

CUGLATON® TT STAALVEZELMORTEL XTREME


- CUGLATON TT STAALVEZELMORTEL XTREME is a ready-made cement mortar, reinforces with high-quality steel fibres.
- CUGLATON TT STAALVEZELMORTEL XTREME has been specially developed for expansion joints where a quick strength development is required, also with low temperatures.
- **CUGLATON TT STAALVEZELMORTEL XTREME has a guaranteed compressive strength development of 20 N/mm² at 2 hours, 30 N/mm² at 4 hours at 20°C and also at 10°C.**



Thanks to the use of high-quality steel fibres CUGLATON TT STAALVEZELMORTEL XTREME gives an excellent tensile strength, what makes the mortar particularly suitable for expansion joints and repairing floors. Due its unique composition the mortar meets the highest toughness class 3 in accordance with BRL 5060. CUGLATON TT STAALVEZELMORTEL XTREME is a semi plastic mortar.

CUGLATON TT STAALVEZELMORTEL XTREME is CE certified in according to NEN-EN 1504-3 and can be used for the following repair methods:

- 3.1 Concrete restoration by applying mortar by hand
- 4.4 Structural strengthening by adding mortar or concrete
- 7.1 Increasing cover to reinforcement with additional cementitious mortar or concrete
- 7.2 Replacing contaminated or carbonated concrete

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CUGLA BV Rudonk 6a 4824 AJ BREDA 18 0956-CPR-0707	
NEN-EN 1504-3	
DoP: EM0505-01-09-2018	
Concrete repair product for structural repair (based on cement)	
Compressive strength	Class R4
Chloride ion content	≤ 0,05 %
Adhesive Bond	≥ 2,0 MPa
Carbonation resistance	Passes
Elastic modulus	≥ 20 GPa
Thermal compatibility	≥ 2,0 MPa
Capillary absorption	≤ 0,5 kg/(m ² *h ^{0,5})
Dangerous substances	comply with 5.4
Reaction to fire	Class A1

Directions for use

Pre-treatment

The surface onto which CUGLATON TT STAALVEZELMORTELT XTREME has to be applied needs to be clean.

The cement skin coating should be removed and no free water may be present.

- Pre-treatment with water.
The surface must only be moistened with water (Please note: No free water!)
- or
- Pre-treatment CUGLACRETE HECHTPRIMER CEMENTGEBONDEN or CUGLACRETE HECHTPRIMER EPOXY SEALER.
For an optimum bond we advise the use of CUGLACRETE HECHTPRIMER CEMENTGEBONDEN, a cement polymer modified system, or CUGLACRETE HECHTPRIMER EPOXY SEALER, an epoxy-based system.

Mixing

Mechanically mix CUGLATON TT STAALVEZELMORTELT XTREME until it becomes a homogeneous mixture. Mixing time depends on the type of mixer, at least 3 minutes.

Water dosage

Water bandwidth: 2,1 – 2,4 ltr/20 kg mortar. Dose, within the indicated water bandwidth, with plenty of water so as to produce a mortar with a flow of approx. 170mm.

Follow-up treatment

The finished surface must be carefully protected against dehydration by covering with plastic foil.

Storage and shelf life

If stored in a dry place it has a shelf life of up to 12 months after production date, as stated on the packaging.

Technical data at 20°C/65% RH

Property	Standard	Value	
Maximum grain	NEN-EN 12192-1	4,0	mm
Water bandwidth		2,1 – 2,4	l/20 kg
Exposure class	NEN-EN 206-1	X0 t/m XA3	
Layer thickness		30 - 250	mm.
Density	NEN – EN 12190	2200	kg/m ³
Workability	NEN – EN 13395-1	170	mm
Initial setting time		10	min
Air content	NEN – EN 12350-7	5	%
Adhesive bond	NEN-EN 1542	28 days	3,0
Freeze-thaw (50 cycli with salt)	NEN-EN 13687-1		4,1
Carbonation resistance	NEN-EN 13295		1,0
Elastic modulus	NEN-EN 13412		32150
Shrinkage	NEN 3534	7 days	0,30
		28 days	0,90
Capillary absorption	NEN-EN 13057		0,10
Tenacity class according BRL 5060			Class 3
Colour CUR 100 greyscale			Anthracite

Strength development

Compressive strength	N/mm ²	2 hours	4 hours	24 hours	7 days	28 days
20°C		20	30	40	60	80
10°C		20	30	40	60	80
5° C		15	30	40	60	80

Cuglaton[®] does not contain any chlorine, nor any other corrosive substances. For application at temperatures < 0 °C please contact Cugla B.V.

Health aspects

Cugla advises:

- To wear appropriate personal protective equipment (PPE).
- To avoid contact with eyes and skin.
- In case of contact with the eyes, to rinse immediately with plenty of water and seek medical advice.
- In case of swallowing the product immediately contact a doctor and show the package or the safety data sheet.

Safety data sheets, SDS, are available via our website www.cugla.com.

EG Declaration of conformity

CUGLA BV declares that this product, as mentioned in this technical datasheet, meets the requirements according to EN 1504-3. The factory production control is reviewed by KIWA Nederland BV. Certificate of conformity of the factory production control, no. 0956-CPR-0707 is issued by KIWA Nederland BV on 01-07-2013.

Breda, July 18, 2023

H.J. Dikmans-Duenk
Technical Director

Changes to this document will not automatically be issued. Any previous product information hereby becomes null and void. The above data is provided to the best of our knowledge. The tests have been carried out under laboratory conditions. We will not accept any liability for the results achieved on the work, now that we have no influence on the process nor the specific conditions of the work.

Our general sales, delivery and payment conditions apply to all our transactions and are available at www.cugla.com.
