

## PRODUCT PROPERTIES

- One-component, polymer-modified
- Application without bond coat
- Low fresh mortar density, low coverage
- Excellent bonding of the fresh mortar on mineral substrates
- Application by hand or wet spraying
- High water retention
- Class R1 according to EN 1504 part 3
- Fire-resistant according to DIN 4102-2 fire resistance class F 120
- Non-flammable according to EN 13501-1, building material class A1

## AREAS OF APPLICATION

- Concrete replacement for repair of normal, lightweight and crushed-brick concrete
- Suitable for interior and exterior areas
- Partial and full-surface concrete repair of facades, balconies, loggias, attics, etc.
- Suitable on lime sand brick
- For partial repair of porous lightweight concrete (gas concrete)
- Certified and classified according to EN 1504 part 3 for principle 3, procedure 3.1 and 3.3

## APPLICATION ADVICE

**Substrate Preparation:** See leaflet "General Application Advice Coarse Mortar / Concrete Replacement Systems". A mini-mum surface tensile strength of  $\geq 0.8$  MPa is required.

**Pre-wetting:** Prior to application of Nafufill LM the substrate must be pre-wetted. Very porous or absorbent substrates are to be pre-wetted several times. Standing water on the surface is not permitted.

**Mixing:** Nafufill LM is added to the prepared water under constant stirring and mixed thoroughly for 2 - 3 minutes until homogeneous and lump-free. The mortar is left to rest for approx. 2 minutes and afterwards mixed again. Forced action mixers or slowly rotating double mixers must be used for mixing. Mixing by hand and preparation of partial quantities is not allowed.

**Mixing Ratio:** For a 20 kg bag of Nafufill LM approx. 5.8 to 6.4 litres of water are required. As with other cementitious products the quantity of added water may vary.

**Application:** Nafufill LM can be applied by hand and wet spray-ing. Application can be carried out in two or several layers. For hand application a thin layer of Nafufill LM is applied in a first work step and over-coated fresh-in-fresh with the specified layer thickness. For spray application worm pumps with variably adjustable discharge flow are to be used.

**Finishing:** Following application Nafufill LM may be smoothed and finished using a wooden or plastic float or a fine pored sponge squeegee.

**Curing:** Nafufill LM must be protected from drying out too rapidly due to direct sun and wind exposure. Curing usually takes 3 days.

## TECHNICAL VALUES & PRODUCT CHARACTERISTICS

Characteristic	Unit	Value	Comments
Maximum grain size	mm	1.2	
Dry bulk density	kg/dm <sup>3</sup>	1.29	
Mixing ratio	p.b.w.	100 : 29 - 32	powder component : water
Working time	minutes		
		120	at 8°C
		60	at 20°C
		20	at 30°C
Application conditions	°C	≥ 5 ≤ 30	air, substrate and material temperatures
Consumption	kg/m <sup>2</sup> /mm	1.12	factory-dried mortar
Flexural strength	N/mm <sup>2</sup>		
24 h		1.3	
7 d		2.8	
28 d		3.7	
Compressive strength	N/mm <sup>2</sup>		
24 h		3	
7 d		12	
28 d		14	
E-modulus (dynamic)	N/mm <sup>2</sup>	10,000	
E-modulus (static)	N/mm <sup>2</sup>	8,500	
Layer thickness	mm	5	minimum layer thickness per pass/operation
		70	maximum total layer thickness
		100	as a reprofiling mortar
Fresh mortar bulk density	kg/dm <sup>3</sup>	1.43	
Shrinkage	mm/m	1	after 28 days

All technical values are laboratory results determined at 21°C ±2°C and 50% relative humidity.

colour shade	Cement grey
form	pulverous
delivery form	Sack goods 20 kg
Storage	Can be stored in cool and dry conditions for at least 12 months in original unopened packs. Protect from frost.
packaging disposal	Make sure single-use containers are completely empty. Ensure compliance with our information leaflet "Return of Emptied Transportation and Sale Packaging". We will be glad to send you this on request.

### Safety instructions

Please note the safety information and advice given on the packaging labels and safety data sheets.

**Note:** The information contained in this data sheet is based on our experience and is correct to the best of our knowledge. It is, however, not binding. It will need to be adapted to the requirements of the individual structure, to the specific application and to non-standard local conditions. Application-specific conditions must be checked in advance by the planning engineer/specifier and, where different from the standard conditions indicated, will require individual approval. Technical advice provided by MC's specialist consultants does not replace the need for a planning review by the client or its agents in respect of the history of the building or structure. Subject to this prerequisite, we are liable for the correctness of this information within the framework of our terms and conditions of sale and delivery. Recommendations of our employees deviating from the information given in our data sheets are only binding for us if they are confirmed in writing. In all cases, the generally accepted rules and practices reflecting the current state of the art must be observed. The information given in this technical data sheet is valid for the product supplied by the country company listed in the footer. It should be noted that data in other countries may differ. The product data sheets valid for the relevant foreign country must be observed. The latest technical data sheet shall apply to the exclusion of previous, duly superseded versions; the date of issue in the footer must be observed. The latest version is available from us on request or may be downloaded from our website. [2100004175]