



## TECHNICAL DATA SHEET

# KEIM IPOR® TIPWALL

## 1. PRODUCT DESCRIPTION

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

## 2. FIELD OF APPLICATION

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Interior insulation board for KEIM iPor interior insulation, in accordance with DIN 4108-3, in conjunction with system-associated adhesive and reinforcing mortars, e.g. KEIM Mycal-Por, to form a diffusion-open, moisture-regulating and heat-insulating interior insulation.

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

Suitable for: Masonry or concrete, rendered and unrendered; mineral render; natural stone; timber frame. The function of the system can be proven by suitable simulation methods.

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

Not suitable for: gypsum renders; wood substrates; distempers; metallic substrates; organic substrates; substrates with salt efflorescences.

## 3. PRODUCT PROPERTIES

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- easy to use
- good heat insulation
- in a handy format
- no hazardous emissions
- fire behaviour: non-flammable, class A1 according to EN 13501-1
- sound in terms of building biology
- completely recyclable
- especially stable in dimension
- resistant to aging
- Externally monitored by the Kiwa GmbH MPA Berlin-Brandenburg

### MATERIAL CHARACTERISTICS:

- |                                      |                              |
|--------------------------------------|------------------------------|
| - Panel size:                        | 600 x 390 mm                 |
| - Panel thickness:                   | 50 - 200 mm                  |
| - Edge formation:                    | square                       |
| - Bulk density according to EN 1602: | approx. 90 kg/m <sup>3</sup> |
| - Sorption moisture:                 | ≤ 6 M.-%                     |
| - Thickness tolerance:               | T1 ±2 mm                     |
| - Width tolerance:                   | W2 ±2 mm                     |
| - Length tolerance:                  | L2 ±2 mm                     |
| - Colour shade:                      | light grey                   |

## 4. APPLICATION INSTRUCTIONS

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### SUBSTRATE PREPARATION:

The substrate must be strong, dry, clean, sound and free from adhesion-reducing residues and must not be too absorbent. The substrate must be suitable for a tension-resistant adhesion. 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. Substrates containing gypsum as

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well as vapour-tight coatings, wallpapers or similar must be removed. Highly absorbent substrates must be sufficiently prewetted. Microbially infested substrates must be pretreated with KEIM Mycal-Fix and removed when wet (at least up to 0.5 m above the visible area) to minimize spore flight as far as possible. Appropriate protective measures, e.g. respiratory mask, must be observed. Pretreatment of the substrates with Mycal-Ex or Mycal-XO is recommended.

### APPLICATION CONDITIONS:

Ambient and substrate temperature during application and drying from  $\geq 5$  °C to  $\leq 30$  °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 panels are butted tightly and glued in a bond from bottom to top. Apply the system-specific adhesive mortar to the entire surface of the insulation panels, to the substrate, or to the insulation panels and the substrate using the floating-buttering method. Push the boards into place. At the edges of the building, the insulation panels are glued offset. For full-surface gluing, apply the system-specific adhesive mortar to the insulation panels and, if necessary, to the substrate using a 10 mm toothed trowel. Immediately float the insulation panels into the fresh mortar bed with slight pressure. 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). 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. All connecting joints are made airtight with a joint sealing tape. An edge insulation strip must be inserted at the connection to floors and moisture-sensitive components. System supplements are also possible across systems with Multipor Wedge (insulation wedge), Multipor Reveal (reveal panel), Mycal-CS-Dämmkeil (insulation wedge) or Mycal-CS-Laibungsplatte (reveal panel).

### DOWELING:

Check the adhesion of the insulation panels after at least 3 days. Insulation panels that are not bonded or damaged must be replaced. In the case of subsequent tiling work, the panels are additionally fastened through the mesh with suitable screw anchors and finished with another layer of KEIM Universalputz.

### 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 KEIM Glasfaser-Gittermatte (glass fibre mesh), overlap the edges by 10 cm and fill wet-in-wet with system-specific reinforcing mortar. The system-specific KEIM 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. 4 mm.

## 5. PACKAGING / TECHNICAL DATA

Panel thickness [mm]	Rated value thermal conductivity [W/mK]	Compressive strength [kPa]	m <sup>2</sup> per pallet	Bundle per pallet
50	0,045	$\geq 300$	33.70	18
60	0,042	$\geq 200$	28.08	12
80	0,042	$\geq 200$	21.06	18
100	0,042	$\geq 200$	16.85	12
120	0,042	$\geq 200$	14.04	12
140	0,042	$\geq 200$	11.23	12
160	0,042	$\geq 200$	9.83	12
180	0,042	$\geq 200$	8.42	12
200	0,042	$\geq 200$	8.42	12

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### PACKAGING / TECHNICAL DATA ADDITIONAL INFORMATION:

Delivery by pallets only, larger thicknesses on request.

## 6. STORAGE

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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

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### EC WASTE CODE:

Waste code: 17 06 04

## 8. SAFETY INSTRUCTIONS

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No particular indications.

## 9. CERTIFICATES & QUALITY SEALS

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