



# polystyrene boards

One-component polyurethane adhesive for fixing expanded and extruded polystyrene boards in Ceresit Ceretherm thermal insulation systems and for fixing other types of insulating boards

# **CHARACTERISTICS**

covers up to 8 sqm – much more than cementitious adhesives

- better adhesion than cementitious adhesives mechanical fixation after ~2 hours – shortens
- thermal insulation works by 5 days
- it can be applied from 0°C and in high humidity
- special thermal insulation properties, like

polyurethane foam or XPS

### SCOPE

Ceresit CT 84 Express STD is used to fix expanded and extruded polystyrene boards in Ceresit Ceretherm façade thermal insulation systems.

Ceresit CT 84 may be used to apply polystyrene boards on both façades of new buildings and of buildings which are to be thermally rehabilitated by means of thermal insulation.

About 2 hours after application, polystyrene boards can be levelled (by roughening), doweled, and then the reinforcing mortar applied with reinforcing mesh by using Ceresit Thermo Universal CT 80, CT 87 adhesives.

Ceresit CT 84 polyurethane adhesive may also be used to fix expanded and extruded polystyrene boards and basalt mineral wool on surfaces such as: wood, OSB, glass, metal, concrete, ceramic bricks, bituminous surfaces.

Moreover, Ceresit CT 84 also adheres to plasterboard surfaces, if they have been moistened in advance.

#### SUBSTRATE PREPARATION

Ceresit CT 84 adheres very well to mineral loadbearing surfaces such as plaster walls and concrete free of substances that could prevent adhesion. In case of low temperatures, the surfaces on which Ceresit CT 84 is to be applied shall be protected from frost. The adhesion of existing plasters and paint layers shall be checked beforehand. Plasters that show swelling

("hollow sounding") shall be removed. Any surface contaminated with other non-adherent substances or surfaces with poor adhesion to the substrate shall be completely removed by washing with pressurised water. Moss or algae shall be removed and the entire surface shall be treated



with antifungal solution in accordance with its technical data.

Old plastered surfaces shall be dusted off, washed with pressurised water, and left until completely dry. The adhesion of Ceresit CT 84 to the properly prepared substrate shall be checked by bonding 10 x 10 cm polystyrene boards in several places and pulling them off after 2 to 4 hours.

# APPLICATION

In façade Ceresit Ceretherm thermal insulation systems. Shake the tube vigorously for a few seconds, then remove the protective valve cap and screw on the applicator straw so that the bottle is valve down. Caution! The valve opens by twisting.

After screwing in the applicator straw, the valve opens and the adhesive can be released by pressing the trigger. Fixing profiles shall be installed before applying polystyrene boards.

Ceresit CT 84 shall be applied with the applicator straw so that the bottle is valve down. The distance between the applicator straw head and the polystyrene board shall be maintained to allow the adhesive to be applied. In case of applying polystyrene boards on an older thermal insulation, Ceresit CT 84 shall be applied to the perimeter

of the polystyrene boards 2 cm from the edge of the board and on the middle line of the board (parallel to the long side). If applying polystyrene boards to foundations, Ceresit CT 84 shall be applied in 5 vertical lines, parallel to the short side of the polystyrene board, 2 cm from the edge. The polystyrene boards shall be immediately placed on the wall and pressed with a longer trowel. The surface may be levelled or corrected within 20 minutes after applying the polystyrene boards to the wall. High humidity accelerates the bonding of Ceresit CT 84 adhesive.

If applying the thermal insulation system in adverse weather conditions (strong wind or heavy rain), scaffolding protection is mandatory. Special attention shall be paid to the corners of the building in case of strong wind. The residues of unhardened adhesive may be removed with Ceresit TS 100 Premium Cleaner or acetone. The residues of hardened adhesive shall be removed only mechanically. After removing the bottle, the applicator straw shall be cleaned with Ceresit TS 100 Premium Cleaner. If cavities are identified under polystyrene boards, pierce the expanded polystyrene board and fill the cavities with Ceresit CT 84.

If applying a second layer of polystyrene boards over the thermal insulation system, the latter shall be cleaned to remove substances preventing adhesion; the second layer of boards shall be applied as for Ceresit Ceretherm systems.

#### Note:

The adhesive shall be applied at a temperature of 0°C to +40°C. Ceresit CT 84 adhesive allows the outside temperature to go down below 0°C 8 hours after its application. All data were obtained at a temperature of +20°C and relative humidity of 60% CM. Product parameters may be different under other conditions. Ceresit CT 84 contains substances harmful to health. During application, it is recommended to use protective glasses and gloves. It is forbidden to eat or smoke while working. If swallowed, seek medical advice immediately and show the doctor the packaging or label.

The tube contains compressed flammable gas, so keep away from heat sources and avoid storage above +50°C. The tube shall not be punctured or thrown into the fire. The adhesive tube shall always be transported in the box, in the trunk, never in the driver's cab. Keep out of reach of children. CT 84 shall be used with white or graphite expanded polystyrene boards complying with ETICS requirements according to EN 13163.

#### RECOMMENDATIONS

This data sheet describes how to use the product, how to apply it and recommendations for work, but all this also depends on the user's professional training. The manufacturer guarantees the quality of the product, but cannot be held responsible for the conditions and method of its use. Therefore, if in doubt, the quality of the product shall be verified by your own tests.

#### PACKAGING

750 ml metal bottle.

SHELF LIFE

Ceresit CT 84 can be stored and transported in vertical position, in cool, dry environments, above  $0^{\circ}$  C.

#### **TECHNICAL DATA**

Basis:	polyisocyanate, propane/ isobutane propagator gas
Application temperature:	from 0°C to +40°C
Air humidity:	even above 90%
CM crust formation time:	approx. 10 min
Hardening time:	approx. 2 hours
Adhesion according to ETAG 004	
To concrete:	≥0.08 N/mm²
To EPS boards:	≥0.08 N/mm²
To ceramic bricks:	≥0.08 N/mm²
To aerated concrete:	≥0.08 N/mm²
To OSB:	≥0.08 N/mm²
To metal:	≥0.08 N/mm²
To plasterboards:	≥0.08 N/mm²
To XPS:	≥0.08 N/mm²
To bituminous coatings:	≥0.08 N/mm²
To wood:	≥0.08 N/mm²
Estimated consumption in Ceresit Ceretherm thermal insulation systems: 8 m <sup>2</sup> For thermal insulation of foundations: 12 m <sup>2</sup>	

