

# CM 120

## EcoFlex

**CO<sub>2</sub>-reduced, hydraulic-setting, dust-reduced and flexible thin-bed mortar with hybrid technology for installing ceramic tiles and slabs as well as natural stone coverings that are not susceptible to staining – both indoors and outdoors**



### CHARACTERISTICS

- ▶ CO<sub>2</sub>-reduced
- ▶ Low-emission product
- ▶ Long open time
- ▶ Early walk-on stability – even at low temperatures
- ▶ Virtually non-shrinking
- ▶ Easy workability
- ▶ High sag resistance
- ▶ White
- ▶ For walls and floors
- ▶ For indoor and outdoor use

**Test Certificate No. NR. 220009387-12, MPA**  
**GEV Licence No. 4038**

### SCOPE OF USE

CM 120 can be used for the installation of:

- ceramic tiles and slabs
- earthenware, stoneware and porcelain stoneware\*
- Cotto tiles
- natural stone coverings that are not susceptible to staining
- cast concrete slabs
- building boards and insulation boards.

CM 120 is suitable for use on heated screeds, cement screeds, dry screeds and mastic asphalt (indoors). Also for use on existing wall and floor tiles. Especially well suited for anhydrite and calcium sulphate flow screeds, gypsum plasters, plasterboards as well as fibrous plasterboards. CM 120 can be used to ensure a flexible adhesive bed and prevent restraint stresses on difficult substrates, e.g. old artificial stone and tile coverings, paint coats.

Tested in composite waterproofing systems together with the Ceresit waterproofing products CL 50, CL 51, CR 72 and CL 69.

\* When installing porcelain stoneware outdoors, add CC 83 Elastic Emulsion to the adhesive to improve the flexibility and crack-bridging capacity.



### SUBSTRATE PREPARATION

CM 120 adheres to all sound, load-bearing, clean and dry substrates that are free of substances which may impair adhesion. If necessary, small surface areas can be levelled and repaired with CM 120 the previous day, but only up to a layer thickness of approx. 20 mm.

#### Indoor use:

In the case of gypsum plasters (EN 13279-2, B1/B7), the residual moisture must be < 1.0 CM %. Use Ceresit CT 17 to prime calcium sulphate screeds / heated screeds (gypsum/anhydrite screeds, mechanically roughened and freed from dust, residual moisture 0.5/0.3 % by weight). Also cellular concrete, dry screeds and other absorbent substrates must be primed with CT 17. Use CT 19 SuperGrip to prime non-absorbent substrates, tiles, natural/artificial stone floors, firmly adhering coatings, and non-sanded mastic asphalt screeds.

#### Outdoor and indoor use:

Plasters of mortar groups CSII - CS IV (at least 14 days old), cement screeds (at least 28 days old, residual moisture < 2 % by weight and concrete (at least 28 days old) can be directly covered with tiles. Concrete must be mechanically pretreated and cleaned before the installation of tiles.

## APPLICATION

Mix CM 120 with clean, clear water and stir until the mixture is completely free of lumps. Leave the mortar to mature for approx. 5 minutes and then stir again. If necessary, add small amounts of water until the desired consistency is reached.

Apply CM 120 according to the generally recognized rules of the thin-bed resp. medium-bed method or use the buttering-floating method instead. Allow for a skin formation time of approx. 30 minutes. After the pot life has expired and the mortar begun to set, do not attempt to retemper the mortar by adding water and stirring again. For the installation of thin natural stones that tend to staining (in most cases crystalline materials), we recommend using e.g. CM 15.

## PLEASE NOTE

Use CM 120 only in dry conditions and at temperatures of +5 °C to +30 °C. For the application, make sure to observe in particular DIN 18332, DIN 18157, DIN 18515 and the information sheets issued by the ZDB (Central Association of the German Building Trade).

On waterproofed surfaces and at low temperatures, hardening will be delayed so that it takes longer until the surface is walkable and groutable. Fresh excess mortar can be removed with water; hardened material can only be removed mechanically.

CM 120 is a low-chromate product. It contains cement which produces a strong alkaline reaction with water; therefore protect eyes and skin. If contact occurs, rinse thoroughly with plenty of water. In case of contact with the eyes, seek medical advice additionally.

When installing tiles in areas exposed to chemicals, use a product from the Ceresit UltraPox epoxy range.

<b>CE</b>	
<b>0432</b>	
Henkel AG & Co. KGaA Henkelstr. 67, D-40589 Düsseldorf	
<b>12</b>	
<b>00459</b>	
<b>EN 12004: 2007 + A1: 2012 C2TE</b>	
<b>Cementitious adhesive with improved characteristics, slip-resistance and extended open time</b>	
Reaction to fire	<b>E</b>
Release of dangerous substances	see MSDS
Bond strength, as:	
Initial tensile adhesion strength	≥ 1.0 N/mm <sup>2</sup>
Tensile adhesion strength after water immersion	≥ 1.0 N/mm <sup>2</sup>
Tensile adhesion strength after heat ageing	≥ 1.0 N/mm <sup>2</sup>
Tensile adhesion strength after freeze-thaw cycles	≥ 1.0 N/mm <sup>2</sup>
Durability, for:	
Open time: tensile adhesion strength after not less than 30 min	≥ 0.5 N/mm <sup>2</sup>
Slip	< 0.5 mm

## TECHNICAL DATA

Chemical basis:	CO <sub>2</sub> -reduced, synthetic-resin-modified mineral thin-bed mortar with chromate-reduced fillers <b>Classification acc. to DIN/EN 12004: C2 TE</b>
Bulk density:	Approx. 1.30 kg/dm <sup>3</sup>
Fresh mortar density:	Approx. 1.58 kg/L
Mixing ratio:	Approx. 0.25/0.30 L of water for 1 kg of CM 120; approx. 5.0 L for a stiff, non-sag consistency, up to 6.0 L of water for floor application for 20 kg of CM 120
Working time:	Approx. 60 minutes
Working temperature:	+5 °C to +30 °C
Open time:	Approx. 30 minutes
Vertical slip:	≤ 0.10 mm
Walkable and groutable:	After 4 hours
Temperature resistance:	-30 °C to +70 °C
Adhesive tensile strength with all types of storage:	≥ 1.0 N/mm <sup>2</sup>
Mixing ratio when adding CC 83:	2 kg of CC 83 + 3/3.5 L of water for 20 kg

Consumption:	Notch depth acc. to DIN 18157 in mm (without water)	Amount required in kg/m <sup>2</sup>	
		CM 120	CC 83
	4	1.3	0.13
	6	1.9	0.19
	8	2.4	0.25
	10	3.0	0.30
	12	3.7	0.37
	Medium-bed	5.7	0.57

Shelf life:	Approx. 12 months if stored tightly closed in a cool and dry place. Use up opened bags as quickly as possible.
Packaging unit:	20 kg PE bag

**Should you need support or advice, please consult our advisory service for architects and craftsmen.**  
**Phone: +49 (0) 211/797 106-07/-55/-59**  
**Fax: 0211-798-1204**

The above information, in particular recommendations for the handling and use of our products, is based on our professional knowledge and experience. As materials and conditions may vary with each intended application and thus are beyond our control, we strongly recommend that in each case sufficient tests are conducted to check the suitability of our products for the intended application method and use. Legal liability cannot be accepted on the basis of the contents of this technical data sheet or any verbal advice given unless there is evidence of wilful intent or gross negligence on our part.

This technical data sheet supersedes all previous editions.

Apart from the information given in this technical data sheet, it is also important to observe the relevant guidelines and regulations of various organizations and trade associations as well as the applicable DIN standards.

All data given was obtained at an ambient and material temperature of +23°C and 50 % relative humidity unless specified otherwise. Please note that under other climatic conditions hardening can be accelerated or delayed.

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