

# CX 15

## STRONG

### Grouting mortar

Mortar for high-strength grouting, anchoring and assembly



#### CHARACTERISTICS

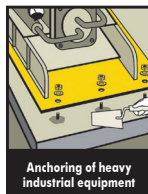
- ▶ Very high early and final strength
- ▶ Fast hardening
- ▶ High flowability
- ▶ Resistant to frost and de-icing salt
- ▶ Water impenetrable
- ▶ Free of chloride and aluminous cement, does not cause corrosion of metal elements
- ▶ Pumpable
- ▶ Non-flammable



Fixing of sewage wells and drainage grids



Grouting under heavy equipment



Anchoring of heavy industrial equipment



Fixing balcony railings



Fixing outdoor lampstands and street piles



Assembly of children playground facilities



Assembly of fence elements

#### SCOPE OF USE

**Ceresit CX 15 STRONG** mortar is intended for grouting steel inserts and anchors in concrete, grouting machine basis, grouting posts, beams support and grouting joints between prefabricated members and in-situ concrete, lintels and wells outlets, for filling openings and recesses in concrete and cavities in floor. Clearance between the edge of the anchoring element and the edge of mounting hole should be 20-50 mm. For fast anchoring of small metal parts use **Ceresit CX 5 EXPRESS** rapid assembly mortar.

#### SUBSTRATE PREPARATION

**Ceresit CX 15 STRONG** adheres to both steel and solid, load-bearing, clean and moist concrete, free of substances that may impair adhesion such as: fats, bituminous, dust. Dirt, anti-adhesive substances and paint coatings must be completely removed. The concrete substrate must be opened-pored, rough and have a good keying structure. Thoroughly pre-wet the concrete, but free of puddles. Check the clearance of mounting element is not less than 20 mm between the edge of mounting hole and anchor.



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#### APPLICATION

Add the material into a measured quantity of 2 l of clean water and premix with a compulsory-type mixer or electric drill with stirrer attachment until homogeneous, completely free of lumps. Then add about 0.9 l of water until the appreciate consistency is reached and mix for a further 5 minutes. Apply mortar within 60 minutes. Observe a minimum clearance of 20 mm at every point of the anchoring or of the cavity to be grouted to ensure cavity-free compaction. Perform grouting in continuous and uniform manner.

#### PLEASE NOTE:

At clearances 50-100 mm, **Ceresit CX 15 STRONG** should be mix with approx. 6.25 kg (25% by weight) of the dolomite aggregate fraction 4/8 mm or basalt fraction 4/8 mm or 8/16 mm, water added to the required consistency. The addition of gravel does not affect setting time, but slightly reduces the strength of the anchorage. Therefore appropriate tests should be carried out earlier on the construction site or the Ceresit Technical Department should be consulted. The material can be applied mechanically using a pump Pneu-Mix PG 50 or equivalent.

Use Ceresit CX 15 STRONG only at temperatures from 0°C up to +25°C. If it is necessary to carry out work in others temperatures, please contact the technical department.

Protect fresh mortar against too rapid drying and keep damp for at least 48 hours.

Ceresit CX15 STRONG contains cement and reacts with water, producing an alkaline solution. Therefore protect eyes and skin. If contact occurs, rinse thoroughly with water. In case of contact with the eyes seek medical advice immediately.

## STORAGE

Up to 12 months from manufacturing date provided if it is kept in cool and dry place in the original undamaged package.

## PACKAGING

25 kg paper bag with PE inlay

## DISPOSAL

Recycle only empty packaging for recycling. Removal of associated product residues is possible with other industrial waste. Dispose of unrelated material as hazardous waste. Waste code: 17 01 06. Hazard notes/Safety advices/Dangerous goods classification/waste disposal advices: See Material Safety Data Sheet.


## TECHNICAL DATA

Base:	cement combination with mineral fillers and modifiers
Bulk density:	approx. 1,5 kg/dm <sup>3</sup>
Consumption:	approx. 1,8 kg/ dm <sup>3</sup> cavity volume
Application time:	approx. 60 minutes
Ambient and substrate temperature :	+0°C to 25°C
Mixing time:	5-6 minutes
Mixing ratio:	2,9 l of water /25 kg
Compressive strength:	after 1 day ≥ 35 MPa 28 days ≥ 70 MPa according to : PN-EN 12190:2000
Flexural strength:	after 1 day ≥ 4,5 MPa 28 days ≥ 7,0 MPa according to: PN-EN 196-1:2006
Capillary absorption of mortar:	≤ 0,5 kg*m <sup>-2</sup> *h <sup>-0,5</sup> according to: PN-EN 13057:2004
Adhesion strength to concrete:	≥ 2,0 MPa according to: PN-EN 1542:2000
Pulling out ribbed reinforcing bars Ø 16mm covered with concrete:	in dry, dedusted conditions ≥ 14 MPa in wet conditions ≥ 12 MPa according to: PN-EN 1881:2007
Displacement of ribbed reinforcing bars at pull out strength of 75 kN:	in dry conditions, dedusted concrete: ≤ 0,6 mm in wet conditions: ≤ 0,6 mm according PN-EN 1881:2007
Elastic modulus with compression:	≥ 20 GPa according to PN-EN 13412:2008

Chloride ions content:	≤ 0,05% according to: PN-EN 1015-17:2002
Thermal compatibility:	≥ 2,0 MPa according to: PN-EN 13687-1:2008
Carbonation resistance:	Pass according to: PN-EN 13295: 2005
Reaction to fire:	class A1 according to: PN-EN 13501-1:2019-02
Packaging:	25 kg paper bag with PE inlay

Product complies with:

- EN 1504-3 Products and systems for the protection and repair of concrete structures - Part 3: Structural and non-structural repair, Declaration of Performance based on the company's compliance certificate  
production control issued by a notified factory inspection certification body production, CE marked
- EN 1504-6 Products and systems for the protection and repair of concrete structures – Part 6: Anchoring of reinforcing steel bar, Declaration of Performance based on the company's compliance certificate  
production control issued by a notified factory inspection certification body production, CE marked

	
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Ceresit CX 15	
01540	
EN 1504-3:2005	
1488	
Product for the protection and repair of concrete structures. Structural and non-structural repair.	
Class	R4
Compressive strength	≥ 70 MPa
Concentration of chloride ions	≤ 0,05%
Adhesion	≥ 2,0 MPa
Thermal compatibility part 1	≥ 2,0 MPa
Modulus of elasticity	≥ 20 GPa
Capillary absorption:	≤ 0,5 kg*m <sup>-2</sup> *h <sup>-0,5</sup>
Reaction to fire	A1
EN 1504-6:2006	
Anchoring of reinforcing steel bars. Uses in buildings and engineering works.	
Pull-off resistance	≤ 0,6 mm at load of 75 kN

Apart from the information given here it is also important to observe the relevant guidelines, regulations and common standards of various organizations and trade associations. The afore mentioned characteristics are based on practical experience and applied testing. Confirmed properties and possible uses which go beyond those listed 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 and that the product itself is subject to local conditions such as amount of water and hardening. A product from another production site may differ.

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 willful misconduct or gross negligence on our part or unless there is a case of personal injury or death or a case of liability under the Product Liability Act. This technical data sheet supersedes all previous editions relevant to this product. Please be aware that this Technical Data Sheet only relates to a product manufactured in the specific relevant production site.

