



Nafufill SBR

SBR based Bonding Agent and Polymer Component for Repair Mortars, Cement Screeds, Water Proofing and Polymer Cement Concrete

Product Properties

- Strength of adhesion to the base is distinctly improved allowing structural bonds between existing substrate and fresh mortar
- Non-toxic and can be used with potable water
- **Nafufill SBR** admixed mortars are easy to work with and can be drawn to very thin layers
- The modulus of elasticity is reduced; flexibility of hardened mortars is improved thus avoiding stress cracks in the repair/screed systems
- The compressive and flexural strength is increased compared to the reference mix
- More economical than Epoxy or Polyester Resin mortar
- The fresh mortar is considerably plasticized
- Reduced degree of shrinkage
- Increased bending tensile strengths
- Controlled thermal expansion
- Increased chemical and abrasion resistance
- Lowering the permeability and chloride ingress
- Increased resistance to carbonation

Areas of Application

- The production of repair mortars, e.g. in the repair and filling of structural concrete in bridge building and civil engineering
- Bonding slurry between hardened concrete and fresh topping of concrete or mortars
- For bonding new cementitious materials to existing cementitious substrates on horizontal or vertical surfaces
- Cold joints between old and new concrete can be made strong and non-permeable with bonding slurry consisting of **Nafufill SBR** and cement mortar
- Improvement of the mechanical characteristics of ready-to-use coarse and fine repair mortars intended for the repair of concrete (such as **Zentrifix AS & Nafuquick**)
- Second component for **Dichtament DS** waterproofing system
- Bonding mortars for bonding of hard-burned bricks, asbestos cement, natural stones, tiles etc.
- Repairs mortars for mending damaged spots in precast concrete industry, pipelines etc.

Application Notes

General

Nafufill SBR is a high Sponification-resistant latex dispersion for improving adhesive strength of all types of commonly used mortars. It is suitable as an admixture for obtaining waterproof concrete and mortars. It is suitable for preparation of repair mortars.

Instructions for Use

The base must be clean and free from loose particles, dust, grease, oil or other remnats. All laitance should be removed by wire brushing. In some cases, the existing concrete must be chipped to a sound substrate. Where surfaces are contaminated with oil or grease, this should be removed by using a strong industrial detergent or organic degreaser. The base must comply with the requirements laid down by competent authorities. Minimum tensile strength of substrate should be 1.5 N/ mm².

Application

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. The compositions of bond

coat & repair mortar for different cases are given below.

In general the dosage of **Nafufill SBR** varies as per the actual requirements. In general, for normal repair mortars, we recommend about 8 to 10% **Nafufill SBR** by weight of cement. For extreme condition the dosage of **Nafufill SBR** should be increased.

Curing

Nafufill SBR 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 SBR** for the production and application of cement mortars/plasters.



Further Instructions / Precautions

General Application/ Precautions: Recommended mixing Ratios for different applications

1. Application of Nafufill SBR Mortar system

Bond coat: 100 pbw mortar + 13 pbw Bond coat Liquid
Bond coat Liquid: 1 pbw **Nafufill SBR** + 1 pbw water
Repair Mortar: 100pbw mortar+ 11pbw mortar Liquid
Mortar Liquid: 1 pbw **Nafufill SBR** + 2 pbw water

2. Application with Zentrifix AS

Bond coat: 100 pbw **Zentrifix AS** +25 pbw Liquid
Bond coat Liquid: 1 pbw **Nafufill SBR** +2 pbw water
Repair Mortar: 100 pbw **Zentrifix AS** + 15 pbw mortar Liquid
Mortar Liquid: 1 pbw **Nafufill SBR** + 2 pbw water

3. Application with Nafuquick fine filler

Mortar: 100 pbw **Nafuquick** + 20 pbw Mortar Liquid
Mortar Liquid: 1 pbw **Nafufill SBR** + 4 pbw water

4. Application of cement/sand screed with Nafufill SBR

Bond coat: 1 pbw cement + 3 pbw 0.2mm dry sand + Liquid (added up to paintable consistencies)
Bond coat Liquid: 1 pbw **Nafufill SBR** + 1 pbw water
Screed: 1 pbw cement +3 pbw 0.2mm dry sand + 0.65 pbw Liquid
Screed Liquid: 1 pbw **Nafufill SBR** + 2 pbw water

Technical Data For Nafufill SBR

Characteristic	Unit	Value	Comments
Density	Kg/dm ³	1.01	± 0.01
Flow table spread	Cm	20	Average
Adhesive strength in Tension: Specimens stored At 23°C & 50% RH.	N/mm ²	7 days: 2.2 28 days: 2.5 90 days: 3.7	Failures by Fracture in the concrete
Compressive strength of mortar system	N/mm ²	2 days: 29 7 days: 35 28 days: 57	4x4x16 cm prisms tested
Flexural strength of mortar system	N/mm ²	2 days: 6.3 7 days: 7.5 28 days: 11.9	4x4x16 cm prisms tested

Product Characteristics for Nafufill SBR

Type of Product	Polymer Component and bonding aid
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

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 may 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. E. & O.E.

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