

**NEW**

# Ceresit

# CM 77

## UltraFLEX

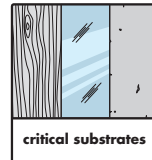
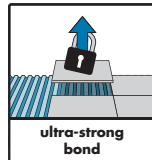
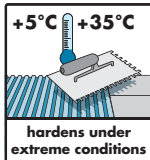
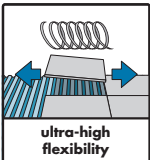


**Highly flexible and multi-functional adhesive for the installation of tiles, natural stones and other coverings – especially on difficult substrates**

### CHARACTERISTICS

- ▶ Ready for use
- ▶ Able to absorb stresses
- ▶ For areas subject to chemical attack
- ▶ For indoor and outdoor use
- ▶ Impact sound damping

**Test Certificate No.:  
220008309-10, MPA, NRW**



### TYPICAL USES

CM 77 UltraFlex is used for installing – ceramic tiles and slabs, marble, artificial stones (agglomerated stones), natural stone slabs, clinker, porcelain, glass tiles and glass mosaic etc. – building elements, prefabricated components, profiles made of wood, plastic and metal.

CM 77 is suitable for indoor and outdoor use. It ensures a reliable and firm bond, even on difficult substrates like metal, wood, glass, synthetic resin and coatings – usually without a primer.

It can be used on standard building substrates, also on freshly installed cement screeds (possible time: 3 to 5 days after installation, then again after 28 days).

Thanks to its high flexibility, it can also be used on slightly vibrating surfaces (if used in combination with Ceresit CM 74/CE 79 UltraPox epoxy grouts).

CM 77 can be used for installing tiles and slabs on heated or cooled floor constructions.

If used in combination with CL 69 UltraTight and CM 74/CE 79 UltraPox, CM 77 is also suitable for areas subject to chemical attack, e.g. car washes, commercial kitchens, breweries, animal housing, dairies and laboratories.

CM 77 can be used for impact sound damping according to DIN EN ISO 140-8:1998 in combination with ceramic coverings.



### SUBSTRATE PREPARATION

CM 77 adheres to all sound, load-bearing, clean and dry substrates free of substances which may impair adhesion. Coatings of insufficient load-bearing strength must be removed. CM 77 adheres without special pretreatment on metal, wood, concrete, plasters, cement screeds, Xylolite, fibre-cement boards, chipboards, existing tile and artificial stone floors and on heated screeds.

Calcium sulphate screeds (gypsum/anhydrite, mechanically roughened and freed from dust, residual moisture  $\leq 0.5$  weight %, heated screed  $\leq 0.3$  weight %) and mastic asphalt (roughened with sand, no industrial use) as well as PVC coverings must be primed with CL 71 UltraPox or CK 740 Epoxy Resin Primer.

Plasters of mortar groups CS II to CS IV (at least 28 days old), cement screeds (at least 28 days old, residual moisture  $\leq 2$  weight %) and concrete (at least 2 months old) can be covered directly with tiles.

Fresh cement screeds (3 to 5 days after installation) must be primed with CL 71 or CK 740. When used outdoors, the adhesive must be protected against moisture penetrating from behind, e.g. by installing the CL 69 UltraTight Waterproofing and Uncoupling Membrane.

## APPLICATION

CM 77 UltraFlex is ready for use and can therefore be applied directly from the bucket. Apply the adhesive according to the generally recognized rules of the thin-bed method or use the buttering-floating method instead.

To ensure void-free bedding of the tiles and slabs, the adhesive layer must be of sufficient thickness.

CM 77 cures by contact with moisture (air humidity).

When installing large-format slabs of > 0.2 m<sup>2</sup>, the adhesive layer should be sprayed with a thin water film to accelerate the curing process. Avoid the formation of puddles.


If work is interrupted, close the bucket. After opening the container, use the adhesive up within 3 weeks. If a skin of dried-up adhesive has formed (e.g. due to improper storage), remove it but do not stir it in.

### Cleaning

CM 77 is a silane-based adhesive that cures by reaction with moisture. Tools and tile surfaces cannot be cleaned with water. Pre-clean the tools and surfaces with dry cloths. Fresh adhesive residues can be removed with alcohol, oil or paint thinner. Hardened material can only be removed mechanically.

## PLEASE NOTE

Use CM 77 only in dry conditions and at temperatures of +5 °C to +35 °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). The optimum ambient and material temperature is 23 °C and 50 % relative humidity. At low temperatures, we recommended bringing the adhesive up to

	
<b>0432</b>	
Henkel AG & Co. KGaA Henkelstr. 67, D-40589 Düsseldorf	
<b>12</b>	
<b>00053</b>	
<b>EN 12004:2007+A1:2012 R2T</b>	
<b>Improved reaction resin adhesive with reduced slip</b>	
Reaction to fire	<b>E</b>
Release of dangerous substances	see MSDS
Bond strength, as:	
initial shear adhesion strength	≥ 2.0 N/mm <sup>2</sup>
shear adhesion strength after water immersion	≥ 2.0 N/mm <sup>2</sup>
shear adhesion strength after thermal shock	≥ 2.0 N/mm <sup>2</sup>
Tensile adhesion strength after freeze-thaw cycles	≥ 1.0 N/mm <sup>2</sup>
Durability, for:	
Open time: Tensile adhesive strength after not less than 20 min	≥ 0.5 N/mm <sup>2</sup>
Slip	≤ 0,5 mm

temperature before application. For the installation of tiles in areas other than those specified above, please request technical advice. CM 77 is solvent-free according to TRG 610.

During the curing process, methanol is released; therefore ensure adequate ventilation during and after application and drying. The risk of medium- or long-term release of appreciable concentrations of volatile organic compounds (VOCs) into the ambient air is negligible.

Eating, drinking and smoking should be avoided while working with the product. Wear protective gloves. In case of contact with the eyes, seek medical advice.

Information for allergy sufferers under +49 (0) 211 797 0. Keep out of the reach of children. Product for professional users.

## TECHNICAL DATA

Material base: Silane-based reaction resin adhesive with mineral fillers and additives

Bulk density: 1.6 kg/dm<sup>3</sup>

Colour: White

Open time: Approx. 45 minutes

Walkable and groutable: After 24 hours\*

Resistant to chemicals: After 7 days

Application temperature: +5 to + 35 °C

Temperature resistance when fully cured: -30 to + 60 °C

Vertical slip: ≤ 0.2 mm

Tensile shear strength acc. to DIN EN 12003: ≥ 2 N/mm<sup>2</sup> in all storage conditions

Impact sound measurement: -10 db

Consumption: Notch depth acc. to DIN 18167 in mm Consumption in kg/m<sup>2</sup>

3	1.5
4	1.8
6	2.8
8	3.4

Shelf life: Approx. 12 months if stored tightly closed in a dry place. Use up opened containers within 3 weeks.

Packaging unit: 8 kg bucket

\* By misting with water, grouting and walking on after three hours it's possible.

**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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