

# **CT 84**





# **EXPRESS PLUS**

# **Express PU adhesive for insulation panels**

One-component, polyurethane adhesive for fixing EPS & MW boards in ETICS and various types of insulation panels

#### **CHARACTERISTICS**

- ► Yield: 10 m² 100 % higher than traditional cement adhesives
- ▶ 15 % higher adhesive strength than traditional cement adhesives
- **▶** Low expansion
- ➤ Anchoring after aprox. 2 h speeding up thermal insulation work; in case of application of CT 84 and Ceresit Ceretherm systems, insulation works can take even 5 days less
- Application from -10°C and high humidity of air especially recommended for work in low temperature when cement adhesives drying time is significantly longer or impossible
- ▶ Perfect for "ETICS on ETICS" application

   fixing of 1 m² of eps boards with CT 84 weights 100 g
   vs 5 kg in case of cement adhesive
- ► Enhanced thermal insulation properties CT 84, unlike traditional cement adhesives, has thermal insulation properties similar to foamed polystyrene or mineral wool













# SCOPE OF USE

Ceresit CT 84 is a polyurethane adhesive used for fixing Expanded Polystyrene & MW boards in Ceresit Ceretherm Systems for thermal insulation of external building walls (ETICS). CT 84 can be used for fixing foamed polystyrene boards & MW in providing thermal insulation for newly erected buildings and those subjected to renovation of thermal insulation. Approximately 2 hours after the application, the insulation boards may be smoothed and anchored, then the reinforced layer may be applied using the Ceresit CT 80, CT 85, CT 87, CT 190 or ZU.

CT 84 polyurethane adhesive is also used for fixing such material as EPS and XPS foamed polystyrene on such substrates



as wood, OSB board, glass, bitumen, ceramic bricks, concrete, coated and galvanized steel, aerated concrete dry and after water impact, drywall and for layered fixing of expanded polystyrene in normal and reduced temperatures in thermal insulation systems also.

It is also used for filling the gaps between the EPS & XPS boards and bonding of EPS boards in case of renovation of the existing insulation system "ETICS on ETICS".

# **SUBSTRATE PREPARATION**

Ceresit CT 84 features very good adherence to compact, carrying substrates, such as wall, render and cement substrates free from grease, dust and other substances decreasing adhesion. In case of low temperatures, the substrates to which CT 84 will be applied, should be covered with neither frost, ice or snow. The adhesion of existing renders and paint coatings should be checked. "Hollow" renders should be removed. Any surface contaminant and other adhesion impairing substances, steam-tight paint coatings and the coats with low adhesion to the substrate should be completely removed, e.g. by means washing devices operating under pressure. Moss and algae should be removed with steel brushes and the entire surface should be

CERESIT C\_CT84\_TDS\_1\_1021

saturated with Ceresit CT 99 fungicide solution in accordance with the technical instructions. The old, not rendered walls, strong renders and paint coats should be dusted, then washed with water jet and left until they go completely dry. Adhesion of CT 84 to the prepared substrate is checked by gluing 10 x 10 cm blocks of EPS-boards in a few places and pulling off manually after 2-4 hours. The load carrying ability of the substrate is sufficient only when the EPS-boards are subject to rent.

### **APPLICATION**

#### In Ceresit Ceretherm composite insulation system.

The container should be intensively shaken for several seconds, then the valve protection cap should be removed and the container with the valve kept upwards should be attached to the gun. Please note! The valve of the gun should be twisted off. With the gun attached to the container, it is possible to open the valve and release the adhesive by pressing the trigger. Starting profiles should be fixed before the application of insulation boards. CT 84 should be applied with the dispensing gun and the container kept in an upright position and the distance kept between the gun and the board allowing the adhesive application. In case of applying CT 84 in Ceresit Ceretherm Systems, it should be applied along the periphery of the board with the distance kept approximately 2 cm from the edges and one strip running along the board parallel to its longer sides. In case of fixing CT 84 on foundation should be applied 5 strips along shorter side of the board, keep the distance c.a. 2 cm from the edge. 2-4 minutes after CT 84 place the board to the wall and press it slightly with a long float. The surface smoothness of the fixed boards can be corrected up to 20 minutes since their fixing by means of a long float. High humidity can cause faster bonding of CT 84.

- In case of the application during the unfavourable weather conditions, e.g. during strong winds or rain, the scaffolding protection should be absolutely used. Special attention should be paid to the protection of the building corners when the application is done during strong winds.
- Fresh adhesive stains should be removed by means of CERESIT PU CLEANER or acetone, and any hardened layer of adhesive can be removed mechanically only only.
- When the container is removed from the gun, the gun should be cleaned with CERESIT PU CLEANER.

#### In the case of key button effect of EPS-boards.

 In the case of 'hollow' sound during cleaning of elevation, topical taped insulation boards should be done through the puncture point in elevation and heat-insulation layer and injecting the adhesive CT 84.

#### In Ceresit Ceretherm Reno system as "ETICS on ETICS"

 After cleaning the surface by mean of Ceresit CT 98 (the concentrate for cleaning the dirt) the EPS-boards should be fixed to existing insulation according to standard external thermal insulation system of Ceresit Ceretherm.

#### **PLEASE NOTE**

CT 84 contains substances harmful to health. Protective glasses and gloves should be worn. It is not permitted to

eat or smoke while working; do not work close to the open fire. In case of any health problem, the general practitioner should be consulted. The container holds flammable gas, therefore it should be protected against heat sources above the temperature of +50 °C. The container should not be perforated or thrown into the fire. The container with adhesive should always be transported in the boot - never in the passenger's cabin. Keep out of reach of children. The performance characteristics are given in the text of corresponding to the product Declaration of Performance.

# OTHER INFORMATION

It is recommended to use white or graphite EPS boards which meet the requirements of external wall insulation systems (ETICS) according to EN 13163; i'ts recommended to use MW boards with acc. EN 13162 with TR  $\geq 10$  & lammella with TR  $\geq 80$ .

#### **PACKAGING**

- in ETICS systems

- on foundation insulation

Metal container of 850 ml.

PACKAGING		
Temperature of application:	from -10 °C to +40 °C	
Air humidity:	up to 100%	
Surface drying time:	approx. 10 min.	
Hardening time:	approx. 2 hours	
Thermal conductivity	0.040 W/mk	
Adhesion:		
to concrete	≥ 0.08 MPa	
to EPS-boards	≥ 0.08 MPa (tear in EPS layer)	
to MW boards	≥ 0,08MPa	
to ceramic bricks	≥ 0.08 MPa	
to aerated concrete	≥ 0.08 MPa	
to OSB board	≥ 0.08 MPa	
to steel		
- coated	≥ 0.08 MPa	
- galvanized	≥ 0.08 MPa	
to XPS	≥ 0.08 MPa	
to bitumen coat	≥ 0.08 MPa	
to wood	≥ 0.08 MPa	
Fire classification acc. EN 13501-1:		
B-s1,d0 in:		
Ceresit Ceretherm Popular, Ceresit Ceretherm Classic		
Ceresit Ceretherm Premium		
Assumed consumption:	·	

Shelf life/ Storage: Ceresit CT 84 should be stored and transported, in cool and dry conditions and in the temperature above 5  $^{\circ}$ C. The expiry date: up to 15 months since the production date placed on the bottom of the container.

approx. 10 m<sup>2</sup>

approx. 14 m<sup>2</sup>

This product possesses documents of reference:

- BBA Certificate No. 14/5142
- Irish Agrement Board Certificate No. 09/0340
- European Technical Assessment (ETA) in systems:

Ceresit Ceretherm System	Popular	Classic	Premium
ETA	08/0309	09/0014	08/0308
Certificate	1488-CPR-0382/Z	1488-CPR-0439/Z	1488-CPR-0363/Z
DoP	00426	00420	00428

#### - National Technical Assessment in systems:

Ceresit Ceretherm System	Reno
NTA	ITB-KOT-2018/0472 wydanie 1
Certificate	020-UWB-0895/Z
NDoC	00444

Apart from the information given here it is also important to observe the relevant guidelines and regulations of various organisations and trade associations as well as the respective standards of the German Standards Institute (DIN). The aforementioned characteristics are based on practical experience and applied testing. Warranted properties and possible uses which go beyond those warranted in this information sheet require our written confirmation. All data given was obtained at an ambient and material temperature of +23 °C and 50 % relative air humidity unless specified otherwise. Please note that under other climatic conditions hardening can be accelerated or delayed.

The information contained herein, particularly recommendations for the handling and use of our products, is based on our professional experience. As materials and conditions may vary with each intended application, and thus are beyond our sphere of influence, we strongly recommend that in each case sufficient tests are conducted to check the suitability of our products for their intended use. Legal liability cannot be accepted on the basis of the contents of this data sheet or any verbal advice given, unless there is a case of wilful misconduct or gross negligence on our part. This technical data sheet supersedes all previous editions relevant to this product.