CM 16

Flexible tile adhesive for indoor and outdoor areas

Flexible thin-bed adhesive mortar for laying ceramic tile coverings and slabs on critical substrates









CHARACTERISTICS

- ► For ceramic tiles (glazed & terracotta), vitrified tiles, porcelain tiles, mosaic tiles and natural stones like granite, sand stone, marble (for light colour natural stone white adhesive recommended)
- ► Flexible polymer modified
- ► For indoor and outdoor areas
- ► For walls and floors
- ► Non-slip, perfect for walls
- ► Suitable for wet areas and swimming pools
- ► Easy application







PRODUCT SCOPE

- cement and cement-lime plasters, cement screeds, cement ground coats, concrete substrates.
- light weight AAC blocks / concrete block, wood cement boards and sound deadening panels primed with CT 17.
- gypsum and anhydrite substrates (inside) primed with CT 17.
- wet areas e.g. bathrooms, kitchens, toilets
- swimming pools
- utility rooms as cellars, storerooms, drying rooms, corridors, stairs, anterooms, living rooms, parking, balconies, terraces
- on deformable substrates such as: primed plasterboards, wood chip-boards, heated floors, large tiles (<0.36 m²) and higher loads
- on Polybit flexible sealing materials like Polyflex & CL51

APPLICABLE STANDARDS

Tested according to EN 12004 and conforms to ANSI A118.4 $\,$

SUBSTRATE PREPARATION

Polybit CM 16 can be applied on even, load-bearing and compact substrates, free of any substances that reduce adherence (grease, bitumen, dust):



TDS_CM16_GCC_0519

Indoors and outdoors

- concrete (residual moisture ≤2%)
- cement screeds without floor heating, plasters, cement and lime plasters (residual moisture ≤ 1.5 %)

Indoors

- anhydrite substrates without floor heating (residual moisture below 0.5%) and gypsum (residual moisture below 1%) substrates – mechanically roughened, cleaned from dust and primed with CT 17
- aerated concrete (free from dust and primed with CT 17) Substrates must not be wet. Any existing dirt, loose layers and paint coating with low strength shall be mechanically removed. Absorbent substrates shall be primed with CT 17 and left to dry for at least 2 hours. Surface unevenness of up to 5 mm can be filled on the previous day using Polybit CM 16 mortar.

APPLICATION

Pour Polybit CM 16 into the precisely measured amount of clean water (7.5-8.5 L) and mix with a drill and mixer until a homogenous mass without lumps is reached. Leave for 2 min. and then mix again. Apply the mortar with a suitable notched trowel. For indoor use, the mortar coverage (wetting) on the tile backside must be at least

65%. The floating-buttering method shall be used for larger tiles and for outdoor applications (i.e. additionally a thin layer of the mortar should be spread on the tile's backside, wetting equal or more than 90%). Place the tiles only during the open time of the adhesive. Do not lay tiles butt jointed! Fresh excess mortar can be removed with water; hardened material can only be removed. Grouting on the wall can be done after 8 hours and after 24 hours in floor using Polybit grouts. Walkability is reached after 24 hours. Expansion joints, joints at the corners of walls and floor and around sanitary equipment shall be filled with silicone sealant.

PLEASE NOTE

Work should be carried out in dry conditions at an air and surface temperature from 5°C to 40°C.

PRODUCT SAFETY: Contains cement. Strongly alkaline reaction with moisture, so protect skin and eyes. After contact wash immediately with plenty of water. After eye contact also seek medical advice.

OTHER INFORMATION

The manufacturer recommends using suitable products from the system solution range.

- For grouting, Polybit CE 33 aquastatic grout is recommended for general purpose and Polybit CE 47 is recommended for stain & chemical exposed area like kitchen, toilet, swimming pool etc.
- For waterproofing in indoor applications a sealing film of Polyflex for rigid surface like concrete/plastered and CL 51 for gypsum/cement particle board are recommended with Polybit sealing tape.

In the case of laying stone tiles prone to colour changes, sample tests must necessarily be carried out in order to check whether the mortar causes no fading of the tiles. Should you need support or advice, please consult our technical service.

TECHNICAL DATA		
Base		mixture of cements with mineral fillers and modifier Colour: grey and white
Bulk density		1.5 + 0.05g/cc
Mixing proportion		approx. 7.5 – 8.5L of
*with addition of CC 83		water for 25kg of powder 6 to 6.5L of water + 2L
Initial maturing time		approx. 2 minutes
Pot life		approx. 2 hrs
Application temperature		5°C to 40°C
Temperature resistant		-30°C to 70°C
Walkability		after 24hrs @ 25°C
Tensile adhesion strength [ANSI 118.4]		
Sec 5.3		>120 Psi [2days 20minutes]
Sec 5.3		>110 Psi [28days @30 minutes]
Sag on vertical sur Sec 6.0	.4] >120 Psi	
Shear adhesion strength of glazed wall tile [ANSI 118.4]		
Sec 7.1.2		>300 Psi [7days aircuring]
Sec 7.1.2		>200 Psi [7days water immersion]
Shear adhesion stre	ength porcelin til	
Sec 7.2.2 Sec 7.2.3		>75 Psi [1days] >200 Psi [7days]
Sec 7.2.4		> 150 Psi [7days] > 150 Psi [7days water immersion]
Sec 7.2.5		>200 [28days]
Open time		approx. 20 minutes
Initial tensile adhesion		≥ 1,0 N/mm ²
Amount required:		
Tile size	notch	depth CM 16 [kg/m²]
up to 10cm	4mm	1.8
up to 15cm	6mm	2.3
up to 25cm	8mm	3.0
up to 30cm	10mm	3.8
above 30cm	12mm	4.6
Shelf life		Approx. 12 months if stored in a
		tightly sealed container, in cool and dry conditions.
Packaging		25 kg paper bag
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All values given are subject to 5-10% tolerance

Apart from the information given here it is also important to observe the relevant guidelines and regulations of various organisations and trade associations as well as the respective standards. The aforementioned characteristics are based on practical experience and applied testing. Warranted properties and possible uses which go beyond those warranted 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 at laboratory conditions unless specified otherwise. Please note that under other climatic conditions hardening can be accelerated or delayed.

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 wilful misconduct or gross negligence on our part. This technical data sheet supersedes all previous editions relevant to this product.

