

Nafufill RM 40

Microsilica-modified repair mortar



PRODUCT PROPERTIES

- One-component, only to be mixed with water
- Application by hand and wet spraying technique
- High carbonation resistance
- Resistant to temperature, frost-thaw and de-icing salts
- High water retention
- Open to water vapour diffusion and impermeable to water
- Low active alkali content, highly sulphate-resistant binder
- Non-flammable according to EN 13501-1 - building material class A1
- Registered with DGNB (Code: 6BZL59)
- Class R3 by hand application or R4 by spray application according to DIN EN 1504 Part 3

AREAS OF APPLICATION

- Suitable for partial and large-scale repair of concrete components in statically relevant and non-statically relevant areas
- Suitable for repair of building components in sulphate loaded areas
- Suitable according to EN 206 for exposure classes XC1-4, XS1, XD1-2, XF1-3 and XA1-2
- Certified according to EN 1504 part 3 for principle 3 and 7, procedure 3.1, 3.3, 7.1 and 7.2

APPLICATION ADVICE

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

Bond coat: For hand application Nafufill BC is to be used as bond coat. See leaflet "General Application Advice Coarse Mortars/Concrete Replacement Systems".

Mixing: Nafufill RM 40 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 5 minutes.

Mixing ratio: Please see "Technical Data" table. For a 25 kg bag of Nafufill RM 40 approx. 3.25 to 3.5 litres of water are required. As with other cement-bound products the quantity of added water may vary.

Application: Nafufill RM 40 can be applied by hand or wet spraying. The material may be applied in one or more layers. A worm pump with adjustable discharge flow is advised for spray application. Please request our assistance.

Finishing: Following application Nafufill RM 40 may be smoothed and finished using a wooden or plastic float.

Curing: Nafufill RM 40 must be cured for 3 days using moist jute and plastic foil. The jute must not dry out during this time and must be kept moist.

TECHNICAL VALUES & PRODUCT CHARACTERISTICS

Characteristic	Unit	Value	Comments
Maximum grain size	mm	4	
Mixing ratio	p.b.w.	100 : 13 - 14	powder component : water
Working time	minutes	60	at 5° C
		45	at 20 °C
		30	at 30 °C
Application conditions	°C	≥ 5 ≤ 30	Temperatura del aire, soporte y material
Consumption	kg/m ² /mm		
Dry mortar		2	
Flexural strength	N/mm ²		applied by hand
7 d		4.3	
28 d		7.2	
Flexural strength	N/mm ²		spray application
7 d		5.1	
28 d		7.8	
Compressive strength	N/mm ²		applied by hand
7 d		31.7	
28 d		44.1	
Compressive strength	N/mm ²		spray application
7 d		38.3	
28 d		52.4	
E-modulus (applied by hand)	N/mm ²	20,700	after 28 days (static)
E-modulus (spray application)	N/mm ²	27,600	after 28 days (static)
Layer thickness	mm	15	minimum layer thickness per pass/operation
		40	maximum layer thickness per pass/operation
		60	maximum total layer thickness
		60	as a reprofiling mortar
Fresh mortar bulk density	kg/dm ³	2.1	
Tensile strength	N/mm ²	> 1.5	
Capillary water absorption	kg/m ² · h ^{-0,5}	0.22	
Shrinkage (applied by hand)	mm/m	0.88	after 28 days
Shrinkage (spray application)	mm/m	0.64	after 28 days

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

Form	pulverous
Colour	Cement grey
Delivery form	25 kg bag
Storage	Can be stored in original sealed packages at temperatures between 5°C and 30°C in dry conditions for at least 12 months.
Packaging disposal	Make sure single-use containers are completely empty.

GISCODE : ZP1

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. [2400020991]