the primer with regard to execution and dilution. The insulation panel may also be used as a basement ceiling insulation panel: Rusty steel beams or damp areas must not be covered with insulation until the cause itself has been properly remedied.

APPLICATION CONDITIONS:

Ambient and substrate temperature during application and drying from ≥ 5 °C to ≤ 30 °C. Do not apply in direct sunlight or on sun-heated substrates. Protect surfaces from direct sun, wind and rain during and after application.

APPLICATION:

Cut to size with a fine-toothed saw.

GLUING:

The insulation panels are butted tightly and glued in a bond from bottom to top. Apply the appropriate adhesive mortar to the insulation panels using the bead-and-dot method or over the entire surface. Push the boards into place. At the edges of the building, the insulation panels are glued offset. Apply the system's adhesive mortar to the insulation panels using the bead-and-dot method, ensuring an adhesion of min. 70 %. The insulation panels may also be adhered in 2 layers. The second layer of insulation panels is glued over the entire surface and in a staggered bond pattern (starting with half a row of panels). Closing of unavoidable defects and joints up to 5 mm wide with Iso Top Thermofoam B1 is permissible. Alternatively the non-flammable Multipor-Füllmörtel (filler mortar) can be used. General instruction with regard to gluing: Do not apply adhesive to the panel joints. Do not create an insulation panel joint over a joint in the substrate underneath. The insulation panel may also be used as a basement ceiling insulation panel: Using the combed bed method, apply Mycal-Por with a notched trowel ≥ 10 mm over the full surface of the insulation panel or alternatively to the substrate, and then use gentle pressure to position the panel in the adhesive bed. To adhere to the full surface, it is advisable to apply adhesive mortar to both the insulation panel and the substrate (floating-buttering-method). The insulation panels are to be attached tight to the substrate, cavities are not allowed. The insulation panels can be applied with the point method. For this purpose apply chunks of Mycal-Por on the insulation panel and float in with gentle pressure, so an adhesion of minimum min. 70 % is achieved.

DOWELING:

Check the adhesion of the insulation panels after at least 3 days. Insulation panels that are not bonded or damaged must be replaced. Anchoring is carried out in glued and dowelled ETIC systems using ETICS fasteners approved by the general building authorities or by the European authorities according to DIN EN 1991-1-4/NA. The required dowel quantity depends on the building height and the respective wind zone in which the object is located. For further information, please refer to our ETICS Technical Guide, Chapter #8, ETICS Wind Suction Loads. The insulation panel may also be used as a basement ceiling insulation panel: Without fire protection requirements: The insulation panels may only be glued to new substrates up to a maximum weight per unit area of 15 kg/m² (including any final coating). In the case of insufficiently load-bearing substrates (old substrates) or if the permissible weight per unit area is exceeded, dowelling is carried out using ETICS anchors approved by the general building authorities or by the European authorities. Minimum number of anchors: 2 anchors per insulation board cut. With fire protection requirements: If necessary, dowel with the basement ceiling insulation screw DDS-Z and the basement ceiling insulation washer DDT.

REINFORCEMENT:

After a sufficient setting time of the adhesive, apply the mixed, system-specific reinforcing mortar evenly to the insulation panels, preferably with a 10 mm toothed trowel. Embed the system-specific Glasfaser-Gittermatte (glass fibre mesh), overlap

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the edges by 10 cm and fill wet-in-wet with system-specific reinforcing mortar. The system-specific Glasfaser-Gittermatte should be embedded in the middle (layer thicknesses up to 6 mm) or in the upper third (layer thicknesses from 6 mm). Thickness of the reinforcement layer should be approx. 5 mm.

5. PACKAGING / TECHNICAL DATA

Panel size [mm]	Panel thickness [mm]	edge	Rated value thermal conductivity [W/mK]	m ² per pallet	Bundle per pallet
600 x 390	60	dull	0,045	28.08	12
600 x 390	80	dull	0,045	21.06	18
600 x 390	100	dull	0,045	16.85	12
600 x 390	120	dull	0,045	14.04	12
600 x 390	140	dull	0,045	11.23	12
600 x 390	160	dull	0,045	9.83	12
600 x 390	180	dull	0,045	8.42	12
600 x 390	200	dull	0,045	8.42	12

PACKAGING / TECHNICAL DATA ADDITIONAL INFORMATION:

Delivery by pallet only

6. STORAGE

max. storage time	Storage conditions
no maximum storage time	dry protect against weathering

STORAGE INFORMATION:

Please note max. stacking height of 2 m. Transport packaging is not sufficient weather protection.

7. DISPOSAL

EC WASTE CODE:

Waste code: 17 06 04

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