



# WHITE FLEXIBLE Adhesive and Reinforcing mortar for EPS/MW

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

### **CHARACTERISTICS**

- 2 in 1 does not require priming before plaster's application
- strengthened with unique combination of fibres

**CT 87** 

- considerably lower consumption per m<sup>2</sup>
- resistant to hairlines and cracks
- ▶ high adhesion to mineral substrates, EPS and mineral wool
- flexible and highly resistant to mechanical impacts
- highly vapour permeable
- Iow water absorption
- resistant to weather conditions
- possibility of machine application



## SCOPE OF USE

Ceresit CT 87 mortar is an element of Ceresit Ceretherm ETICS systems. CT 87 mortar is used for fixing of EPS- or mineral wool facade boards and for applying the reinforcing protection layer to insulate the newly constructed objects as well as older buildings to be thermo-renovated. Ceresit CT 87 thanks to the use of specially selected combination of fibres (Fibre Force Technology), strengthens the resistance of insulation system to damage, cracks and scratches. The application of CT 87 (colour, surface and organic modifiers) allows for omitting the substrate preparation process by priming with the priming paints before the application of any Ceresit plasters. The content of special light fillers gives more flexible, light and homogenous consistency, it is easier to be stirred, applied and spread, thus increasing the efficiency of the mortar.

# SUBSTRATE PREPARATION

#### 1. Fixing thermal insulation boards

CT 87 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. In case of mycological contamination with fungi, moss and algae, the surface of the facade should be cleaned with and, then saturated with Ceresit CT 99 fungicide solution in com-



pliance with the technical data sheet. The old, not plastered walls, strong plasters and paint coats should be de-dusted, then washed with water jet with an 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 87 to the prepared substrate is checked by gluing  $10 \times 10$  cm blocks of EPS-boards in a few places and pulling off manually after  $4\div7$  days. The load carrying ability of the substrate is sufficient only when the EPS-boards are subject to rent.

#### 2. Armoured layer application.

When CT 87 is set (after approx. 2 days), any unevenness of the boards should be ground with abrasive paper, then any loose particles of insulation materials should be carefully brushed whereas the boards should be additionally reinforced with mechanical anchors.

# APPLICATION

CT 87 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 thermal insulation boards.

The ready mortar should be applied with a trowel along the board edge forming a strip of  $3 \div 4$  cm wide and a few spots with the diameter of approx. 8 cm. Only in case of mineral wool boards, it is necessary to apply so called "priming" with CT 87 on the whole surface of the board with the use of a metal long float before the adhesive mortar is applied. 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 boards by means of a toothed long float with the size of the teeth 10-12 mm. Only in case of mineral wool boards, it is necessary to apply so called "priming" with CT 87. The glass fibre mesh should be applied on the fresh mortar, it should be immersed by means of a metal long float and filled smoothly. The properly immersed glass fibre should not be visible, it should be completely immersed in the adhesive mortar. It is necessary to use the approximately 10-cm overlaps of the neighbouring mesh belts. Possibility of mechanical application. Recommended type of machine e.g. Wagner PC 15, SPG Baumaschinen PG 20.

### PLEASE NOTE

The armoured layer should not be applied on highly insolated 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. CT 87 contains 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

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.



Henkel CEE Erdbergstrasse 29 1030 Vienna www.ceresit.com 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. In case of mineral wool it is recommended to use the boards which meet the requirements of external wall insulation system (ETICS) acc. to EN 13162. 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,	
	hydrophobic agents and modifiers	
Bulk density:	approx. 1.3 kg/dm³	
Mixing ratio:	7.25÷7.75   of water per 25 kg	
Temperature of application:	from +5 °C to +25 °C	
Pot life:	approx. 2 hours	
Adhesion:		
to concrete	> 0.25 MPa acc. ETAG 004	
to EPS-boards	> 0.08 MPa acc. ETAG 004	
to mineral wool	> 0.08 MPa acc. ETAG 004	
Water absorption after 24 h:	< 0.5 kg/m² acc. ETAG 004	
Adhesion between layers		
after ageing:	$\geq$ 0.08 MPa acc. ETAG 004	
Compressive strenght:	$\geq$ 9.5 N/mm² (CS IV) acc.	
	EN 1015-11:2001+A1:2007	
Flexular resistance:	$\geq$ 3.0 N/mm <sup>2</sup> acc.	
	EN 1015-11:2001+A1:2007	
Fire classification acc. EN 13501	-1:	
B – s1, d0 in:		
Ceresit Ceretherm Premium		
B-s2, d0 in:		
Ceresit Ceretherm Wool Premiu	ım	
Assessment of natural radiation:	meets the requirements of ITB Instruc-	
tion No. 234/2003, p.6.2.1, acc	ording to Regulation of the Council of	
Ministers on 2 January 2007. &	3, p.1	
Assumed consumption:		
Fixing of EPS-boards:	approx. 4.0 kg/m²	
Armoured layer (on EPS-boards)	: approx. 3.0 kg/m²	
Fixing of mineral wool boards:	approx. 4.5 kg/m²	
Armoured layer (on mineral wool)	: approx. 4.0 kg/m²	
Putty layer:	approx. 1.0 kg/m²	
Shelf life/ Storage: Up to 12 mor	nths since the production date when	
stored on pallets in dry cool cond	ditions and in original undamaged	
packages.		

This product possesses:

- BBA Certificate No. 14/5142

- Irish Agrement Board Certificate No. 09/0340

European Technical Assessment (ETA) in systems

Ceresit Ceretherm System	Premium	Wool Premium
ETA	08/0308	09/0037
Certificate	1488-CPR-0363/Z	1488-CPR-0375/Z
DoP	00428	00430

- National Technical Assessment in systems:

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

# **Quality for Professionals**