

CT 81

Adhesive mortar for EPS-boards

For fixing Expanded Polystyrene (EPS) boards for thermal insulation of buildings

Properties

- ▶ economical in use
- ▶ high strength
- ▶ vapour permeability
- ▶ good working parameters
- ▶ excellent adhesion to mineral substrates and polystyrene

Area of application

The Ceresit CT 81 adhesive mortar is used for fixing thermal insulation boards of expanded polystyrene (EPS) for the thermal insulation of buildings using the light-wet method.

CT 81 can also be used for new buildings. The product is part of the Ceresit Ceretherm façade ETICS (External Thermal Insulation Composite System). It is suitable both for thermo-renovation of old LPS (large panel system) buildings and for thermal insulation of newly erected buildings. The applied boards require additional fixing by means of mechanical anchors, i.e. proper expansion pins made of plastic. Ceresit CT 82 mortar should be used to apply glass-fibre reinforced layer on the EPS-boards.

Substrate preparation

CT 81 has strong adhesion to load-bearing walls, concrete substrates and plasters, which are sound, dry and free of any substances that may impair adhesion (e.g. oils, bitumen and dust).

The adhesion strength of any existing plasters and paint coatings must be tested. Any 'hollow' (weak) plasters must be removed. Any unevenness of up to 20 mm must be filled with Ceresit CT 29 plaster and repair filler or with cement mortar. Any contamination, remaining substances that may impair adhesion, vapour-impermeable paint coatings and layers with poor adhesion to the substrate must be completely removed—e.g. using a high-pressure steam cleaner.



Any areas covered with mould must be cleaned using steel brushes and treated with Ceresit CT 99 anti-fungus. Old walls without coatings or with sufficiently strong plasters and paints must be dedusted with a brush, washed with a water jet and left to dry completely.

Substrates with high absorbency, e.g. walls of aerated concrete or gypsum blocks, must be primed with Ceresit CT 17 deep-penetrating primer and left to dry for at least 4 hours.

Usage

Pour CT 81 into the predefined amount of cold clean water and mix with a manual stirrer until a homogenous mixture is achieved. Wait 2–3 minutes and mix again. Apply the ready mixture along the perimeter of the boards in stripes with widths of 3–4 cm and in the middle—a few 'balls' with approximate diameter of 8 cm. Install the board immediately on the wall and press it using light taps with the trowel. Once pressed, properly applied mortar must cover at least 40% of the board surface.

On even and smooth substrates, apply the mortar with a notched trowel to the whole board surface (10–12 mm notch size). Polystyrene boards must be flush with each other, with staggered vertical joints on adjacent rows. After the CT 81 sets (approximately 2 days), sand down and then fix the boards using the mechanical anchors. Use at least 4 expansion pins per square metre. The highest weather stresses are concentrated in the stripes with an approximate width of 2 m along the outer edges of the building, where the number of expansion pins must be increased to at least 8 per square metre. Wet mortar spots can be cleaned with water, while hardened residue can be removed only mechanically.

Caution

Use CT 81 in dry conditions, at temperatures between +5°C and +30°C. All data and instructions in this data sheet were determined at a temperature of +23°C and a relative air humidity of 50%. Other climatic conditions may shorten or extend the setting and drying times accordingly. CT 81 contains cement and sets off an alkaline reaction with water. Therefore, protect your skin and eyes. In case of contact of material with the eyes, rinse the eyes with plenty of water and consult a physician.

Recommendations

When the mortar is used outside certified Ceresit Ceretherm façade ETICS systems, the polystyrene boards, mechanical anchors, mesh and other thermal insulation components must conform to the international and national standards (EN 13163 for the EPS-boards and ETAG 014 for the plastic anchors). The manufacturer guarantees the product quality but cannot influence its conditions and method of use. The product must be applied by qualified personnel/professional users. It is recommended to consult the product Technical Data Sheet and Safety Data Sheet. The manufacturer shall not be liable for any compensation to the customer other than the cost of the materials. The customer is required to conduct testing or find information before applying the product.

Storage

12 months after the date of manufacture, in the original undamaged packaging, in a dry and cool place, on pallets.



Henkel Bulgaria EOOD
Business Park Sofia, building 2, floor 4,
Tel.: 02/806 39 00,
henkel.lepila@bg.henkel.com,
www.ceresit.bg

Packaging

Paper bags of 25 kg.

Technical data

Base:	Cement mixture with mineral fillers and modifiers
Bulk density:	approx. 1.3 kg/dm ³
Mixing ratio:	5.0-5.5 l of water per 25 kg
Pot life of the ready mixture:	approx. 2 hours
Application temperature:	between +5°C and +30°C
Open time:	approx. 15 min
Adhesive strength after 28 days:	
to concrete	≥ 0,25 MPa
to polystyrene	≥ 0,08 MPa (compromised polystyrene layer integrity)
Indicative consumption rate:	approx. 5.0 kg/m ²

The Ceresit CT 81 adhesive mortar for EPS-boards is part of the Ceresit Ceretherm façade ETICS, certified with an ETA (European Technical Approval):



Ceresit Ceretherm system	ETA	Certificate
Popular	08/0309	1488-CPR-0382/Z
Impactum	13/0086	1488-CPD-0349/W

Quality for Professionals