



Nafufill KM 220

Fibre-reinforced repair mortar and fine mortar

Product Properties

- One-component, polymer-modified
- Hand and wet spray application
- May be applied without bond coat
- Low fresh mortar density, low consumption
- Resistant to temperature, frost-thaw and de-icing salts
- High carbonation resistance
- Increased bonding capacity
- Suitable for wall and overhead areas
- Layer thickness 2 - 30 mm
- Excellent application properties
- Non-flammable according to EN 13501-1 - building material class A1
- Class R2 according to EN 1504 part 3

Areas of Application

- Repair of fractured or broken areas in concrete, application of levelling layers and fine mortaring works > 2 mm
- Suitable for partial and full-surface application onto normal-, lightweight- and chipped brick concrete in civil engineering, industrial- and housing construction
- Certified and classified according to EN 1504 part 3 for principle 3, procedures 3.1, 3.3, 7.1 and 7.2

Application

Substrate preparation

See leaflet "General Application Advice Coarse Mortars / Concrete Replacement Systems".

Mixing

Nafufill KM 220 is added to the prepared water under constant stirring and mixed until a homogeneous and lump-free mortar is achieved. Forced action mixers or slowly rotating double mixers must be used for mixing. Mixing by hand and preparation of partial quantities is not permitted. Mixing takes at least 5 minutes.

Mixing ratio

Please see "Technical Data" table. For a 25 kg bag of Nafufill KM 220 approx. 4.25 to 4.75 litres of water are required. As with other cement-bound products the quantity of added water may vary.

Application

Nafufill KM 220 can be applied by hand or wet spraying. The material may be applied in one or more layers.

As Nafufill KM 220 is applied without any bond coat, a thin layer is generally to be worked into the substrate and afterwards overcoated fresh-in-fresh.

A worm pump with adjustable several discharge flow is advised for spray application. Please request our assistance or our spraying technique equipment planner leaflet.

Finishing

Following application Nafufill KM 220 may be smoothed and finished using a wooden or plastic float or a porous sponge rubber squeegee. At the connecting areas between edge of damaged spot/concrete the freshly applied mortar must be treated that subsequent products can be applied without problems.

Curing

Nafufill KM 220 must be protected from drying out too rapidly and from direct sunlight and wind exposure. Curing usually takes 3 days.



Technical Data for Nafufill KM 220

Characteristic	Unit	Value*	Comments
Largest grain size	mm	1	
Fresh mortar density	kg/dm ³	1.95	
Flexural tensile-/ compressive strength	N/mm ²	1.4 / 5.3 3.8 / 22.5 4.2 / 25.0	after 1 day after 7 days after 28 days
Dynamic E-modulus	N/mm ²	16,200	after 28 days
Shrinkage	mm/m	1.0	after 28 days
Coverage (dry mortar)	kg/m ² /mm	1.67	
Application time	minutes	60 45 30	at + 5 °C at + 20 °C at + 30 °C
Layer thickness	mm	2 30 30 50	min. layer thickness per work step max. layer thickness per work step max. total layer thickness reprofiling of disruptions
Application conditions	°C	≥ 5 - ≤ 30	air-/material-/substrate temperature
Mixing ratio	p.b.w.	100 : 17 - 19	Nafufill KM 220 : water

Product Characteristics for Nafufill KM 220

Colour	cement-grey
Delivery	25 kg bags
Storage	Can be stored in cool and dry conditions for at least 12 months in originally sealed packs. Protect from frost!
Disposal	Packs must be emptied completely.

* All technical values have been determined at + 23 °C and 50 % relative humidity.

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 12/16. 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.