

Capatect PS-Dämmplatte 032

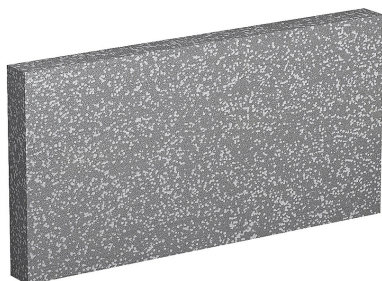
Dalmatiner 155/156/157

Polystyrene insulation boards according to DIN EN 13163 for Capatect façade systems



Product Description

Field of Application	EPS facade insulation board for bonded or mechanically fixed ETICS in the Capatect facade systems.	
Material Properties	<ul style="list-style-type: none"> ■ Type of application: WAP according to DIN 4108-10 ■ Quality-controlled according to DIN EN 13163 ■ Conforms to the quality guidelines of the "Industrieverband Hartschaum e.V." (IVH) and the "Verband für Dämmsysteme, Putz und Mörtel e.V." (VDPM) ■ Free of HBCD, CFCs and HCFCs ■ Glare-free application, dimensionally stable and grindable ■ EPS - DIN EN 13163 - T(1) - L(2) - W(2) - S(2) - P(3) - BS100 - TR100 - DS(N)2 - DS(70,-)2 - SS50 - GM1000 	
Colours	Dalmatiner (grey/white spotted)	
Storage	Store in a dry place, protected from moisture and sunlight (shaded or in closed, roofed rooms). Do not expose to UV rays for long periods without protection.	
Technical Data	<ul style="list-style-type: none"> ■ Material: ■ Heat conductivity: ■ Water vapour permeability: ■ Water absorption: ■ Raw density: ■ Fire behaviour: ■ Tensile strength perpendicular to the plate plane: 	<p>Expanded polystyrene rigid foam (EPS)</p> <p>$\lambda_B = 0.032$ W/(m-K) rated value according to DIN 4108-4 $\lambda_D = 0.031$ W/(m-K) nominal value according to DIN EN 12667 or DIN EN 12939</p> <p>$\mu = 30/70$ according to DIN EN 12086</p> <p>$WL(P) \leq 0.2$ kg/m² according to DIN EN 12087</p> <p>$\rho \leq 25$ kg/m³ according to DIN EN 1602</p> <p>Class E according to DIN EN 13501-1 Building material class B1 according to DIN 4102-1</p> <p>≥ 100 kPa according to DIN EN 1607</p>



TECHNICAL INFORMATION NO. 155

Product No.

Board Thickness [mm]	Size: 1000 x 500 mm			Packaging [m ²] *Shrink-wrapped
	Product-No. Edge: Blunt	Product-No. Edge: Groove & Tongue	Product-No. Edge: Rabbet	
10	155/01	–	–	25.0
20	155/02	–	–	12.5
30	155/03	–	–	8.0
40	155/04	156/04	157/04	6.0
50	155/05	156/05	157/05	5.0
60	155/06	156/06	157/06	4.0
70	155/07	156/07	157/07	3.5
80	155/08	156/08	157/08	3.0
100	155/10	156/10	157/10	2.5
120	155/12	156/12	157/12	2.0
140	155/14	156/14	157/14	1.5
160	155/16	156/16	157/16	1.5
180	155/18	156/18	157/18	1.0
200	155/20	156/20	157/20	1.0
220	155/22	-	-	1.0
240	155/24	-	-	1.0
260	155/26	-	-	1.0
280	155/28	-	-	1.0
300	155/30	-	-	1.0

Special thicknesses are available on request.

* The effective surface is reduced by about 3% with tongue & groove edges, with rabbet edges by about 4%.

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 solid, dry, free of grease and dust and, if necessary, have sufficient load-bearing capacity for the use of anchors. Impurities and substances with a separating effect (e.g. formwork oil) as well as protruding mortar burrs must be removed. Damaged, peeling paints and textured plasters must be removed as far as possible. Hollow areas of rendering must be knocked off and flush with the surface to be rendered. 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. Pre-treat substrates according to the processing instructions of the adhesive.
Consumption	1.0 m ² /m ² ; plus offcuts
Application Conditions	Depending on the condition of the substrate (adhesive pull strength, evenness) or the system selected, it may be necessary to anchor the insulation boards.
Installation	During application and in the drying phase, the ambient and substrate temperatures must not be below +5 °C and above +30 °C respectively. In this context, we refer to DIN 18345 section 3.1.3 (unsuitable climatic conditions). Do not process under direct sunlight.
	<ul style="list-style-type: none"> - 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 - Sand down any unevenness and remove sanding dust - Damaged insulation boards must not be installed

Bead-dot method

Application of a circumferential bead at the edge of the panel and adhesive dots in the centre.

- Plaster systems - adhesive contact area $\geq 40\%$
- Hard surface systems - adhesive contact area $\geq 60\%$

Full-surface bonding

On even substrates, the adhesive can be applied over the entire surface using a notched trowel. applied over the entire surface. Immediately press, float and press the insulation boards against the substrate with the side to which the adhesive mortar has been applied.

Bonding with adhesive foam

When using the adhesive foam "Capatect EcoFix", apply EPS boards by applying a surrounding bead close to the edge and provide with an enclosed bead in M- or W-shape.

- Plaster systems - adhesive contact area: $\geq 40\%$

Machine bonding (partial surface method)

Apply the system-specific adhesive 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.

- Render systems - adhesive contact area $\geq 60\%$.
- Hard cladding systems - adhesive contact area $\geq 60\%$

Machine bonding (full-surface application)

Apply the system-specific adhesive to the substrate by machine up to a maximum thickness of 10 mm. Immediately before applying the insulation boards, comb the adhesive mortar with a notched trowel (the width and depth of the teeth depends on the condition of the substrate). Immediately press the insulation boards into the fresh adhesive mortar bed, float them in and press them into place. To avoid skin formation, only as much adhesive surface may be applied as can be immediately covered with insulation boards.

Two-layer installation

The boards can be laid in one or two layers up to 400 mm insulation thickness. For two-layer installation, the boards must have an insulation thickness of at least 60 mm and consist of the same EPS insulation material. The second layer must be adhered in the joint offset to the first layer with a mineral adhesive belonging to the system.

- Render systems - adhesive contact area: $\geq 40\%$

Verdübelung

Requirement:

The insulation boards must be bonded to the substrate and, if necessary, fixed with anchors. Anchors are required if the adhesive mortar's adhesive pull strength to the substrate is insufficient or if the substrate is uneven by more than 1 cm/m. For purely bonded ETICS, a tear-off strength of at least 0.08 N/mm² must be maintained. The number and position of the anchors is based on the information in the general building authority approval / general construction type approval. The anchors are installed after the adhesive has hardened sufficiently.

Flush with surface:

The insulation boards can be fixed with approved plate anchors (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

Countersunk:

From insulation thicknesses of 80 mm to max. 400 mm, countersunk fixing is possible with the *Capatect Universaldübel 053*. Covering is carried out with the associated anchor roundel.

- Anchor arrangement: in the surface
- Insulation thicknesses: 80 - 200 mm
- Use an installation/mounting tool

Spacing of anchors when anchoring in the panel surface:

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
- Insulation thicknesses: 40 - 400 mm, depending on the relevant approval

Double-layer installation of EPS boards in ETICS with render coating:

When installing two layers of EPS insulation boards, the anchors must be placed through the entire thickness of the insulation material. Alternatively, only the first layer of EPS boards may be fixed with anchors. The second layer must then be bonded full-surface over the entire with an adhesive that is relevant to the approval.

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.

Fire protection measures:

For necessary constructive fire protection measures to maintain flame resistance, please refer to the respective approval / type approval or the information in the german leaflet: "Technische Systeminformation Kompendium WDVS und Brandschutz des VDPM e.V."

Aromatic solvents:

Do not bring into contact with aromatic solvents.

Note:

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

Disposal

Waste should be avoided by careful cutting and reuse.

Nevertheless, dispose of small material residues according to EAK 170203 (plastic) or 170604 (insulation material).

Approval

Z-33.41-130
Z-33.43-132
Z-33.46-1091
Z-33.46-1732
Z-33.47-859
Z-33.49-1071

ETA-07/0184
ETA-12/0383

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