

# Capatect Lamelle VB 041 101

Mineral wool lamella strip according to DIN EN 13162, mineral fibers flatwise to ETICS layers, both sides pre-primed, German application type WAP-zh to DIN 4108-10



## Product Description

Field of Application	Compressive stress resistant, non-combustible facade insulation boards (lamella) in Capatect facade systems.
Material Properties	<ul style="list-style-type: none"> <li>■ Area of application according to DIN 4108-10: WAP-zh and DI (ceiling inside)</li> <li>■ Inorganic coating on both sides - Rock mineral wool with hydrophobic water-repellent treatment</li> <li>■ Dimensionally stable and very high tensile strength</li> <li>■ Ageing resistant</li> <li>■ Quality-controlled according to DIN EN 13162</li> <li>■ Occupational health classification: free according to GefStoffV (regulation for hazardous goods), ChemVerbotsV and EU Guideline 97/69 (note Q)</li> </ul>
Colours	Brown-yellow with translucent primer
Storage	Dry, protected from moisture, do not expose to weather without protection.
Technical Data	<ul style="list-style-type: none"> <li>■ Heat conductivity: <math>\lambda_B = 0,041 \text{ W/(mK)}</math> rated value according to DIN 4108-4 <math>\lambda_D = 0,040 \text{ W/(mK)}</math> nominal value according to DIN EN 12667 or DIN EN 12939</li> <li>■ Resistance-count for diffusion <math>\mu \text{ (H}_2\text{O)}</math>: <math>\mu = 1</math> according to DIN 12086</li> <li>■ Compressive stress (compression: 10%): <math>\geq 40 \text{ kPa}</math> according to DIN EN 826</li> <li>■ Shearing resistance: <math>\geq 20 \text{ kPa}</math> according to DIN EN 12090</li> <li>■ Temperature resistance: up to <math>150 \text{ }^\circ\text{C}</math></li> <li>■ Raw density: <math>\rho</math>: approx. <math>80 \text{ kg/m}^3 \pm 15\%</math></li> <li>■ Melting point: <math>&gt; 1000 \text{ }^\circ\text{C}</math> according to DIN EN 4102-17</li> <li>■ Adhesive tensile (pull-off) strength at right angle to the panel plane: <math>\geq 80 \text{ kPa}</math> according to DIN EN 1607</li> </ul>



Board Thickness * [ mm ]	Size of insulation board 1200 x 200 [ mm ]	
	Product-No.	Packaging [ m <sup>2</sup> ] (shrink-wrapped)
40	101/04	2.88
50	101/05	1.92
60	101/06	1.92
70	101/07	1.92
80	101/08	1.44
100	101/10	0.96
120	101/12	0.96
140	101/14	0.96
160	101/16	0.96
180	101/18	0.96
200	101/20	0.96
220	101/22	0.48
240	101/24	0.48
260	101/26	0.48
280	101/28	0.48
300	101/30	0.48
other thickness available on request		
Edge formation: blunt		

## Application

Substrates	Mineral substrates, solid old renders, wood and board materials, as well as stable old paint or coatings or in accordance with the information in the general Building authority approvals / general type approvals of the ETICS.
Substrate Preparation	The substrate must be clean, dry and load-bearing. Impurities and substances with a separating effect (e.g. formwork oil) as well as protruding mortar burrs must be removed. Damaged, flaking paint and decorative renders must be removed as far as possible. Hollow areas of rendering must be knocked out and rendered flush. Clean highly absorbent, sanding or chalking surfaces thoroughly to expose the solid substance and prime. Check the compatibility of any existing coatings with the adhesive. Prepare substrates in accordance with the adhesive manufacturer's instructions.
Consumption	1.0 m/m; plus offcuts
Application Conditions	During the application and drying phase, the ambient and substrate temperatures must not be below +5 °C and above +30 °C. In this context, we refer to the commentary ATV DIN 18345 point 3.1.3 unsuitable climatic conditions.
Bonding of Insulation Boards	<ul style="list-style-type: none"> <li>- Manual or machine application possible</li> <li>- Butt joints and bed joints must remain free of adhesive mortar</li> <li>- Never seal the joints between the insulation boards with adhesive</li> <li>- Fill joints ≤ 5 mm with suitable flame-retardant joint foam</li> <li>- Close joints and gaps &gt; 5 mm with equivalent insulation strips</li> <li>- Lay the insulation boards in a staggered pattern (min. 10 cm) and but them tightly together.</li> <li>- Ensure that the application is flush and plumb</li> <li>- Ensure alignment and perpendicular application</li> <li>- Interlock insulation materials at the corners of the building</li> </ul> <p><b>Full-surface bonding:</b> When applying the adhesive over the full surface, work with the notched trowel method on the mineral wool lamella. When applying the adhesive over the full surface, work the adhesive immediately before attaching the mineral wool lamella with a notched trowel. Press the mineral wool lamella with the coated side into the mortar bed and press on.</p>

## **Machine bonding (partial surface method):**

Machine the system-compatible adhesive onto the substrate in the form of vertical beads (adhesive contact area  $\geq 50\%$ ). The adhesive beads must be approx. 5 cm wide and at least 10 mm thick in the center of the bead. The center distance must not exceed 10 cm. The insulation boards must be immediately pressed into the fresh adhesive bed, floated and pressed on. To avoid skin formation, only as much adhesive surface area should be provided as can be laid immediately.

## **Anchoring:**

For substrates not suitable for bonding and for wind loads from  $-1.6 \text{ kN/m}^2$ , anchoring in accordance with the general building authority approval / general type approval of the underlying ETIC systems with a render layer must be observed.

## **Additional instructions for mineral wool lamella with insulation thicknesses $> 200 \text{ mm}$ :**

The adhesive mortar is always applied by machine.

For wind suction loads up to  $-1.1 \text{ kN/m}^2$ , at least 50% of the adhesive surface.

For wind suction loads up to  $-1.6 \text{ kN/m}^2$ , at least 70% of the adhesive surface.

Adequate installation safety must be ensured by suitable support measures. At the corners of buildings, only full-length, whole insulation boards should be arranged, as far as the geometric constraints allow.

Depending on the geometry of the building, the mineral wool lamellae in some areas of the facade must be additionally anchored with at least 3 anchors/strip elements.

The requirements and execution provisions of the general building authority approval must be observed.

The maximum field sizes of the render systems without expansion joints according to the system approval must be observed.

## **Anchoring through the glass fibre mesh on bonded cladding or rendered ceiling soffits:**

For systems with bonded cladding or rendered ceiling soffits, the insulation boards must be fixed with approved Capatect plate anchors (e.g. Capatect Universaldübel 053) through the reinforcement mesh after the base coat has been applied. The anchor plates are then immediately levelled ('fresh in fresh') or a second layer of base coat is applied.

### Systems with bonded cladding:

- Anchor arrangement: according to DIN 55699

### Ceiling soffits:

- Anchor arrangement: according to the dowel grid of the building authority approval

- Insulation thickness: from 80 - 200 mm

## **Application as basement ceiling insulation:**

Apply adhesive using the notched trowel method.

Only use quick-drying adhesives such as *Capatect Klebe- und Spachtelmasse 190* or *Capatect Dämmkleber 185* to bond the mineral wool lamella to the ceiling.

## **Fixing of basement ceiling insulation up to a surface weight of $15 \text{ kg/m}^2$ (MVTB Clause D):**

Mechanical fastening if necessary (on insufficiently adhesive substrates) with system-compatible anchors/screws, such as *Capatect Universaldübel 053* or *Deckendämmschraube DDS-Z* in conjunction with DDT plate.

## **Fixing of basement ceiling insulation with a surface weight of over $15 \text{ kg/m}^2$ :**

Use fixings approved by the building authorities with *Capatect Universaldübel 053* or *Deckendämmschraube DDS-Z* and DDT plate.

- Butt the mineral wool lamella.

- Leave the butt and horizontal joints of the boards without adhesive.

- The front edges of the mineral wool lamella are not laminated and may therefore be visible in the laying grid. This must be taken into account when planning the installation.

- A subsequent coat of paint or a render coating is possible.

Note

## **Unrendered insulation boards:**

Protect unrendered insulation boards on the façade from moisture and coat with reinforced base coat as soon as possible.

## **Butt joints of insulation boards:**

Butt joints of insulation boards must not be located above the connection zones of different components (e.g. ring beams, roller shutter boxes, element joints). The insulation materials should be bridged by at least 10 cm and supported on both sides by a secure adhesive connection.

## **Expansion joints:**

Expansion joints in the building must be incorporated into the external thermal insulation composite system.

## **Not suitable:**

The insulation material is not suitable for accepting spiral anchors and mounting elements such as DoRondo-PE mounting discs and ZyRillo mounting cylinders, which are glued exclusively in the insulation material. Attachments are fastened exclusively via mounting elements fixed to the substrate or otherwise suitable.

**Note:**

The "Allgemeine bauaufsichtliche Zulassung" (general building authority approval) / "Allgemeine Bauartgenehmigung" (general type approval) of the underlying ETIC systems or RVS and the technical information of the products must be observed.

## Advice

Disposal

Waste should be avoided by careful cutting and reuse. Any small amounts of material residues that do occur should be disposed of in accordance with EAK 170604 (insulating material).

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