# CT 190





## **MW FLEX**

## Adhesive and Reinforcing mortar for mineral wool

For fixing mineral wool 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 mineral wool
- resistant to weather conditions
- highly vapour permeable
- low water absorption
- possible mechanical application











### **SCOPE OF USE**

Ceresit CT 190 mortar is an element of Ceresit Ceretherm ETICS (External Thermal Insulation Composite Systems) with the use of mineral wool and lamela boards. CT 190 can also be used with lamela boards for insulating garage ceilings. CT 190 mortar is used for fixing of mineral wool facade boards and for applying the reinforcing protection layer to insulate the newly constructed objects as well as older buildings to be thermorenovated. Ceresit CT 190 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 mineral wool boards

CT 190 mortar shows good adhesion to carrying, compact, dry and clean substrates free from substances decreasing adhesion (such as grease, bitumen, dust) of surfaces of walls, plasters and concretes. The adhesion to the existing plasters and paint coatinas should be checked before starting the application. "Hollow" plasters should be removed. Any losses and uneven surfaces 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. washed with water jet. In case of mycological contamination with moss and algae, the surface should be cleaned and, then saturated with a fungicide solution of Ceresit CT 99. The old, not plastered walls, strong plasters and vapour permeable paint



coats should be 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 or silicate blocks should be primed with Ceresit CT 17 and left for drying for at least 2 hours.

#### 2. Armoured layer application.

The surface of the boards which are additionally fixed with mechanical anchors should be thoroughly cleaned by means of a brush with loose wool fibres.

#### **APPLICATION**

CT 190 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 min and mix again.

#### 1. Fixing mineral wool boards.

Before of application of adhesive mortar it is necessary to apply CT 190 mortar.

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

CERESIT C CT190 TDS 1 0819

float. The properly applied mortar when pressed should cover minimum 40% of its surface. In case of usage of mineral wool the mortar should be applied by mean of notched trowel (notched: 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. When CT 190 is set (after approx. 3 days), the boards should be ground with abrasive paper and additionally fixed with mechanical anchors with steel cores.

#### 2. Armoured layer application.

Before application of the final layer of adhesive to make so called "priming" of the boards with CT 190 by applying of thin layer of thickness approx. 1mm on the surface of the wool. After drying of the layer, ig. after approx. 24 h start to perform the armoured layer with mesh. Ready mortar should be spread along the surface of the boards by means of a notched trowel 10 or 12 mm. The glass fibre mesh should be applied on the fresh mortar (with 10-cm overlaps) and smoothed evenly so that the glass fibre mesh should not be visible.

Possibility of mechanical application. Recommended type of machine e.g. Wagner PC 15 or SPG Baumaschinen PG 20, nozzle size  $\varnothing$  10.

Fresh stains should be cleaned with water while hardened elements should be mechanically removed only.

#### **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 190 powder mortar shows acrid properties and the cement content 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.

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 mineral wool boards which meet the requirements of external wall insulation systems (ETICS) according to EN 13162. Other details that refer to thermal insulation are described in the Instruction ITB No. 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/dm³
Mixing ratio:	6.5÷7.0 l of water per 25 kg
Temperature of application:	from $+5$ °C to $+25$ °C
Pot life:	approx. 1.5 hours
Compression resistance:	$\geq$ 20 N/mm <sup>2</sup> (CS IV) acc.
	EN 1015-11:2001+A1:2007
Water absorption after 24 h:	< 0.5 kg/m² acc ETAG 004
Adhesion acc. ETAG 004:	
to concrete	> 0.25 MPa
to mineral wool	> 0.08 MPa
E' I : EN 10501	1

Fire classification acc. EN 13501-1:

A1 in:

Ceresit Ceretherm Wool Garage

A2-s1, d0 in:

Garage:

Ceresit Ceretherm Wool Classic, Ceresit Ceretherm Wool Premium

The sound absorption coefficient in the system Ceresit Ceretherm Wool

 $\alpha$  w = 0.85 (L) Class B absorption

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 boards: approx. 5.0 kg/m²
Priming layer: approx. 1.0 kg/m²
Armoured layer: approx. 4.0 kg/m²
Putty layer: approx. 1.0 kg/m²

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

Ceresit Ceretherm System	Wool Classic	Wool Premium
ETA	09/0026	09/0037
Certificate	1488-CPR-0440/Z	1488-CPR-0375/Z
DoP	00424	00430

- National Technical Assessment in systems:

Ceresit Ceretherm System	Wool Garage
TA	15-7956/2016+ Annexes
Certificate	ITB-0320/Z
NDoC	00448