

# Capatect PUR-Dämmplatte 124

Polyurethane insulation board for Capatect ETICS and plinth insulation



## Product Description

Field of Application	<p>Façade insulation board based on rigid polyurethane foam according to DIN EN 13165 for glued as well as glued and anchored Capatect façade systems.</p>
Material Properties	<ul style="list-style-type: none"> <li>■ Very high thermal insulation</li> <li>■ Application area WAP, WAS according to DIN 4108-10</li> <li>■ Good sanding properties</li> <li>■ Dimensionally stable and shrinkage-free</li> <li>■ Coated on both sides</li> <li>■ Very good render adhesion</li> <li>■ Quality controlled according to DIN EN 13165</li> <li>■ Free of CFCs, HCFCs, HBCD and HFCs</li> <li>■ Toxicologically harmless</li> </ul>
Colours	<p>Insulation board: yellow</p>
Storage	<p>Dry, protected from moisture and sunlight in closed and sheltered rooms. Do not expose unprotected to UV for an extended period of time. During processing, protect the insulation boards from strong sunlight. Do not place in full sun. Cover the installed insulation boards appropriately and apply the base coat as soon as possible.</p>
Technical Data	<ul style="list-style-type: none"> <li>■ Heat conductivity: <math>\lambda_R = 0.024 - 0.026 \text{ W/(mK)}</math> depending on board thickness (see table) (rated value as per DIN 4108-4 - application above ground level)</li> <li>■ Resistance-count for diffusion <math>\mu \text{ (H}_2\text{O)}</math>: 50-70 as per DIN EN 12086</li> <li>■ Raw density: 30 - 37 <math>\text{kg/m}^3</math></li> <li>■ Fire behaviour: Class E as per DIN EN 13501-1</li> <li>■ Capillary water absorption: <math>\leq 2.5 \%</math> by volume as per DIN EN 12087 for long term immersion</li> <li>■ Tensile strength: <math>\geq 100 \text{ kPa}</math> as per DIN EN 1607 (perpendicular to the surface)</li> </ul>
Product No.	<p>124</p>



Board thickness [ mm ]	Board formate: 1 000 x 500 mm	
	Product-N° Edge: blunt	$\lambda_R$ [ W/(mK) ]
20 - 70	124/02 - 07	0.026
80 - 110	124/08 - 11	0.025
120 -300	124/12 - 30	0.024

**Packaging units: See current Capatect product range catalogue**

## Application

Substrates	Mineral substrates like concrete and masonry walls, solid old mineral renders, load-bearing old paints or coatings as well as other load-bearing, flat substrates.
Substrate Preparation	The substrate must be clean, dry and load-bearing. Contamination and substances with a separating effect (e.g. formwork oil) as well as protruding mortar burrs must be removed. Damaged, peeling coats of paint and textured plaster must be removed as far as possible. Hollow areas of render must be removed and repaired flush with the surface. Highly absorbent, sanding or chalking surfaces must be thoroughly cleaned down to the solid substance and primed with Sylitol® RapidGrund 111.
Consumption	1 m <sup>2</sup> /m <sup>2</sup>
Application Conditions	During application and in the drying phase, the environmental and substrate temperatures must not be below +5 °C and above +30 °C. In this context, we refer to the comment "ATV DIN 18345 point 3.1.3" unsuitable climatic conditions. When grinding the polyurethane (e.g. external corners), we recommend wearing eye protection. Do not bring into contact with solvents.
Installation	<p><b>Application in glued, as well as glued and anchored systems.</b></p> <p><b>Insulation board cutting:</b> Cutting is done by means of a fine saw. Smaller areas can also be cut with sharp insulation knives. Hot wire cutters will not work due to higher density and temperature resistance.</p> <p><b>Apply adhesive manually:</b> Apply the system-specific adhesive mortar to the back of the board using the bead-and-dot method (strips approx. 5 cm wide all around the edge, 3 - 6 palm-sized lumps in the middle of the board) (adhesive contact area <math>\geq</math> 40 %, in conjunction with hard claddings the adhesive contact area is <math>\geq</math> 60 %).  Alternatively, full-surface bonding on flat substrates by combing the adhesive mortar onto the back of the board with a notched trowel.</p> <p><b>Adhesive application by machine:</b> Spray the system-specific adhesive mortar by machine onto the substrate in the form of vertical beads (adhesive contact area <math>\geq</math> 60 %). The adhesive beads must be approx. 6 cm wide and at least 10 mm thick in the center of the bead. The center-to-center 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 mortar may be applied as can be immediately covered. In the case of very level substrates, an additional application of adhesive mortar using the tooth bed method is possible.</p> <p><b>Insulation board installation:</b> The "Capatect PUR-Dämmplatte 124" must be laid from bottom to top in a single layer and in a bond, butt-jointed and well pressed on. The facade insulation board must lie flat on the substrate. Cross joints must be avoided.</p> <p>Depending on the application situation, the boards are bonded using the bonding method defined for this purpose and suitable adhesive mortars "Capatect X-TRA 300", "Capatect Klebe- und Armierungsmasse 186M", "Capatect Klebe- und Armierungsmasse 186M SPRINTER", or "Capatect Dämmkleber 185".</p> <p>Do not apply adhesive mortar to board joints. Ensure that the boards are laid aligned and plumb. Any unavoidable gaps must be closed with similar insulation material. Gaps up to a maximum width of 0.5 cm may also be filled with "Capatect Füllschaum B1". Offsets at board joints are to be avoided. At all building corners, interlocking must be made in board thickness (offset joints).</p> <p>Butt joints of insulation boards must not be located above the connection zones of different building components (e.g. ring beams, roller shutter boxes, element joints). The insulation materials should bridge at least 10 cm here and be supported on both sides by a secure adhesive bond to the substrate.</p>

As reinforcement on the facade insulation board, use exclusively "Capatect X-TRA 300" in 4.0 - 6.0 mm layer thickness with "Capatect Gewebe 650" or "Capatect Klebe- und Armierungsmasse 131 SL" in 5.0 - 7.0 mm layer thickness with "Capatect Glasfasergewebe 666".

For ETICS with hard cladding, use only "Capatect Klebe- und Armierungsmasse Uni 190" in 4.0 - 8.0 mm layer thickness with "Capatect Gewebe 650" as reinforcement on the facade insulation board.

### Fastening:

On substrates not suitable for bonding, anchor in accordance with "allgemeine bauaufsichtliche Zulassung (abZ)" (general building authority approval) for the insulation material. The additional fastening is made flush with the surface within the surface and as joint anchoring with anchors approved by the building authorities. In addition, the fastening can also be countersunk from an insulation thickness of 80 mm. Covering is done with the corresponding anchor roundel.

In ETICS with hard facing, the anchoring is carried out through the reinforcement mesh.

### Follow-up work:

Damaged insulation boards must not be installed. Sand uneven and/or UV-damaged insulation surfaces and remove sanding dust thoroughly. Observe necessary work safety measures.

Expansion joints present in the building must be taken over in the ETICS (external thermal insulation composite system).

Unrendered insulation boards must be protected from moisture and coated with reinforced base coat as soon as possible.

### Application in the plinth area:

The processing of the insulation boards in the rendered visible plinth area essentially corresponds to the processing method of an ETICS. The adhesive is therefore applied in a force-fit manner with the substrate (no bitumen adhesives) using the bead-point method with at least 40 % adhesive surface area or the tooth-bed method (in conjunction with hard cladding, the adhesive contact area is  $\geq 60\%$ ).

This fastening method is also to be used in the area in contact with the ground up to approx. 20 cm below the top edge of the ground level if the insulation boards are part of the plastered base system.

The insulation material embedded below the ground level must be provided with additional moisture protection in the connection to the waterproofing of the building or in the transition to an existing perimeter insulation. To avoid visible transitions with high-shrinkage adhesive types or methods, high adhesive layer thicknesses should be avoided.

### Notes on application in the plinth area:

If "Capatect PUR-Dämmplatte 124" is used as plinth insulation board, the plinth in this area must be protected against exposure to water by a structural waterproofing according to DIN 18 533-1 or do not require any additional covering/ structural waterproofing due to their construction. If damage to "Capatect PUR-Dämmplatte 124" cannot be excluded during backfilling of the excavation pit, a protective layer must be applied prior to backfilling.

Suitable measures must be taken to ensure that water (e.g. precipitation water flowing on the ground surface or running off the facade surface) cannot run behind the insulation layer.

A clear separation between the plinth and facade insulation by a plinth setback is recommended for the application of the most suitable material combinations and allows independent renovation intervals of the facade surfaces.

The plinth can also be laid align with the facade insulation.

The render, which reaches the ground or binds into the ground, must be coated or protected with a moisture protection coating permissible in the system up to approx. 5 cm above the top edge of the ground.

Fitting of Insulation Boards

## Advice

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

Disposal

CE Labelling

Customer Service Centre

Wear protective clothing (dust-tight) and dust mask P1 when dust occurs. During mechanical processing (sawing, drilling, grinding, milling) and when working overhead, also wear protective goggles.

Waste should be avoided by careful cutting and reuse. Nevertheless, small material residues should be disposed according to EWC 170203 (plastic) or 170604 (insulation material). Information on the recycling of material cuttings without adhesive and filler adhesions can be obtained from the "Industrie- und Handelskammern (IHK)".

The CE mark is applied on the label.

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## Technical Information No. 124 · Issue: September 2022

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