

CT 84 Express

Express PU Adhesive for EPS-boards

One-component, low-pressure polyurethane adhesive for fixing expanded polystyrene (EPS) boards in ETICS thermal insulation system of buildings and for fixing various types of insulation panels

CHARACTERISTICS

- ▶ Yield: 10 m² – 100% more than traditional cement adhesives
- ▶ 15% higher adhesive strength than traditional cement adhesives
- ▶ Low expansion
- ▶ Anchoring after ca. 2 h – speeding up thermal insulation work. In case of application of CT 84 and Ceresit Ceretherm Express system insulation work can take even 5 days less
- ▶ Application from 0°C and at high humidity – especially recommended for work in low temperature when cement adhesives drying time is significantly longer
- ▶ Perfect for “warming to warming” system – 1 m² of expanded polystyrene boards fixed with CT 84 adhesive weight 100 g, instead of 5 kg in case of cement adhesives
- ▶ Enhanced thermal insulation properties – CT 84, unlike traditional cement adhesives, has thermal insulation properties similar to foamed polystyrene or wool
- ▶ High homogeneity of adhesive thanks to metal ball protecting against too large air bubbles

SCOPE OF USE

Ceresit CT 84 polyurethane adhesive is used for fixing expanded polystyrene boards in the complex Ceresit Ceretherm systems for thermal insulation for external building walls (ETICS). CT 84 is used for fixing foamed polystyrene boards in providing thermal insulation for newly erected buildings and for those subjected to renovation of thermal insulation. Approximately 2 hours after the application, the foamed polystyrene boards may be smoothed, anchored and, then the armoured layer may be applied using the Ceresit CT 85, CT 87 or ZU. CT 84 polyurethane adhesive is also used for fixing such materials as EPS and XPS foamed



polystyrene and hard mineral wool for such surfaces as wood, OSB boards, glass, bitumens, ceramic bricks, concrete, coated and galvanised sheet plate, dry cellular concrete and after water impact, drywall, and for layered fixing of expanded polystyrene and mineral wool boards under conditions of normal and lower temperatures, also in thermal systems.

SURFACE PREPARATION

CT 84 features very good adherence to compact, carrying surfaces free of grease, dust and other substances which reduce adhesion. In case of application under reduced temperatures, surface may not be covered with frost, ice or snow. Adherence of the existing plasters and paint coats should be checked. “Hollow” plasters should be removed. Contamination, remains of anti-adhesive substances, vapourtight paint coats and low adherence coats should be completely remove, e.g. with washing devices under pressure. The places which are habitats for moss and algae should be cleaned with steel brushes and then saturated with solution of the Ceresit CT 99 agent in accordance with its instructions. Old walls without plasters, properly strong plasters and paint coats should be brushed of dust, and then

washed with water under pressure and left until completely dry. Adherence of CT 84 to the prepared surface is checked by fixing blocks of expanded polystyrene 10 x 10 cm in several places and their manual removing after 2-4 hours. Carrying capacity of the surface is sufficient when expanded polystyrene is torn apart.

APPLICATION

In the Ceresit Ceretherm thermal insulation systems

- Shake the container energetically for several seconds, remove the valve cup and screw the gun on the container held with the valve upwards. Caution! The gun valve should be twisted off. After screwing the container on, the valve gun may be opened and adhesive may be released with pressing the trigger. Prior to fixing EPS, fix the start strips. CT 84 should be applied with the gun held with the container upwards, with the distance between the gun and the board maintained to enable correct application of adhesive. In case of fixing insulation panels in the CT 84 additional thermal insulation system, application should be done on the perimeter of the board, at the distance of about 2 cm from the edge, and in one strip across the centre of the board, parallel to its longer sides. When gluing insulation panels for foundation thermal insulation, apply CT 84 in 5 vertical strips parallel to the shorter sides of the board, in the distance of about 2 cm from the edge. Immediately press the board to the wall and hold it with small pressure with a long float. Smoothness of the surface of the EPS-boards may be adjusted within 20 minutes of their fixing, with the use of a long float. High humidity of air may accelerate bonding of CT 84.
- In case of work under unfavourable weather conditions, e.g. during strong wind or rainfall, covers on scaffolding must be used. Special attention shall be paid to protection of building corners when work is conducted during strong wind.
- Fresh adhesive stains should be washed with CERESIT PU CLEANER or acetone, and hard adhesive layer may be removed only mechanically.
- After removing the container from the gun, clean the gun with CERESIT PU CLEANER. In case of keying expanded polystyrene boards
- If "hollow" sound is found during cleaning or hearing to the façade sounds, the local fixing of thermal insulation panels should be done with point puncturing of façade plaster and thermal insulation layer and injecting CT 84. In the "warming to warming" system
- After cleaning the surface, e.g. with the Ceresit CT 98 concentrate for removing contaminants, expanded polystyrene boards should be fixing on the existing thermal insulation as in case of the standard Ceresit Ceretherm system.

PLEASE NOTE

Application should be performed at temperatures of the surroundings and surface from 0°C to +40°C. Application of the CT 84 adhesive allows temperature drops below 0°C after 8 h from its application. All data refer to temperature +20°C and relative air humidity 60%. Under other conditions, the parameters of the material may differ. CT 84 includes substances harmful to health. Protection goggles and gloves should be used. Smoking and eating during work is forbidden, work should not be conducted close to open fire or glow due to flammable gas present in the package. If swallowed, seek medical advice immediately and show this container or label. Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use. Do not spray on a naked flame or any incandescent material. Keep away from sources of ignition – No smoking. The container with adhesive should be transported in car boot, never in the passenger area. Keep out of the reach of children.

OTHER INFORMATION

This technical specification defines the scope of application of the material and recommended work procedures but it cannot replace professional experience of the contractor. Apart from the recommendations stated, work should be performed in accordance with building art and HS&E rules. The manufacturer guarantees quality of the product, but cannot be held responsible for the conditions and method of its use. In case of doubts, run your own tests. This technical specification supersedes all earlier specifications.

STORAGE

Store and transport in vertical position, under cool and dry conditions, in positive temperatures. Shelf life: 15 months of the production date printed on the bottom of the container. Metal container.

PACKAGING

Contents – 850 ml.

TECHNICAL DATA

Temperature of application: from 0°C to +40°C

Humidity of application: even above 90%

Time of surface drying: approx. 10 min.

Hardening time: approx. 2 h

Thermal conductivity coefficient λ : 0.040 W/mk

Adherence:

to concrete	≥ 0.3 MPa
to foamed polystyrene	≥ 0.15 MPa (breaking in EPS layer)
to ceramic bricks	≥ 0.30 MPa
to cellular concrete	≥ 0.15 MPa
to OSB boards	≥ 0.30 MPa
to glass	≥ 0.30 MPa
to sheet plate	
- galvanised	≥ 0.10 MPa
- coated polyester SP25	≥ 0.20 MPa
to drywall	≥ 0.10 MPa
to foamed polystyrene XPS	≥ 0.20 MPa
to bituminous coat	≥ 0.25 MPa
to wood	≥ 1.0 MPa
to mineral wool	≥ 0.08 MPa
interlayer in the system:	
- EPS-CT 84 –EPS	≥ 0.08 MPa
- mineral wool-CT 84-mineral wool	≥ 0.08 MPa

Package coverage:

- in additional heating systems about 10 m²
- for foundation heat insulation about 14 m²

This product possesses:

- Technical Approval in system:

Ceresit Ceretherm System	Express	Reno
TA	15-7152/2010 + Annex no. 1	15-8077/2009 + Annex no. 1 & 2
Certificate	ITB-0173/Z	ITB-355/Z
DoC: Ceresit Ceretherm	Express 2/12 15.02.2012	Reno 3/12 15.02.2012

- Technical Approval No. AT-15-8372/2010 issued by Instytut Techniki Budowlanej and National Declaration of Conformity No. CT 84/1/10 of 25.05.2010.