

# CM 16 PRO

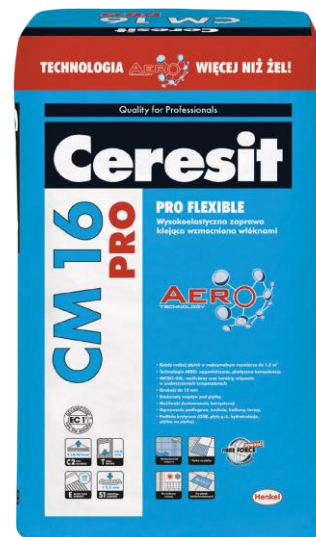


## PRO FLEXIBLE

### Flexible, fibre reinforced grout & adhesive

#### CHARACTERISTICS

- ▶ **AERO technology:** perfectly aerated, workable consistency
- ▶ **MICRO GEL technology:** increased water retention, application in higher temperatures
- ▶ **3 in 1 medium layer up to 10 mm, levelling, stable at different bed**
- ▶ **recommended for all types of tiles**
- ▶ **reinforced with Fibre Force fibres**
- ▶ **for small, medium and large tiles**
- ▶ **for balconies and terraces**
- ▶ **adjustable consistency**



#### RANGE OF APPLICATIONS

The technologically advanced CM 16 PRO grout & adhesive provides:

- **AERO technology** – the additives, carefully selected and optimised for air content and rheological properties, ensure a unique, homogeneous microstructure and perfect working conditions. This translates into an excellent, smooth consistency, very workable and aerated texture which makes application of the adhesive very easy, both on vertical and horizontal surfaces. Besides, you can adjust the thickness of the adhesive depending on the type of glued tiles and the surface on which they are being laid.

- **MICROGEL technology** – due to a special blend of biopolymers which form a gel texture, the grout & adhesive ensure a much better water retention throughout the adhesive, which translates into a longer correction time, even at high temperatures. The carefully designed mixture is ideal for permanent fixing of tiles with different absorbencies, on deformable substrates at higher temperatures. It is also highly adhesive, spreads well and easily under tiles thus providing a flexible bonding between the tiles and deformable substrate that is capable of transferring shearing stress.

- **The bed thickness can be up to 10 mm** – due to aeration, the micro-gel structure and a special combination of fibres, the entire layer of the adhesive has the same strength at every depth.

This allows you to apply, in a single working operation, a thicker layer of the adhesive than in the case of typical thin-bed products, that is up to 10 mm, thus allowing you level the surface and glue the tiles at the same time. Besides, thanks to the shrinkage-free drying and setting, glued tiles are stable both in the first setting phase and after complete drying. Fibres ensure excellent performance and technical parameters. The product exhibits high adhesive strength and flexibility which is of great importance when used on balconies, terraces or on top of underfloor heating.

Advanced technologies used in the grout & adhesive make it perfectly suitable for:

- indoor and outdoor application,
- balconies and terraces,
- vertical and horizontal surfaces,
- deformable substrates,
- levelling the substrate,
- installation of ceramic (glazed ceramic, terracotta, stoneware), cement and natural stone (stain resistant) tiles,
- use on cement and cement-lime plasters, cement screeds, cement bases, concrete, cellular concrete,
- use on primed gypsum or anhydrite substrates,
- use on indoor and outdoor water insulation,
- use on gypsum plasterboards,
- use on solid and well adherent paint coatings,
- use on anhydrite substrates,
- use on oriented strand boards and fibreboards,
- use on existing ceramic and stone tiles.

## APPLICATION EXAMPLES

- Perfect for laying tiles on balconies, terraces, façades, underfloor heating systems.
- Areas exposed to intensive traffic and service loads, such as traffic routes, schools, markets, stores, restaurants, corridors, etc.
- Perfectly suitable for use in bathrooms, kitchens, drying rooms, etc.

When fixing natural stone tiles that are susceptible to staining, use the Ceresit CM 16 White, CM 17 White and CM 49 White grouts & adhesives.

CM 16 PRO can be used in ecological and energy efficient buildings as well as in passive buildings.

## SURFACE PREPARATION

The CM 16 PRO grout & adhesive can be used on load-bearing and dry substrates which are free from any adhesion-reducing substances (such as grease, bitumen, dust):

- concrete (not earlier than 3 months after casting, moisture content below 4%),
- cement screeds and plasters, cement-lime plasters (not earlier than 28 days after casting, moisture content below 4%),
- cellular concrete, dusted, primed with CT 17,
- gypsum plasterboards – primed with Ceresit CT 17,
- solid and well adherent coatings, sanded with sandpaper, dusted and primed with CT 17,
- anhydrite (moisture content below 0.5%) and gypsum substrates (moisture content below 1%) - sanded, dusted and primed with Ceresit CT 17,
- oriented strand boards and wood particle boards ≥ 22 mm thick) – mechanically sanded and primed with Ceresit CN 94 or CT 19,
- existing ceramic and stone tiles (only indoors) – cleaned, degreased and primed with Ceresit CN 94.

Any existing dirt, old layers and paint coatings of low durability must be removed mechanically. Absorbent substrates should be primed with Ceresit CT 17 and allowed to dry for at least 2 hours. Any unevenness of the surface up to 10 mm can be levelled one day earlier with the same CM 16 PRO grout & adhesive. In the case of larger bumps or defects, use Ceresit CN products on the floors or the Ceresit CT 29 filler on the walls.

## PERFORMANCE

Pour the contents of the package into a carefully measured amount of clean, cool water and mix with a drill mixer until a homogeneous mixture is obtained. Leave for 5 minutes then mix again. If necessary, add a small amount of water and mix again. Use a notched trowel to spread the grout & adhesive over the surface. The size of the trowel notches depends on the size of the tiles. The correct size and spacing of the trowel notches prevent a typical ceramic tile, pressed onto the adhesive, from sliding down the vertical plane and allow the grout & adhesive to coat at least 65% of the underside surface of the tile. If the underside of your tiles is dirty or dusted, clean it carefully before proceeding to the gluing. In the case of both indoor and outdoor application of CM 16 PRO, use a combined method – before spreading the grout & adhesive with a trowel over the substrate, using a smooth tool apply a thin layer of the grout & adhesive onto the underside surface of the tiles.

Do not soak tiles in water! Lay them on the grout & adhesive and press while the adhesive is still sticky to your hands. Always leave gaps between tiles! The right spacing between tiles depends on the size of tiles and the conditions in which they will be utilised. You can remove fresh grout & adhesive from tiles with water, whilst dried product must be removed mechanically. Fill joints not earlier than after 12 hours, using the Ceresit grouts from the CE group.

The joints between tiles, joints in wall corners, wall-floor joints as well as the spaces where the tiles reach bathroom fittings should be filled with the Ceresit CS 25 MicroProtect silicone.

Perform works in dry conditions, at air and surface temperature between +5°C and +30°C.

CM 16 PRO contains cement and its contact with water causes an alkaline reaction. Therefore, you need to protect your skin and eyes. In case of contact with eyes, rinse thoroughly with plenty of water and seek medical advice.

## RECOMMENDATIONS

The manufacturer recommends the use of appropriate products included in the solution system.

— For grouting inside and outside buildings, including terraces and balconies, use the Ceresit CE 40 Aquastatic or Ceresit CE 43 Grand'Elit grout. For substrates exposed to aggressive chemical or mechanical factors, use the Ceresit CE 43 Grand'Elit grout.

— For interior damp proofing, use the Ceresit CL 51 damp proofing coat and the Ceresit CL 62 sealing tape. For outdoor applications use the Ceresit CL 50 or Ceresit CR 166 sealant and Ceresit CL 152 tape.

— For additional protection of joints and ceramic cladding against stains and dirt, use the Ceresit CT 10 silicone sealant which renders the surface hydrophobic.

— When fixing tiles that are susceptible to staining, it is imperative that you perform your own application tests to make sure that the adhesive does not stain the tiles.

## STORAGE

Up to 12 months from the date of manufacture, when stored on pallets, in dry conditions and in the original, undamaged packaging.

## PACKSIZE

5 kg, 20 kg and 25 kg bags

## DANE TECHNICZNE

Base:	blend of cements with mineral fillers and polymer modifiers
Mixing proportions:	8.25-8.75 l of water per 25 kg 6.6-7.0 l of water per 20 kg 1.65-1.75 l of water per 5 kg
Application temperature:	between +5°C and +30°C
Initial setting time:	approx. 5 min.
Working time:	up to 2 hours
Extended open time (according to EN 12004: 2007 + A1:2012):	tensile adhesion strength $\geq 0.5 \text{ N/mm}^2$ , after not less than 30 min
Slip (according to EN 12004: 2007 + A1:2012):	$\leq 0.5 \text{ mm}^2$
Grout:	after 12 h
Maximum size of glued tiles:	up to 1.5 m <sup>2</sup>
Bond strength defined as:	Initial adhesion strength $\geq 1.0 \text{ N/mm}^2$
Durability in conditioning/thermal ageing conditions defined as:	Adhesion strength after heat ageing $\geq 1.0 \text{ N/mm}^2$
Durability under the impact of water/moisture defined as:	Adhesion strength after water immersion $\geq 1.0 \text{ N/mm}^2$
Durability under the impact of freeze/thaw cycles defined as:	Tensile adhesion strength after freeze/thaw cycles $\geq 1.0 \text{ N/mm}^2$
Reaction to fire (in accordance with EN 12004: 2007 + A1:2012):	Class A1;A1 <sub>f</sub>
Content of dangerous substances:	meets the requirements: see the Product Data Sheet
Temperature resistance:	between -30°C and +70°C

Approximate yield:

(refers to an even substrate, the coverage may vary depending on the evenness of the substrate and the type of tiles):		
Tile length up to (cm)	Trowel notch size (mm)	Coverage (kg/m <sup>2</sup> )
10	4	1.4
15	6	2.0
25	8	2.6
30	10	3.1
> 30	12	3.6

Product consistent with EN 12004:2007 + A1:2012.

Any technical advice can be obtained from the telephone numbers:  
+48 800 120 241  
+48 41 3710124.

In addition to the information provided in this data sheet, the rules of the trade, guidelines of institutes and associations, relevant national and European standards, approval documents, health and safety regulations, etc. must be observed. The properties and technical characteristics listed above are based on practical experience and tests. Any properties and applications of materials outside the scope of this data sheet require our written consent. All data refers to a substrate, ambient and material temperature of +23°C and a relative humidity of 50%, unless otherwise stated. Under other climatic conditions, the specified parameters may vary.

The information contained in this data sheet, in particular recommendations concerning the method and conditions of application and the scope of application and use of our products, is based on our professional experience. This technical sheet defines the scope of application of the material and the recommended method of executing the work, but it cannot replace the professional preparation of the contractor. The manufacturer guarantees the quality of the product, but has no control on the conditions and method of its usage. Since the conditions under which the products are used may change, it is recommended to perform your own tests in case of any doubts.

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