

Capatect Klebe- und Spachtelmasse 190

Highly-modified mineral adhesive, base coat and filling for façades



Product Description

Field of Application	Mineral standard render for the use as adhesive and base coat for insulation boards in Capatect façade systems
Material Properties	■ High binder content ■ High adhesive strength on almost all substrates ■ Water repellent and permeable to water vapour ■ Long open time ■ Additives for water repellency as well as for smooth application and good adhesion
Material Base / Vehicle	■ Mineral binders according to DIN EN 197-1 and DIN EN 459-1 - Synthetic resin dispersion powder ■ general purpose rendering mortars according to DIN EN 998-1
Packaging/Package Size	25 kg bag, 800 kg OneWay container, 1.3 t BigBag, 4.0 t BigBag silo, silo starting at 5 t
Colours	Light grey
Storage	Dry, protected from moisture, frost-free. Empty silos completely before longer standstill periods. Originally closed containers can be stored for approx. 12 months.
Technical Data	■ Heat conductivity: $\lambda_{10 \text{ dry, mat}} \leq 0.45 \text{ W/(mK)}$ for P=50% according to DIN EN 1745 $\lambda_{10 \text{ dry, mat}} \leq 0.49 \text{ W/(mK)}$ for P=90% according to DIN EN 1745 ■ Resistance-count for diffusion $\mu \text{ (H}_2\text{O)}$: $\mu \leq 25$ according to DIN EN 1015-19 ■ Compressive strength: Category CS IV according to DIN EN 998-1 ■ Apparent density of hardened mortar: approx. 1.4 g/cm^3 according to DIN EN 1015-10 ■ Adhesive tensile strength: $\geq 0.08 \text{ N/mm}$ according to DIN EN 1015-12 Fracture pattern A, B or C ■ Fire behaviour: Class A2-s1, d0 according to DIN EN 13501-1 (non-combustible) ■ Capillary water absorption: Category: Wc2 according to DIN EN 998-1 $C \leq 0.20 \text{ kg/(m}^2 \cdot \text{min}^{0.5})$ according to DIN EN 1015-18 ■ Layer Thicknesses: base coat: 3 - 4 mm
Product No.	190



Note	The "allgemeine bauaufsichtliche Zulassung" (general building authority approval) / "allgemeine Bauartengenehmigung" (general type approval) of the ETICS and the Technical Data Sheets of the products must be observed.
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Application

Substrate Preparation

Tape off window sills and add-on parts.
Carefully cover glass, ceramics, clinker, natural stone, painted, glazed and eloxated 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 impurities and substances with a separating effect (e.g. formwork oil) as well as protruding mortar burrs. Damaged, peeling paints and textured renders must be removed as far as possible. Hollow areas of rendering must be removed and overworked with render 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. 5-6 l water.

"Capatect Klebe- und Spachtelmasse 190" can be mixed to a lump-free compound using a powerful, slow-running agitator 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 stiffened workable again.

Consumption

Levelling filler:
approx. 1.8-2.2 kg/m²

Adhesive for insulation Boards:
Bead-dot method: approx. 4.5-5.0 kg/m².
Full-surface bonding: approx. 5.5-7.0 kg/m²
partial surface bonding by machine: approx. 5.5-6.0 kg/m²

Base coat:
Per mm layer thickness approx. 1.4 kg/m². Corresponds to approx. 4.2 kg/m² for 3 mm layer thickness.

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" (Rendering, 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

Adehsion
Depending on weather conditions, anchoring or overworking after 24 hours at the earliest. If anchoring is necessary, it should only be carried out after sufficient maturing of the adhesive bed.

Base Coat
Can be recoated with mineral textured renders after 24 hours at the earliest, depending on weather conditions.
Depending on the weather, recoatable with synthetic resin or silicone resin renders after 3-5 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

Immediately after use with water.

Example for Machine Equipment

Common machine technology:

- Flow mixer inoMIX F 21 with Inotec feed pump inoBEAM F 21 (400 V)
- Continuous mixer m-tec D 10 with standard metering or mixing shaft and feed pump m-tec P 15/25 (400 V) with screw section (1/1 capacity)
- Mixing pump e.g. inoCOMB M4G, PUTZKNECHT S48.3 or PFT G4 (½ capacity)

Furthermore, the material can be conveyed with a pressure conveyor system or pneumatic conveyor system into a stand with transfer cover and continuous mixer or into a mixing pump with transfer cover approx. up to 100 m dry.

Important data:
Please be sure to observe the machine manufacturer's guidelines!

Installation

Electrical connection:

Conveying/mixing pump: 400 V three-phase current/32 A (site power distributor with residual current circuit breaker)

Mixer: 400 V three-phase current/16 A (site power distributor with RCD)

Water connection:

3/4" hose with GEKA, required water pressure with machine running at least 2.5 bar.

Delivery hoses:

Start hoses - inner Ø 35 mm, 13.3 m each; end hose - inner Ø 25 mm, 10.0 m Maximum delivery range for feed pumps up to approx. 30 m (to be optimised depending on material and temperature). Delivery range for mixing pumps up to approx. 25 m (to be optimised depending on material and temperature).

Spraying equipment:

Nozzles 8 - 12 mm

Pre-rinse the delivery hoses with lime slurry or paste before regular operation.

When interrupting work, do not leave the delivery hose in direct sunlight, cover the material container e.g. with foil and keep the pistol and nozzle under water. Do not leave the material in the hose for more than 30 minutes before continuing work, otherwise the material in the hose may harden. Before a work break, the material container in the feed pump in the "open system" must be (continuous mixer + feed pump) emptied as far as possible before a break in work to prevent material tunneling when restarting. If this is not observed, the material may have to be made "workable" before the machine is started up (with the machine switched off).

More information on this can be found in the "Spray Technology Manual".

Processing as adhesive

- Manual or mechanical processing possible
- Joints and bed 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 panels 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 spatula/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 lamella insulation boards must always be bonded over the entire surface.

Machine bonding (partial-surface method)

Spray "Capatect Klebe- und Spachtelmasse 190" by machine onto 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 directly 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 / general building approval as well as the data sheets of the respective insulation material.

Reinforcement Layer

Attaching corner rails

Before base coating, place corner beads in mortar over the entire surface and align. When using "capatect Gewebe-Eckschutz", only lay the mesh 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 mesh 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 mesh by machine or when using mineral wool lamellae or mineral wool boards pre-coated on both sides, the base coat mesh 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.
 Embed the mesh in such a way that it is in the middle for base coat layer thicknesses up to 4 mm and in the upper half for thicknesses above 4 mm.
 In corner areas of building openings additionally embed "Capatect Diagonalamierung", "Capatect Sturteckwinkel" or mesh (25 x 25 cm) diagonally into base coat.

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. Contains: Cement, portland, chemicals, calcium dihydroxide. Aqueous cement suspensions have an alkaline effect.

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

Disposal

Empty containers should be taken to an approved waste management facility for recovery or disposal. The product can be deposited after solidification in compliance with local authority regulations. EWC 170904

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