



BE SURE. BUILD SURE.

M 21

Flexible Power Adhesive

Product Properties

- C2 TE according to EN 12004-1
- flexible
- single component
- excellent adhesion and workability
- thixotropic consistency
- for interior or exterior use, walls and floors
- for tile-on-tile refurbishment
- for large-format floor tiles

Area of Application

M 21 is a high-quality cementitious adhesive for installing floor and wall tiles. It can be used in tiling of interior and exterior areas and for bonding ceramic, porcelain or homogeneous tiles to a wide range of substrates.

M 21 possesses high tensile adhesion strength, long open time and improved flexibility making it an ideal adhesive for a wide range of application including direct tiling on liquid-applied waterproof membranes. M 21 is a single-component tile adhesive and usage of additional latex is unnecessary.

M 21 is certified as class C2 TE adhesive according to EN 12004-1. It also fulfils the requirements of EN 14891 when used in combination with MC Proof DF 9.

Application

Application:

Apply a layer of adhesive onto the substrate with the flat side of a notched trowel. After that use the notched side of the trowel to spread the adhesive evenly and to create straight ridges. Swirled ridges are always not recommended.

For bigger-sized tiles, use a trowel with bigger notches to ensure sufficient amount of adhesive in order to achieve full coverage underneath the tiles.

The buttering-floating method (combined application of adhesive onto the tiles as well as onto the substrate) to create a cavity-free adhesive layer is recommended especially for external floor areas, wet areas or large-format tiles.

After spreading the adhesive, place the tile by pressing it firmly into the mortar and slide it in the direction perpendicular to the ridges. Within 30 minutes the tile can be moved slightly to its final position.

If a surface skin has formed, re-troweled the adhesive to produce a fresh surface. Avoid sprinkling water to moisten the adhesive.

Suitable Substrates:

M 21 adheres to almost all kinds of mineral substrates such as concrete, precast concrete panels, plaster, screed, render, brickwork, light-weight blocks, etc.

Substrate Requirement:

The substrate must be clean, solid, stable and free of any loose particles, grease, oil, paint, cement lime, tar, bitumen or release agent which might affect the adhesion.

Substrate Preparation:

For all highly absorbent substrates, the usage of deep penetrating primer D 11 is recommended to achieve best adhesion. Alternatively, the absorbent substrates should be pre-wetted with clean water to saturated-surface-dry (SSD) condition.

For one 25 kg bag approx. 7.0 – 7.5 litres of water are required. Mix M 21 with clean water using a mechanical mixer for a few minutes until a lump-free, homogeneous mix is obtained. Let the mixture stand in the container for 5 minutes, then remix for 1 minute. The product is now ready for use.



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Application

General Remarks:

Protect M 21 against adverse weather conditions until the material is completely set.

Avoid heavy mechanical stress during curing as this will affect the final bonding strength.

The datasheet of products used in conjunction with M 21 must be followed.

All technical data stated in this datasheet are based on test under laboratory conditions. Actual achieved data may vary due to different ambient conditions at job sites.

The Material Safety Data Sheet is available upon request.

Setting time:

Tiles installed with M 21 can be walked on after approx. 24 hours. Grouting of the tile joints can be carried out after approx. 24 hours.

The drying times are approximate and will be affected by ambient conditions. High temperature and low humidity quicken the drying process whereas low temperature and high humidity retard the drying process.

Consumption:

The consumption varies with the application method as well as with the particular kind of notched trowel.

Material base:

Cementitious composite with mineral aggregates and dry powder dispersants



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Technical Data for M 21

Characteristic	Unit	Value	Comments
Colour			Cement grey
pH-Value		11	
Mixing Ratio	liter	7.0 – 7.5	Water
Wet Density	kg/lit	~1.65	
Pot Life	minutes	120	At 25+°C
Open time EN 12004-2	minutes	>30	At 25+°C
Foot-trafficable after	hours	24	
Grouting of joints after	hours	24	
Full mechanical load after	7	days	
Consumption	kg/m ²	3.9 5.2 6.5	6mm notched trowel 8mm notched trowel 10mm notched trowel
Pull-off strength (EN12004-2):	N/mm ²	≥ 1.2 ≥ 1.2 ≥ 1.4	Standard condition Heat aging Water immersion
Vertical Slip	mm	<0.5	according to EN 12004-2
Application conditions	+°C	8 to 40	

Product Characteristics for M 21

Packaging	25 kg bag
Storage	Keep cold and dry.
Shelf Life	12 months if kept in original, unopened and undamaged sealed bags.

Safety Advice

Please take notice of the safety information and advice given on the packaging labels and safety information sheets.

Note: The information on this data sheet is based on our experiences and correct to the best of our knowledge. It is, however, not binding. It has to be adjusted to the individual structure, application purpose and especially to local conditions. Our data refers to the accepted engineering rules, which have to be observed during application. This provided we are liable for the correctness of this data within the scope of our terms and conditions of sale-delivery-and-service. Recommendations of our employees which differ from the data contained in our information sheets are only binding if given in written form. The accepted engineering rules must be observed at all times.

Edition 11/22. Some technical changes have been made to this print medium. Older editions are invalid and may not be used anymore. If a technically revised new edition is issued, this edition becomes invalid.