

Capatect ArmaReno 600

Mineral dry mortar premix. Suitable for bonding thermal insulation boards, for applying reinforcement layers and for renovation.



Product Description

Field of Application	<p>High-grade all-round mortar, applicable as:</p> <ul style="list-style-type: none"> - Adhesive for bonding exterior thermal insulation boards of Capatect ETICS Systems A + B. - Reinforcement mortar (base coat) within Capatect ETICS Systems A + B - Renovation mortar for revising sound, existing render and plaster surfaces - Thin-film adhesive layer, e.g. for even concrete surfaces without sintered layers, XPS/R and lightweight wood wool boards - Finishing render for sponging up (not on plinth, subjected to splashing water).
Material Properties	<ul style="list-style-type: none"> ■ Mortar class PII as per DIN 18550-1, lime-cement-bound dry mortar premix; standard plaster mortar CS III as per DIN EN 998-1 ■ Reaction to fire (German classification): non-combustible ("nichtbrennbar") or flame retardant ("schwerentflammbar") depending on the structure of used ETICS. ■ Weather-resistant ■ Water-repellent as per DIN EN 1067 ■ Highly water vapour permeable. ■ Extremely low tension due to added fibres. ■ Easy to apply, either manually or by machine. ■ Excellent working properties (pliable) for use with silos or machines. ■ High fresh mortar stability while applying. ■ Long open-time for application. ■ Ecologically compatible. ■ Additives for hydrophobic effect provide elegant application and high adhesion.
Packaging/Package Size	25 kg bag
Colours	White
Storage	Dry and cool, but frost-free; protect from direct sunlight. Empty containers and silos completely before longer breaks (e.g. winter break). Shelf life of original, tightly closed packaging: Approx. 12 months.
Technical Data	<ul style="list-style-type: none"> ■ Density: Approx. 1.5 kg/dm³ ■ Heat conductivity: 0.78 W/m•K ■ Diffusion-equivalent air layer thickness $s_d H_2O$: Approx. 0.05 m as per DIN EN ISO 7783 - when applied in intended thickness ■ Compression strength: 5.0 N/mm² ■ Coefficient of water absorption: $\leq 0.1 \text{ kg}/(\text{m}^2 \cdot \text{h}^{0.5})$ as per DIN EN 1062 – Class W3 (low) ■ Adhesive tensile strength on EPS high-density foam board: $\geq 0.120 \text{ N}/\text{mm}^2$
Product No.	700



Application

Substrate Preparation

General Advice:

The substrate must be even, clean, dry, solid, sound/stable, adherent, and free from all substances, that may prevent good adhesion. Mask windowsills and attached parts. Cover glass, ceramics, clinker, natural stone, varnished and anodised surfaces thoroughly.

Bonding of Thermal Insulation Boards:

The substrate must be sound/stable, with an adhesive tensile strength as required according to system permission. Check existing paint coatings for compatibility and provide for dowel application, if necessary.

Reinforcement Layer:

Abrade offset at butt joints of EPS boards to achieve a planar surface and remove all abrasive dust.

Renovation Mortar:

Clean mineral substrates (render/plaster of mortar groups/classes PII or PIII), if necessary, to achieve a sound/stable surface.

Clean mineral substrates (render/plaster of mortar groups/classes PII or PIII) showing a slightly sanding surface, then prime with Sylitol Concentrate 111 (diluted with tap water 2:1).

Clean existing paint coatings (must be adherent and without chalking effect) e.g. with a high-pressure water jet.

Clean adherent existing paint coatings (with a slightly chalking surface) e.g. with a high-pressure water jet and prime with Sylitol Concentrate 111 (diluted with tap water 2:1).

Remove unsound existing paint coatings completely.

Render/plaster surfaces showing cracks can only be treated in a safe way, when further crack movement can be excluded without fail.

Thin-Layer Adhesive Plaster:

Clean concrete surfaces, if necessary. XPS boards: Abrade unstable or yellowed areas and remove dust. Wood wool boards: Remove loosely adherent particles.

Method of Application

Bonding of Thermal Insulation Boards:

EPS and mineral wool boards:

Apply the fresh mortar to the reverse side of thermal insulation boards by using the "Bead-Point-Method": A bead of material, approx. 5 cm wide, surrounds the board and 3 blobs (palm-sized) are to be applied in the middle of the board ($\geq 40\%$ of the surface should have contact with adhesive material.)

Pre-treatment of mineral wool boards: To guarantee proper bonding, the adhesive mortar should first be applied in this area as a thin-film adhesive layer and then peeled off by trowel (sharply drawn).

Mineral Wool Lamella – Optionally:

Full surface application:

Apply the adhesive mortar with a square notched trowel to the reverse side/rear panel. (Width and depth of notches depend on the substrate conditions.)

Application as mortar beads:

Apply the adhesive mortar by suitable machine to the wall substrate in S-shaped vertically beads, approx. 5 cm wide and min. 10 mm thick in the middle, with a max. centre distance of 10 cm ($\geq 50\%$ of the surface should have contact with adhesive material).

Place the thermal insulation boards without delay into the freshly applied adhesive mortar layer, touching each other (pressing together) and press on.

For both application methods it is necessary to apply adhesive material only on those surfaces which can be immediately covered with thermal insulation boards.

Adjust the thickness of applied material (base height) to the tolerances of the substrate. Irregularities up to ± 1 cm can be equalised by this application method. Place insulation boards thoroughly from bottom to top -pressing together- and press on sufficiently. The rows of thermal insulation boards must be applied 50 % staggered one beneath the other. Avoid the penetration of adhesive material into butt joints (board sides) – such material has to be removed. Follow the alignment and vertical lines for installation. Allow to set for min. 48 hours before any further application.

As Reinforcement Layer:

After having applied edge guards to reveals and edges and diagonal reinforcement fabric to the edges of openings in the façade, apply the reinforcement material in width of fabric sheets and embed Capatect Fabric 650 with an overlap of min. 10 cm. Then treat wet on wet to guarantee the complete covering of fabrics. Application method: Manually or by machine and subsequent trowelling. Provide for an even reinforcement layer thickness. The fabric sheets should be embedded centric or in the upper third of the layer. Layer thickness: On EPS boards: 3-7 mm, on mineral wool boards: 4-7 mm.

As Renovation Mortar (base coat):

Use Capatect ArmaReno 600 according to substrate requirements for:

- Treatment of partial defects
- Surfacing and levelling of existing textured render/plaster coatings
- Revision of full surfaces (renders/plasters or masonry). The embedding of reinforcement fabric is recommended. Application method: Manually or by machine and subsequent trowelling.

As Finishing Render:

Prime with Sylitol Concentrate 111 (diluted with tap water 2:1), if necessary, depending on the substrate absorbency and weather conditions during application.

Apply Capatect ArmaReno 600 to the stable substrate (basic render of lime-cement mortar group PII or mineral reinforcement layer) in a thickness of approx. 2-3 mm. While stiffening the mortar may be smoothed with a wet sponche trowel (sponging up). On external walls an additional paint coat is obligatory after curing.

For smoothed surfaces:

Additionally to the intermediate reinforcement layer the finishing render coat has also to be reinforced, if the following ETICS insulation boards are used:

Capatect MW 119, Capatect MW 149 EXTRA, Capatect LS VB 101 or elastified Capatect EPS boards.

For finishing render coat apply Capatect ArmaReno 600 (2–3 mm thick) and embed the Capatect Gewebe (fabric). Allow to cure, then apply a second coat of Capatect ArmaReno 600 in the same thickness and smooth it with a wet sponche trowel during the stiffening process. On external walls an additional paint coat is obligatory after curing.

Please note: Fine shrinkage cracks of smoothed surfaces, due to binder accumulation (forming a sintered layer), cannot be excluded. This is no deficiency and does not entitle for any claims.

New renders can be coated after a sufficiently long idle time, normally 2 weeks at 20 °C and 65 % RH. Adverse weather conditions, e.g. influenced by wind and rain, may extend the idle time.

An additionally applied priming coat of CapaGrund Universal minimises the risk of efflorescence and the render may be coated after a waiting time of 7 days. Apply two finishing coats of ThermoSan or AmphiSilan.

As Thin-Layer Adhesive Plaster:

Substrates: Concrete (without laitance), XPS/R- and mineral-bound lightweight wood wool boards, etc.

Apply Capatect ArmaReno 600 in a layer thickness of min. 5 mm, then treat with a rough-notched trowel or roughen the surface (keying by broom).

Hardening time = approx. 1 day per mm of layer thickness, before applying the rendering.

Consumption

Bonding:

EPS boards: Approx. 3.5 - 4.5 kg/m²

Mineral wool insulation boards: Approx. 4.0 - 5.0 kg/m²

Reinforcement coat:

Approx. 1.3 - 1.5 kg/m² per mm of layer thickness.

Renovation mortar and adhesive plaster:

Approx. 1.3 - 1.5 kg/m² per mm of layer thickness.

Felted finishing render:

Approx. 4.0 - 4.5 kg/m² for a layer thickness of 3 mm.

This indication does not take into account usage for spilling or loss on site. The figure may also vary according to substrate or application conditions. The exact rate of consumption is best established by a trial application on site.

Application Conditions

Processing temperature: +5 °C to +30 °C during application and curing for product, substrate and ambient air.

Do not apply on sun heated substrates, during strong wind, fog or rain, high relative humidity or imminent rain and frost.

Drying/Drying Time

At 20 °C and 65 % RH, the reinforcement coat is surface dry after 24 hours.

Tool Cleaning

Immediately after use with water.

Material Preparation

Capatect ArmaReno 600 is applicable with all common types of flow mixers, spiral pumps and plaster machines.

For manual preparation add approx. 5 - 6 l cold tap water - as required per 25 kg bag - into the mortar bucket. Pour the mortar premix into the bucket while stirring thoroughly with a suitable low-speed electric agitator until the mixture is free of lumps. Leave to stand for approx. 5 minutes, then stir again. If necessary, adjust to working consistency with a small amount of tap water.

Do not prepare more mortar than can be applied within 2 hours.

Depending on weather conditions, pot life for manually mixed material is approx. 2 hours. Maximum life in the hose for mechanic conveyance: 60 minutes. Already hardened (slightly stiff) material must not be made pliable by adding water and cannot be used.

Example for Machine Equipment

Strictly follow manufacturer instructions!

Standards values:

Hoses: Primary hoses, interior 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).

Electric Supply: 400 V rotary current / 16 A (building current distributor with FI-protection switch)

Water Supply: 3/4" hose, minimum 2.5 bar water pressure is required for the running machine.

Flow of Water : Approx. 330 l/hour for bonding. Adjust the desired consistency by the fine-regulating valve in the water-fitting of the mixer.

Spraying Unit: Nozzle Ø 10 mm

Note: Rinse hoses prior to regular application with lime slurry or lime paste.

Capatect One-Way Box (powder) with flow mixer Capa-M: see Technical Information Capa-M.

Note

Cover the scaffolding with tarpaulins during the curing phase, if necessary to protect the surface against rain. Germany: Follow DIN 18550 and DIN 18350, VOB, part C for use and workmanship.

Advice

Approval:

Z-33.41-130

Z-33.42-131

Z-33.43-132

Z-33.47-859

Z-33.49-1071

ETA-10/0436

ETA-10/0160

CE Labelling

According to EN 998-1 CE declaration on bags / containers and on data sheet for CE declaration, which can be accessed in Internet under www.caparol.de.

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

The mineral powder interacts with water to an alkaline reaction and should only be used by trained operatives. Causes skin irritation. Causes serious eye damage. May cause respiratory irritation. Keep out of reach of children. Wear suitable protective gloves, goggles and face protection. Do not breathe dust. Do not get in eyes, on skin, or on clothing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Contains portland cement.

Disposal

Materials and all related packaging must be disposed of in a safe way in accordance with the full requirements of the local authorities. Particular attention should be made to removing wastage from site in compliance with standard construction site procedures.

In Germany/EC: Only completely emptied packaging (bags) must be recycled. Dispose residues of hardened material as mixed building and demolition waste. European Waste Code (EWC) 170904

Giscode

ZP1

Further Details

See Material Safety Data Sheet (MSDS).

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