

Capatect MW-Dämmplatte 035 LIGHT 145

Lightweight, non-combustible façade insulation board made of mineral wool



Product Description

Field of Application	Non-combustible mineral wool façade insulation board for bonded and anchored Capatect façade systems.
Material Properties	■ Application type: MW WAP-zh and DI according to DIN 4108-10 ■ Light weight for optimal handling on the construction site ■ Low dynamic stiffness for better sound insulation ■ Fast installation due to optimised dowel quantities ■ Two-sided coating ■ Panel can be glued by machine using the partial-surface method without pressed application ■ Quality-controlled according to DIN EN 13162 ■ Occupational health classification: free according to german regulations: "GefStoffV", "ChemVerbotsV" and "EC Directive 97/69 (Note Q)"
Colours	Insulation material: brown-yellow Coating: Base Coat side white, adhesive side white with coating-free stripes
Storage	Dry, protected from moisture, do not expose to weather without protection.
Technical Data	■ Heat conductivity: $\lambda_B = 0.035 \text{ W/(m}\cdot\text{K)}$ rated value of thermal conductivity according to EN DIN 4108-4 $\lambda_D = 0.034 \text{ W/(m}\cdot\text{K)}$ nominal value of thermal conductivity according to EN 12667 or EN 12939 ■ Resistance-count for diffusion $\mu \text{ (H}_2\text{O)}$: $\mu = 1$ according to DIN EN 12086 ■ Raw density: ρ: approx. 85 kg/m^3 according to DIN EN 1602 ■ Melting point: $> 1000 \text{ }^\circ\text{C}$ according to DIN EN 4102-17 ■ Dynamic stiffness: $s' \leq 10 \text{ MN/m}^3$ (60 mm) $s' \leq 8 \text{ MN/m}^3$ (80 - 100 mm) $s' \leq 6 \text{ MN/m}^3$ (120 mm) $s' \leq 5 \text{ MN/m}^3$ (140 - 160 mm) $s' \leq 4 \text{ MN/m}^3$ (180 mm) $s' \leq 3 \text{ MN/m}^3$ (200 - 300 mm) according to DIN EN 29052-1 - Length-related flow resistance: $r \geq 36 \text{ kPa}\cdot\text{s/m}^2$ (60 mm) $r \geq 39 \text{ kPa}\cdot\text{s/m}^2$ (80 mm) $r \geq 35 \text{ kPa}\cdot\text{s/m}^2$ (100 mm) $r \geq 30 \text{ kPa}\cdot\text{s/m}^2$ (120 - 300 mm) according to DIN EN 29503 ■ Tensile strength perpendicular to the plate plane: $\geq 7.5 \text{ kPa}$ according to DIN EN 1607



Product No. 145

Thickness (mm)	Capatect MW-Dämmplatte 035 LIGHT 145	
	Format: 1.200 x 400 mm	
	Prod.-Nº. Edge: blunt	[m²] per shrink wrap packaging
60	145/06	1,92
80	145/08	1,44
100	145/10	0,96
120	145/12	0,96
140	145/14	0,96
160	145/16	0,96
180	145/18	0,96
200	145/20	0,96
220	145/22	0,48
240	145/24	0,48
260	145/26	0,48
280	145/28	0,48
300	145/30	0,48

Application

Substrates	Mineral substrates of new construction, 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 frost-free, solid, dry, free of grease and dust and, for anchored ETICS systems, have sufficient load-bearing capacity for the use of anchors. It must have the flatness required for the planned ETICS. The compatibility of any existing coatings with the adhesive mortar must be checked. Observe VOB, Part C, DIN 18345, Section 3. Reference is made to Caparol Technical Information No. 650 'Untergründe und deren Vorbehandlung' (Substrates and their preparation).
Consumption	1.0 m²/m²; plus offcuts
Application Conditions	During application and in the curing phase, the ambient and substrate temperatures must not be below +5 °C or above 30 °C. In unfavourable weather conditions, suitable measures must be taken to protect the treated façade surfaces.
Installation	- Manual or machine application possible - Lay insulation boards at least 10 cm staggered in a bond and join tightly (avoid cross joints) - Butt joints and bed joints must remain free of adhesive mortar - Fill joints ≤ 5 mm with suitable flame-retardant joint foam - Close joints and gaps > 5 mm with equivalent insulation strips - Avoid height offsets at panel joints - Interlock insulation materials at the corners of the building - Ensure that the application is flush and plumb - Damaged insulation boards must not be installed Bead-dot method: Due to the existing adhesive coating on the adhesive side, press filling can be omitted. Application of a circumferential bead at the slab edge and adhesive dots in the center. - Render systems - adhesive contact area ≥ 40 % - Hard cladding systems - adhesive contact area ≥ 60 % Full-surface bonding: When applying adhesive to the entire surface of the insulation board, work using the toothed bed method. When applying adhesive to the entire surface of the wall, comb through the adhesive mortar with a notched trowel immediately before applying the insulation board. The insulation boards must be pressed, floated and pressed onto the substrate immediately, after 10 minutes at the latest, with the side to which the adhesive mortar was applied. Machine bonding (partial surface method): Apply the adhesive to the substrate by machine 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. - Render systems - adhesive contact area ≥ 50 %

Verdübelung

Two-layer installation:

The boards can be laid in one layer up to 300 mm and in two layers up to 300 mm. With two-layer installation, insulation thicknesses from 60 mm to 180 mm can be combined as desired. The second layer must be glued in the joint offset to the first layer with a mineral adhesive mortar belonging to the system.

- Render systems - adhesive contact area $\geq 40\%$
- Render systems - adhesive contact area between the double layers $\geq 50\%$

The insulation boards must be glued to the substrate and fixed with anchors. The number and position of the anchors is specified in the "Allgemeine bauaufsichtliche Zulassung" (general building authority approval) / "Allgemeine Bauartzulassung" (general type approval). Anchoring is carried out after the adhesive mortar has hardened sufficiently.

Flush with surface:

The insulation boards can be fixed with approved *Capatect Dübelscheibe 153* (plate diameter 60 mm) or combined with *Capatect Dübelscheibe 153* (plate diameter 90 mm).

- Anchor arrangement: in the surface or in the surface and joint

Recessed:

The insulation boards can be fixed with approved plate anchors (e.g. *Capatect Universaldübel 053*) in combination with *Capatect Thermozyylinder 154* (plate diameter 112 mm). It is recommended that the anchors in the recessed fixing variant are only placed in the surface. The covering is made with the corresponding dowel roundel.

- Anchor arrangement: in the surface or in the surface and joint

Countersunk:

From insulation thicknesses of 120 mm to max. 200 mm, countersunk fixing is possible with the *Capatect Universaldübel 053*. Dowelling is permitted up to a maximum wind load of $W_e \leq 2.02 \text{ KN/m}^2$. Covering is carried out with the associated anchor roundel.

- Anchor arrangement: in the surface
- Insulation thicknesses: 120 - 200 mm

When fixing in the surface, a distance of 15 cm from the anchor shaft to the edge of the insulation board and 20 cm between anchors must be maintained.

Anchoring through the glass fibre mesh:

The insulation boards can be fixed with approved plate anchors (plate diameter 60 mm) through the reinforcing mesh after applying the base coat. The anchor plates are then immediately levelled ("fresh in fresh") or a second layer of base coat is applied.

- Anchor arrangement: according to DIN 55699

Anchoring through the glass fibre mesh with 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 anchor grid of the building authority approval
- Insulation thickness: from 80 - 200 mm

Note

The maximum field sizes without field boundary joints:

The maximum field sizes without field boundary joints for insulation thicknesses $> 200 \text{ mm}$ must be observed in accordance with the application document and/or the general Building authority approval.

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 gondolas 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.

Technical information:

For the application of the products or types of construction, the official documents of the building authorities must be observed. In Germany, this corresponds to the "allgemeinen bauaufsichtliche Zulassung" (general building approval)/ "allgemeinen Bauartengenehmigung" (general construction type approval) of the ETICS and the products. Internationally, the "European Technical Assessment" (ETA) applies. In addition, national and international the technical information for the products must be taken into account.

Advice

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

Wear protective clothing (dustproof) and dust mask P1 when dust occurs. Wear protective goggles during mechanical processing (sawing, drilling, grinding, milling) and when working overhead.

Disposal

Waste should be avoided by careful cutting and reuse. Nevertheless, dispose of Dispose of small amounts of material residues according to EWC 170604 (insulation material).

Approval

Z-33.43-132
Z-33.46-1091
Z-33.46-1732
Z-33.47-859

Customer Service Centre

Tel.: +49 6154 71-71710
Fax: +49 6154 71-71711
e-mail: kundenservicecenter@caparol.de

International Distribution: Please see www.caparol.com