

# CT 85

## FLEX

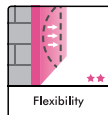
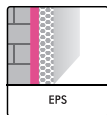
## Adhesive and Reinforcing mortar for EPS



**For fixing Expanded Polystyrene boards as well as for applying a thin reinforced layer for thermal insulation of buildings by means of ETICS**

### CHARACTERISTICS

- ▶ highly resistant to mechanical impacts
- ▶ flexible
- ▶ strengthened with unique combination of fibres
- ▶ resistant to hairlines and cracks
- ▶ high adhesion to mineral substrates and EPS-boards
- ▶ resistant to weather conditions
- ▶ vapour permeable
- ▶ low water absorption
- ▶ possibility of machine application



### SCOPE OF USE

Ceresit CT 85 mortar is an element of ETICS (External Thermal Insulation Composite Systems) within Ceresit Ceretherm. CT 85 mortar is used for fixing EPS and XPS-boards as well as applying the armoured protection layer to insulate the newly erected objects and also the buildings to be thermo-renovated. Ceresit CT 85 thanks to the use of specially selected combination of fibres (Fibre Force Technology), strengthens the resistance of insulation system to damage, cracks and scratches.

### SUBSTRATE PREPARATION

#### 1. Fixing EPS-boards

CT 85 mortar shows good adhesion to carrying, compact and dry substrates, such as surfaces of walls, plasters, mosaics and concretes free from grease, bitumen, dust and other substances decreasing adhesion. The adhesion to the existing plasters and paint coatings should be checked before starting the application. "Hollow" plasters should be removed. Any losses and uneven surfaces of the substrate below 20 mm should be filled with the filler Ceresit CT 29 or covered with cement plaster. 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 of washing devices operating under pressure. In case of mycological contamination with fungi, moss and algae, the surface of the facade should be cleaned and, then saturated with a fungicide solution of



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Ceresit CT 99 in compliance with technical instruction. The old, not plastered walls, strong plasters and paint coats should be dusted, then washed with water jet with addition of an agent for removing impurities Ceresit CT 98 and left until they go completely dry. Substrates with high water absorption, e.g. walls made of aerated concrete blocks should be primed with Ceresit CT 17 and left for drying for at least 2 hours. Adhesion of CT 85 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 4 ÷ 7 days. The load carrying ability of the substrate is sufficient only when the EPS-boards are subject to rent. If EPS-boards tear off with the mortar layer, mechanical anchors should be additionally used.

#### 2. Armoured layer application.

When CT 85 is set (after approx. 3 days), the boards should be ground with abrasive paper and additionally fixed with mechanical anchors. If EPS-boards have not been covered with the armoured layer for 2 weeks, then their quality should be evaluated. The yellowed boards with dusting surface should be ground with coarse abrasive paper.

## APPLICATION

CT 85 should be poured into the measured amount of cool clean water and stirred with the drill by means of a mixer until the homogenous mass is obtained without lumps, wait approx. 5 minutes and mix again.

### 1. Fixing EPS-boards.

The ready mortar should be applied with a trowel along the board edges forming a strip of 3÷4 cm wide and a few spots with the diameter of approx. 8 cm. Then immediately, the board should be pressed to the wall with a few slight blows of a long float. The properly applied mortar when pressed should cover minimum 40 % of its surface. In case of even, smooth substrates the mortar should be applied by means of a toothed long float (teeth 10–12 mm). The boards should be fixed tightly one at the other in one surface with the preservation of “brick like manner” of vertical connection.

### 2. Armoured layer application.

The ready mortar should be spread along the surface of the EPS boards by means of notched trowel 10 or 12 mm. The glass fibre mesh should be applied on the fresh mortar (with 10-cm overlaps), and then smoothed evenly the surface so that the glass fibre mesh should not be visible. Possibility of mechanical application. Recommended type of machine e.g. Wagner PC 15, SPG Baumaschinen PG 20 nozzle size Ø 6. Fresh stains should be cleaned with water while hardened elements should be mechanically removed.

## PLEASE NOTE

The armoured layer should not be applied on highly sunny surfaces and the applied layer should be protected against rain. It is recommended to use scaffolding protection. Application should be performed in dry conditions with the substrate and ambient temperature from +5 °C to +25 °C. Resistance to impact meets the requirements included in ETA for Ceresit Ceretherm system and depends on quality of application of armoured layer. CT 85 contains

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.

cement and causes alkali reaction when mixed with water. Therefore skin and eyes should be protected. In case of contact with eyes, they should be rinsed with water and the general practitioner should be consulted. The performance characteristics are given in the text of corresponding to the product Declaration of Performance. The content of chromium VI – below 2 ppm till the expiry date.

## 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. The requirements that refer to thermal insulation are described in the Instruction ITB nr 418/2007 and 447/2009.

## PACKAGING

Bags of 25 kg.

## TECHNICAL DATA

Base:	cement mixture with mineral fillers and modifiers
Bulk density:	approx. 1.3 kg/dm <sup>3</sup>
Mixing ratio:	6.5 ÷ 7.0 l of water per 25 kg
Temperature of application:	from +5 °C to +25 °C
Pot life:	approx. 2 hours
Compression resistance:	≥ 18 N/mm <sup>2</sup> (CS IV) acc. EN 1015-11:2001+A1:2007
Flexural resistance:	≥ 5.5 N/mm <sup>2</sup> acc. EN 1015-11:2001+A1:2007
Adhesion acc. ETAG 004:	
to concrete	> 0.25 MPa
to EPS-boards	> 0.08 MPa
Water absorption after 24 h:	< 0.5 kg/m <sup>2</sup> acc. ETAG 004
Adhesion between layers after ageing:	≥ 0.08 MPa acc. ETAG 004
Fire classification acc. EN 13501-1:	
B – s1, d0 in:	Ceresit Ceretherm Classic, Ceresit Ceretherm Visage
B-s2, d0 in:	Ceresit Ceretherm Impactum
Assessment of natural radiation:	meets the requirements of ITB Instruction No. 234/2003, p.6.2.1, according to Regulation of the Council of Ministers on 2 January 2007. & 3, p.1
Assumed consumption:	
Fixing of EPS-boards:	approx. 5.0 kg/m <sup>2</sup>
Armoured layer:	approx. 4.0 kg/m <sup>2</sup>
Putty layer:	approx. 1.0 kg/m <sup>2</sup>
Shelf life/ Storage:	Up to 12 months since the production date when stored on pallets in dry cool conditions and in original undamaged packages.

This product possesses documents of reference:

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

Ceresit Ceretherm System	Classic	Visage	Impactum
ETA	09/0014	11/0395	13/0086
Certificate	1488-CPR-0439/Z	1488-CPR-0370/Z	1488-CPR-0407/Z
DoP	00420	00431	00436

- National Technical Assessment in systems:

Ceresit Ceretherm System	Ceramic	Reno
NTA	ITB-KOT-2018/0448 wydanie 1	ITB-KOT-2018/0472 wydanie 1
Certificate	020-UWB-0833/Z	020-UWB-0895/Z
NDoC	00439	00444



**Henkel CEE**  
Erdbergstrasse 29  
1030 Vienna  
www.ceresit.com

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