

Capatect Perimeterdämmplatte 115

Expanded polystyrene foam (EPS) as per DIN EN 13163 for thermal insulation of exterior wall surfaces below and above ground surface.



Product Description

Field of Application

Capatect Perimeterdämmplatte 115 is used for the thermal insulation of walls under ground surface when exposed to moisture (W1.1-E and W1.2-E as per DIN 18533-1 - corresponding to DIN 18195-4), as well as the insulation of plinth areas (water load W4-E, splash area) used in the Capatect ETICS.

According to the German national approval the insulation board can be used down to 3 m below ground surface.

In the presence of cohesive or stratified soils, where layered or percolating water may occur, a efficient drainage as per DIN 4095 must be provided to avoid water accumulation.

Note: Do not use this insulation board in the capillary area of groundwater (usually 30 cm above groundwater) and in the area of pressing water.

Vertical traffic loads of more than 5 kN / m² on the adjacent site must be at least 3 m away from the thermal insulation.

In the splash water areas of plinths above ground surface and below the ordinary ETICS the Capatect Perimeterdämmplatte 115 is strictly recommended as insulation board instead of ordinary EPS.

In all other cases ask for technical advice.

Material Properties

- $\lambda_R = 0.035$ W/(mK) in plinth area above ground surface (Water exposure W4-E)
- $\lambda_R = 0.039$ W/(mK) under ground surface (Water exposure W1.1-E / W1.2 E corresponds to applications as per DIN 18195-4)
- Reaction to fire: German class B1 (flame retardant) as per DIN 4102/DIN EN 13501
- Insulation board type: EPS 035 PW (= thermal insulation for exterior walls near/inside the ground – on the sealing as per DIN 4108-10)
- Quality control according to BFA QS (DIN EN 13163)
- Double-sided profiled surface for a very good plaster adhesion
- National German approval for perimeter insulation for thicknesses of 60 to 300 mm (Z-23.33-1257)
- Toxicologically harmless; free from CFC, HCFC, HFC, HBCD
- Dimensionally stable and without shrinkage
- Waterproof

Colours

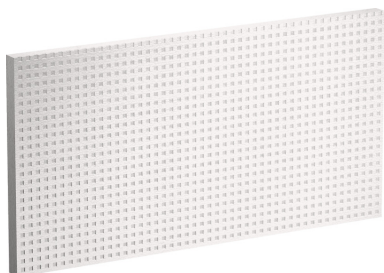
White or slightly red. Surface with stamping

Storage

Dry. Protect from moisture, weathering and ultra-violet rays.

Technical Data

- Heat conductivity: 0.035 or 0.039 W/(m · K), as per DIN 4108 (see above)
- Resistance-count for diffusion μ (H₂O): $\mu = 40/100$ as per DIN EN 12086
- Compressive stress (compression: 10%): ≥ 150 kPa
- Raw density: ≥ 30 kg/m³ as per DIN EN 1602
- Fire behaviour: Class E as per DIN EN 13501-1 (B1 as per DIN 4102-1)
- Capillary water absorption: ≤ 3 vol.% as per DIN EN 12087 for long-term complete immersion



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Product No.

115

Board dimensions: 1,000 x 500 mm

Edges: blunt

Board thickness [mm]	Product No.	Packaging (in shrink foil) [m ²]
For plinth only (above ground surface)		
20	115/02	12.5
30	115/03	8.0
40	115/04	6.0
50	115/05	5.0
German approval for perimeter insulation (below ground surface)		
60	115/06	4.0
70	115/07	3.5
80	115/08	3.0
100	115/10	2.5
120	115/12	2.0
140	115/14	1.5
160	115/16	1.5
180	115/18	1.0
200	115/20	1.0
220	115/22	1.0
240	115/24	1.0
260	115/26	1.0
280	115/28	1.0
300	115/30	1,0
Special board thickness on request		

Application

Buildings and components must have a structural sealing in accordance with DIN 18533-1 (corresponds to the applications of DIN 18195-4) or, due to their construction, do not require any additional sealing before they are insulated with Capatect Perimeterdämmplatte 115. The thermal insulation does not replace the waterproofing of a building or building elements. Only use undamaged insulation boards!

The Capatect Perimeterdämmplatte 115 can be fixed flush with the facade insulation or with a back offset to the façade (advantages: individuell material selection possible and surface separation in restoration cases).

Protect insulation boards from moisture and cover as soon as possible with a suitable reinforcement mortar or with suitable soil.

The ingress of water (eg horizontal or vertical rain flow) behind the Capatect Perimeterdämmplatte 115 must be prevented.

Capatect Perimeterdämmplatte 115 must be protected from damage while filling the construction pit - if necessary with an impact resistant foil.

The finishing render which leads down to the ground surface or even below, must be completely coated below the ground surface and up to approx. 5cm above ground surface with a suitable moisture protecting coating.

Suitable Substrates

Capatect-Perimeterdämmplatte 115 (perimeter insulation panels) for thermal insulation of ground-touching areas outside the waterproofing.

To be used on mineral surfaces above the ground surface in new construction, solid old plasters and solid old plasters with firm and intact coatings.

For use down to 3 m below ground surface and above the groundwater or outside pressurized groundwater.

Provide for a drainage to DIN 4095 in case of cohesive or stratified sole layers, when tail water or stratum water may occur.

Substrate Preparation

Do not use on solvent-based sealing agents/compounds or under statically loaded component parts.

All substrates must be load-bearing, dry, flat (as per DIN 18202 or 18203), clean and free of adhesion-reducing residues. The structural wall waterproofing sealing must exist before starting with perimeter insulation boards fixing.

If necessary, pre-treat wall surface according to the processing instructions of the adhesive defined for the application.

Consumption

per m²: 1 m² plus offcuts

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Application Conditions

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

Not to put in contact with aromatic solvents.

Germany: See also comment ATV DIN 18 345 3.1.3 unsuitable climatic conditions.

Fitting of Insulation Boards

The Capatect Perimeterdämmplatte 115 must be fixed flat without protruding offsets or joint gaps in a staggered formation. Cross joints are to be avoided.

Depending on the application situation make the choice of kind of fixing and the use of appropriate adhesive mortar.

Basically keep all joints free of the board adhesive.

Insulation below ground surface: When Capatect Perimeterdämmplatte 115 is used below ground surface take care to avoid displacement and slipping. In this area a simple adhesive point-application to safe the position is possible. On bituminous wall waterproofing sealings, a flexible bonding without load entry into the waterproofing membrane has to be used like Capatect Klebe- und Dichtungsmasse 114.

Prevent the slipping down of the boards by starting the insulation right above a protruding foundation.

In order to avoid a patchwork design due to flatness differences, it is essential to avoid high adhesive layer thicknesses when using Capatect Klebe- und Dichtungsmasse 114 and respect appropriate curing time.

Plinth insulation (above ground surface):

Processing the insulation boards in the visible plinths area corresponds basically to the method of processing an ETICS. The adhesive mortar has to be applied in the bead-point method with at least 40% adhesive area or in the toothed bed method to achieve force-fit bonding to the substrate. No bituminous adhesive mortar! This type of fixing must also be applied in the area in contact with the ground down to approx. 30 cm below ground surface, if this insulation is part of the rendered plinth insulation system.

To avoid visible transitions between insulation boards caused by different adhesive types and application methods, do not apply thick mortar layers. The insulation boards are to apply at least 10 cm staggered to each other. Interlock the boards alternately from both sides at the corners of the building. No miter-cut!

Butt joints of insulation boards must not lie over the connection zones of different wall components (eg ring anchors, roller shutter boxes, element joints). The insulating boards should bridge the wall joints for at least 10 cm wide and be supported by a secure adhesive bond on both sides.

Close gaping joints widths ≤ 0.5 cm with Capatect Füllschaum B1 055/20, wider joints with equivalent insulation strips.

Advice

Please see Material Safety Data Sheet (MSDS).

It is recommended to provide a clear separation of plinth and façade insulation by a plinth set-off. If this is undesirable for optical reasons, the plinth insulating board may be applied flush with the façade insulation.

The thermal perimeter insulation is effected to the bottom of foundation, if possible, to avoid the forming of thermal bridges.

Eventually necessary procedures for water drain according to DIN 4095 in case of accumulating or permanently pressing water are not affected by the precautions for sealing and thermal insulation.

Disposal

Careful cutting and reuse can prevent offcuts and wastage. In any case, waste or material residue must be disposed of as per European Waste Code (EWC) 17 06 04. 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.

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