









» MEGA FORMAT FLEXIBLE«

Highly flexible adhesive mortar for large format tiles

CHARACTERISTICS

- ► For large gres tiles, (above 1 m2) and natural stone (colour-fast) for indoor and outdoor use
- Adjustable consistency and an increased retention of water
- ▶ Thick-bed application up to 20 mm
- ▶ Highest adhesion strength and flexibility (\$1 class)
- ► For critical substrates like on balconies, terraces and on heated floors,
- ▶ For use in pools and potable water tanks
- ▶ Slip resistance



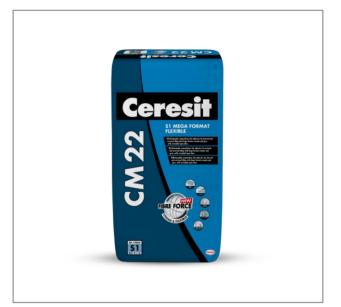






SCOPE OF USE

Ceresit CM 22 can be used for for laying large-format gres tiles also cement and natural stone tiles (colourfast) on deformable substrates. It is recommended for laying tiles on heated floors, elevations, terraces, balconies, as well as pool basins and technological water reservoirs. As well as in places with heavy traffic and high service loads. CM 22 is suitable for applications on substrates such as: existing tiles, firmly adhering paint coatings, gypsum and anhydrite substrates (only indoors). Thanks to its special formula, the consistency is variable by adding 6.8-8.8 I water, depending on the planned application. The CM 22 mortar is very slip-resistant, therefore it can be used for laying large and heavy tiles even on vertical surfaces. Ceresit CM 22 has very good working and mixing properties, high adhesion strength and spreads well under the tiles. For laying natural stone tiles that are not colour-fast, Ceresit CM 15 Marble&Mosaic mortar shall be used.



SUBSTRATE PREPARATION

Ceresit CM 22 adhesive mortar can be applied on load-bearing and dry substrates, free of any substances that reduce adherence (such as: grease, bitumens, dust):

- ▶ concrete (at least 3 months old
- cement screeds and plasters, cement and lime plasters (at least 28 days old, residual moisture below <=2 CM %
- plasterboards primed with Ceresit CT 17,
- paintwork (not chalking and with good adhesion), roughened with sandpaper, freed from dust and primed with CT 17,
- anhydrite (residual moisture below 0.5%) and gypsum (residual moisture below 1%) substrates roughened, freed from dust and primed with CT 17
- aerated concrete freed from dust and primed with CT 17,



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- OSB and chipboards (thickness >22 mm) mechanically roughened and primed with Ceresit CN 94 or CT 19,
- existing ceramic and stone tile coverings cleaned, grease - free and primed with Ceresit CN 94 or CT 19.

Any existing dirt, loose layers and paint coating with low strength shall be mechanically removed. Absorbent substrates shall be primed with Ceresit CT 17 and left to dry for at least 2 hours. The CT 19 primer is also recommended for substrates such as terrazzo, which need to be thoroughly cleaned and degreased before the application of the mortar. Surface unevenness of up to 20 mm can be levelled while laying tiles, using the CM 22 mortar. In the case of bigger

unevenness – Ceresit CN products shall be used on floors and Ceresit CT 29 filler on walls.

APPLICATION

Pour CM 22 to the measured amount of clean, water and stir using a drill with a mixer until it forms a homogeneous mixture. Leave for 5 min. and then stir again. If necessary - add a small amount of water and stir once more. Spread the mortar onto the substrate with a notched trowel with suitable toothing. When applying CM 22 outdoors, a thin layer of the mortar shall be spread on the tile's backside (floating-buttering method). Tiles must not be soaked in water! Tiles should be laid in during the open time of the adhesive mortar. Do not lay tiles butt jointed! Fresh stains can be rinsed with water, hardened stains must be removed mechanically. Grouting can start not earlier than after 24 hours. On deformable substrates Ceresit CE 40 aquastatic or CE 43 Grand'Elite grouts shall be used.

Expansion joints between tiles, joints at corners, in places where floor meets walls and around sanitary equipment shall be filled with Ceresit C\$ 25 MicroProtect silicone.

PLEASE NOTE

- ▶ Works should be carried out in dry conditions, with the air and ground temperature from +5 °C to +25 °C.
- ▶ In the case of laying natural stone prone to colour changes, sample tests must necessarily be carried out in order to check whether the mortar causes no fading of the tiles.
- ▶ CM 22 contains cement and after mixing with water produces an alkaline solution. Therefore, protect eyes and skin. In the case of eye contact, rinse eyes thoroughly with water and consult a doctor.

For grouting, Ceresit CE 40 Aquastatic grout is recommended. On substrates exposed to chemical aggression or mechanical impact (terraces, balconies, traffic areas) Ceresit CE 43 Grand'Elit grout shall be used.

- ▶ For waterproofing in indoor applications, a sealing film Ceresit CL 51 and sealing tape SL 152, CL 82 are recommended. For outdoor use, we recommend Ceresit CL 50 sealing film and Ceresit CL 152 sealing tape.
- Dirt- and water-repellent silicone impregnation agent Ceresit CT 10 shall be used for additional protection of joints and ceramic cladding against staining.

OTHER INFORMATION

Should you need support or advice, please consult our advisory service for architects and craftsmen on the

contact information you will find on the local Ceresit website.

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.



TECHNICAL DATA

Bulk density:	approx. 1.07 kg/dm ³	
Mixing ratio:	6.8-8.8 l of water for 20 kg 1.7-2.2 l of water for 5 kg	
vertical surfaces:horizontal surfaces:	6.8 for 20 kg; 1.7 for 5 kg 8.8 for 20 kg; 2.2 for 5 kg	
Pot life:	up to 3 hours	
Reaction to fire:	E class	
Pot life:	up to 2 h (90min)*	
Open time (according to the EN 12004 standard): adherence after 30 minutes ≥ 0.5 MPa		

Grouting: after 24 hours

Initial adhesive tension strength (according to the EN 12004 standard): ≥ 1.0 N/mm2

Adhesive strength after soaking in water (according to the EN 12004 standard): \geq 1.0 N/mm2

Adhesive strength after maturing in water (according to the EN 12004 standard): ≥1.0 N/mm2

Slip: \leq 0.5 mm

Deformable adhesives: transversal deformation

≥ 2.5 mm and < 5.0 mm

Temperature resistance: from -30 °C to +70 °C

Approximate consumption (for even substrates; consumption

can vary depending on the evenness on the substrate and the type of tiles):

Tile size	Notch depth	Amount of CM 22 [kg/m2]
up to 30 cm	8 mm	2.7
up to 30 cm	10 mm	3.2
up to 30 cm	12 mm	3.7
Large-format tiles	trowel for medium-bed mortars (with semi- circular notches)	6.0

Shelf life: of

until 12 months since the date

production when stored on the pallets in dry conditions and original undamaged

packaging

The product is compliant with the

EN 12004:2008 standard.

	Reaction to fire Release of dangerous substances	class F see MSDS
1487	Bond strength, as: Initial tensile adhesion strength Durability, for:	≥ 1.0 N/mm²
Henkel Polska Sp. z o.o. 02-672 Warszawa, ul. Domaniewska	Tensile adhesion strength after water immersion Tensile adhesion strength	≥ 1.0 N/mm ²
41	after heat ageing Tensile adhesion strength	≥ 1.0 N/mm ²
13	after Freeze-thaw cycles	≥ 1.0 N/mm ²
00045	Open time: tensile adhesion strer	ngth
EN 12004:2007 + A1:2012	after no less than 20 min After at	≥ 0.5 N/mm² least
Fast setting deformable cementitious	30 minu	tes
adhesive with reduced slip	Slip	≤ 0.5 mm
EN 12004: 2007 + A1: 2012 C2 TE S1	Deformable adhesive: transverse deformation ≥ 2,5	and < 5 mm



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