

# Capatect Klebe- und Armierungsmasse 186M

Mineral ready-mixed dry mortar for use as adhesive and base coat for insulation boards, optimised for machine application



## Product Description

Field of Application	Adhesive and base coat - specially developed for machine application. For use as an adhesive for mineral wool, EPS and PUR insulation boards. Can be used as base coat in Capatect façade systems based on EPS and MW insulation material and on load-bearing mineral substrates.
Material Properties	<ul style="list-style-type: none"> <li>■ Water repellent</li> <li>■ Highly water vapour permeable</li> <li>■ Weather resistant</li> <li>■ Can be applied by machine</li> <li>■ Very good stability</li> <li>■ Additives for water repellency, as well as for smooth application and good adhesion to almost all substrates</li> </ul>
Material Base / Vehicle	<ul style="list-style-type: none"> <li>■ Mineral binders according to DIN EN 197-1 and DIN EN 459-1</li> <li>■ Synthetic resin dispersion powder</li> <li>■ Normal plaster mortar according to DIN EN 998-1</li> </ul>
Packaging/Package Size	25 kg bag, 800 kg OneWay® container, 1.3 t Big-Bag, 4.0 t Big-Bag silo, from 5.0 t silo.  For OneWay® containers or break-off pallets, the "Capatect Wetterschutzhaube 069" is optionally available as additional weather protection.
Colours	Light grey
Storage	Dry, protected from moisture, frost-free. Empty containers and silos completely before longer standstill periods. Shelf life in original sealed packaging at least 12 months.
Technical Data	<ul style="list-style-type: none"> <li>■ Heat conductivity: <math>\lambda_{10 \text{ dry, mat}} \leq 0,61 \text{ W/(mK)}</math> for P=50% according to DIN EN 1745 <math>\lambda_{10 \text{ dry, mat}} \leq 0,66 \text{ W/(mK)}</math> for P=90% according to DIN EN 1745</li> <li>■ Bulk density: ca. <math>1.5 \text{ kg/dm}^3</math></li> <li>■ Resistance-count for diffusion <math>\mu</math> (H<sub>2</sub>O): <math>\mu &lt; 25</math> according to DIN EN 1015-19</li> <li>■ Compressive strength: Category CS IV according to DIN EN 998-1</li> <li>■ Adesive tensile strength: <math>\geq 0.08 \text{ N/mm}^2</math> according to DIN EN 1015-12 Fracture pattern A, B or C</li> <li>■ Fire behaviour: Class A2-s1, d0 according to DIN EN 13501 (non-combustible)</li> <li>■ Capillary water absorption: Category: W<sub>C2</sub> according to DIN EN 998-1 <math>C \leq 0.20 \text{ kg/(m}^2\cdot\text{min}^{0.5})</math> according to DIN EN 1015-18</li> <li>■ Layer Thicknesses: Base coat: 3 - 5 mm</li> </ul>



Product No. 186M

Note The "allgemeine bauaufsichtliche Zulassung" (general building authority approval) / "allgemeine Bauartengenehmigung" (general type approval) of the ETICS and the product and the data sheets of the products must be observed.

## Application

**Substrate Preparation** Mask off window sills and add-on parts. Carefully cover glass, ceramics, clinker, natural stone, painted, glazed and anodised surfaces.  
The substrate must be solid, dry, free of grease and dust and, if necessary, have sufficient load-bearing capacity for the use of anchors.

Remove dirt and substances with a separating effect (e.g. formwork oil) as well as protruding mortar burrs. Damaged, peeling paints and textured plasters must be removed as far as possible. Hollow areas of plaster are to be knocked off and flush with the surface.

Highly absorbent, sanding or chalking surfaces must be thoroughly cleaned down to the solid substance and primed. The compatibility of any existing coatings with the adhesive mortar must be checked by an expert.

**Preparation of Material** 25 kg material (one bag) in approx. 6.0 l water.

Capatect Klebe- und Armierungsmasse 186M can be mixed to a lump-free mass using a powerful, slow-running stirrer or compulsory mixer and clean, cold water.

Work through again after approx. 5 minutes. If necessary, adjust the consistency with a little water after this maturing time.

Depending on the weather, the working time is up to 2 hours (pot life).

Do not use water to make material that has already set workable again.

**Consumption** **Bonding of Thermal-Insulating Boards**

Bead-point method: approx. 4.0 – 4.5 kg/m<sup>2</sup>

Full-surface bonding: approx. 5.0 – 7.0 kg/m<sup>2</sup>

Partial surface bonding (only with "LS-Fassadendämmplatte VB 101"): approx. 5.0 – 5.5 kg/m<sup>2</sup>

### Base coat:

1.5 kg/m<sup>2</sup> per mm of layer thickness

For EPS boards: approx. 4.5 kg/m<sup>2</sup> and

for mineral wool boards: approx. 5.0 kg/m<sup>2</sup>

These are indicative values. Building-dependent or processing-related deviations must be considered.

**Application Conditions** During the application and drying phase, the ambient and substrate temperatures must not be below +5°C and above +30°C.

Do not apply in direct sunlight, strong wind, fog or high humidity.

In this context, we refer to the leaflet "Verputzen, Wärmedämmen, Spachteln, Beschichten bei hohen und niedrigen Temperaturen" (Plastering, Thermal Insulation, Filling, Coating at High and Low Temperatures) from the Bundesverband Ausbau und Fassade (Federal Association for Finishing and Facades).

In case of unfavourable weather conditions, take suitable measures to protect the processed facade surfaces.

**Drying/Drying Time** **Adhesive**

Anchoring or overcoat depending on weather conditions, after 24 hours at the earliest.

If anchoring is necessary, it should only be carried out after sufficient consolidation of the adhesive bed.

### Base coat

Can be recoated with mineral textured plasters after 24 hours at the earliest, depending on weather conditions.

Depending on the weather, recoatable with synthetic resin or silicone resin plasters after 5 days at the earliest.

The required curing time is strongly dependent on temperature, humidity, air movement and solar radiation. It can be shortened under favourable drying conditions and extended to several days under unfavourable conditions, e.g. high humidity.

**Tool Cleaning** Clean tools/equipment with water, immediately after use.

**Example for Machine Equipment** Flow mixer Bero Calypso 15 with standard portioning or mixing spindles and feed pump Bero Speedy 15 with screw (spiral) conveyor 1/1 output.

### Important Data

Pre-rinse the delivery hoses with lime slurry or paste before regular operation. Please follow the guidelines of the manufacturer strictly.

Reinforcement Layer

**Electricity supply:**

400 V rotary current each / 16 A (power distributor with FI-protection switch)

**Water supply:**

¾" hose with GEKA, minimum 2.5 bar water pressure is required for the running machine. The desired consistency can be set by the fine-regulating valve in the water-fitting of the mixer.

**Conveying hoses:**

Primary hoses - inner-Ø 35 mm, 13.3 m each  
End hose, interior Ø 25 mm, 10.0 m

**Max. delivery range:**

Approx. 50 m (should be optimised depending on the conditions on site and temperature).

**Spraying unit:**

Nozzle Ø 10 mm or 12 mm end hose - inner-Ø 25 mm, 10.0 m

**Applying corner beads / corner protection**

Before applying the base coat, place the corner beads in the mortar over the entire surface and align them.

When using "Capatect Gewebe-Eckschutz", only guide the fabric strips up to the edge.

**Applying the base coat**

Apply the material according to the desired layer thickness by machine or manually to the insulation boards approved by the building authorities.

In the case of uncoated insulation boards made of mineral wool, the base coat must be worked into the surface of the insulation boards (press-filling). In a second work step, apply the base coat "fresh in fresh" over the entire surface of the insulation boards.

When applying the base coat by machine or when using mineral wool lamellas or mineral wool boards pre-coated on both sides, the base coat may be applied in one working step and then levelled, e.g. by means of a cartridge.

Lay "Capatect Gewebe 650" into open mortar bed overlapping 10 cm and level.

For a base coat thickness up to 4 mm, place the reinforcement fabric in the middle, and for a thickness above 4 mm in the upper half of the base coat.

In corner areas of building openings, additionally embed "Capatect Diagonal Reinforcement 651/00", "Capatect Sutrzeckwinkel 651/20" or mesh stripes (25 x 25 cm) diagonally into base coat.

Bonding of Insulation Boards

- Manual or mechanical processing possible
- Butt joints and bedding joints must remain free of adhesive
- Never seal joints between insulation boards with adhesive.
- Fill joints ≤ 5 mm with suitable flame-retardant joint foam
- Close joints and voids > 5 mm with equivalent insulation strips
- Lay the insulation boards in a staggered pattern and butt them tightly together.
- Ensure that the boards are aligned and plumb
- Pre-fill uncoated mineral wool insulation boards in the bonding area (press-fill)

**Bead-dot method**

Apply a surrounding bead at the edge of the board and adhesive dots in the middle.

Render systems - adhesive contact area ≥ 40 %.

**Full-surface bonding**

On level substrates, the adhesive can be applied over the entire surface using a notched trowel/ notched trowel. The insulation boards must be pressed in, floated in and pressed against the substrate immediately, after 10 minutes at the latest, with the side to which the adhesive mortar was applied.

Mineral wool insulation boards must always be glued over the entire surface.

**Machine bonding (partial-surface method)**

Apply "Capatect Klebe- und Armierungsmasse 186M" by machine to the substrate in the form of vertical beads. The adhesive beads must be approx. 5 cm wide and at least 10 mm thick in the centre of the bead. The centre-to-centre distance must not exceed 10 cm.

The insulation boards must be immediately pressed into the fresh adhesive mortar bed, floated in and pressed on. To avoid skin formation, only as much adhesive surface may be applied as can be immediately covered with insulation boards.

EPS boards - adhesive contact area ≥ 60 %.

Mineral wool insulation boards - adhesive contact area ≥ 50 %.

**Note**

Types of bonding depend on the insulation materials to be used and the type of ETIC systems, please observe the information of the "general building approval" (allgemeine bauaufsichtliche Zulassung) / "general building approval" (allgemeine Bauartengenehmigung) as well as the data sheets of the respective insulation material.

Advice

Special Risks (Hazard Note) / Safety Advice (Status as at Date of Publication)

Causes skin irritation. Causes serious eye damage. May cause respiratory irritation. If medical advice is needed, have product container or label at hand. Keep out of reach of children. Do not breathe dusts or mists. Use only outdoors or in a well-ventilated area. 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. Store locked up.

Additional information: Wear long trousers. Avoid prolonged skin contact with the render. Immediately clean affected skin thoroughly with water. The longer fresh render remains on your skin, the greater the risk of serious skin damage. It is essential to follow the manufacturer's health and safety instructions during the application phase.

Disposal

Only empty bags (trickle free) for recycling. Can be landfilled after concentration, when in compliance with local regulations.

Giscode

ZP1

Further Details

See Material Safety Data Sheet (MSDS).

**Assessments and Approvals:**

Europe: ETA-12/0383, ETA-07/0184, ETA-08/0304, ETA-10/0436, ETA-09/0368, ETA-11/0300, ETA-13/0890, ETA-13/0891

Germany: Z-33.41-130, Z-33.42-1739, Z-33.43-132, Z-33.43-1667, Z-33.43-1707, Z-33.44-133, Z-33.46-1091, Z-33.46-1720, Z-33.46-1732, Z-33.47-859

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