



Nafufill® BB2

Acrylic Based Bonding Agent & Polymer Component for Repair Mortars, Cement Screeds, Waterproofing and Polymer Cement Concrete

Product Properties

- Improves adhesive bond between existing concrete or mortar & new concrete or mortar
- Improves flexibility of hardened mortars, thus avoiding stresses in repair/screed system
- Improves compressive & flexural strength
- Reduces water absorption, improves waterproofing properties
- Plasticizes mortar mixes for better workability
- Improves water retention in mortars

Areas of Application

- The production of structural leveling compounds and bonded screeds
- The production of repair mortars, e.g. in the repair and filling of structural concrete in bridge building and civil engineering
- For waterproofing mortars for roofs, basements, etc.
- Cold-joints between old and new concrete can be made strong and non-permeable with bonding slurry consisting of **Nafufill BB2** and cement mortar
- Improvement of the mechanical and technological characteristics of ready-to-use coarse and fine repair mortars intended for the repair of concrete
- Second component for **Dichtament DS** waterproofing system

Application

General

Nafufill® BB2 is a Saponification-resistant acrylic co-polymer dispersion with extraordinarily favorable characteristics when used as a polymer component in hydraulically setting mortars. By addition of **Nafufill® BB2**, mortar will be improved particularly in terms of the following characteristics

Strength of adhesive to the basis is distinctly improved. This allows structural bonds between existing mortar/concretes and fresh mortar. Coefficient of expansion corresponds to that of the unmodified mortar/concrete. The modulus of elasticity is reduced, the hardened mortar is improved in terms of flexibility, thus avoiding stresses in repairs/screed system. The compressive and flexural strength is increased compared to the reference mix. Water absorption is reduced, thus providing increased waterproofing properties.

The fresh mortar is considerably plasticized. Mortars with a particularly low water cement ratio can be produced with the same workability as the reference mix, thus considerably reducing the degree of shrinkage. The water retention value of the mortar is improved, thus involving less risk of drying out, shrinkage cracks, etc. (especially in thin mortar layers.)

Instruction for use

Surface Preparation

The base must be clean and free from loose particles, dust, grease oil or other remnants. Unsound areas should be removed until sound concrete is located. The base must comply with the requirements laid down by competent authorities. Minimum tensile strength of substrate should be 1.5 N/mm²

Application

Bond coat: All repair systems need a bond coat to be applied on the prepared surface. The bond coat should be forcefully & evenly brushed into the substrates after the pre-moistened surfaces have dried

Repair Mortar: The repair mortar should be applied wet-on-wet after the bond coat while it is still fresh. In general, the dosage of **Nafufill® BB2** varies as per the actual requirements. In general, for normal repair mortars, we recommend about 8 to 10% **Nafufill® BB2** wt. of cement. For extreme conditions the dosage of **Nafufill® BB2** should be increased.

As guideline we recommend dosage from 10 to 12 kg per 50 kg of cement for preparation of protective coatings to resist chloride attacks and carbonations. Such mortars should be used in thin coating overlays and not thick mortars

Curing

Nafufill® BB 2 inhibits rapid drying-out of the fresh mortar. The mortar should all the same be suitably protected from rapid drying in order to ensure uniform development of strength please note that all generally applicable regulations and working principles must be observed when using **Nafufill® BB 2** for the production and application of cement mortars/ plasters



Further Instructions / Precautions

1. Application of Nafufill® BB2 Mortar system

Bond coat: 100 pbw mortar + 13 pbw Liquid
Bond coat Liquid: 1 pbw Nafufill® BB2 + 1 pbw water
Mortar: 100pbw mortar+ 11pbw Liquid
Mortar Liquid: 6 pbw Nafufill® BB2 + 5 pbw water

2. Application in conjunction with Zentrifix AS

Bond coat: 100 pbw Zentrifix AS +25 pbw Liquid
Bond coat Liquid: 1 pbw Nafufill® BB2 +2 pbw water
Mortar: 100 pbw Zentrifix AS + 15 pbw Liquid
Mortar Liquid: 1 pbw Nafufill® BB2 + 2 pbw water

3. Application of conjunction with Nafuquick fine filler

Mortar: 100 pbw Nafuquick + 20 pbw Liquid.
Mortar Liquid: 1 pbw Nafufill® BB2 + 4 pbw water

4. Application of cement/sand screed with Nafufill® BB2

Bond coat: 1 pbw cement + 3 pbw 0.2mm dry sand+ Liquid (added up to paintable consistencies).
Bond coat Liquid: 1 pbw Nafufill® BB2 + 1 pbw water
Mortar: 1 pbw cement +3 pbw 0.2mm dry sand+ 0.65 pbw Liquid
Mortar Liquid: 1 pbw Nafufill® BB2 + 2 pbw water

Technical Data for Nafufill® BB2

Characteristic	Unit	Value*	Comments
Bulk density	Kg/dm ³	2.39	
Flow table spread	Cm	21	
Air content	%	3.1	Average Value
Adhesive strength in Tension: Specimens stored at 23°C & 50% RH	N/mm ²	7 days: 1.9 28 days: 2.4 90 days: 3.6	Failures by Fracture in the concrete
Compressive strength of Mortar system	N/mm ²	7 days: 36 28 days: 55	4x4x16 cm prisms tested
Flexural strength of mortar system	N/mm ²	28 days: 11.0	4x4x16 cm prisms tested

*All the technical Values were determined in laboratory, at a temperature of 20° C and 65% relative humidity

Product Characteristics for Nafufill® BB2

Type of Product	Acrylic copolymer used as bonding agent & polymer component in repairs
Form	Liquid
Colour	Milky White
Shelf Life	9 Months from date of Manufacture
Delivery	30kg and 5kg containers
Storage	In Unopened Packaging. Protect from Rain, Direct Sunlight, Heat and Frost
Disposal	Empty packs completely and dispose off carefully to protect our Environment

Safety Advice

Please Take notice of the safety information and advice given on the packaging labels, safety information sheets and General Application Advice.

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 binding if given in written form. The accepted engineering rules must be observed at all times.

Edition: - MC/IND/202003, 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.