



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

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
- Bonding mortars for bonding of hard-burned bricks, asbestos cement, natural stones, tiles etc.
- Repairs mortars for mending damaged spots in precast concrete industry,

Application

General

Nafufill® SBR is a Saponification-resistant latex co-polymer dispersion with extraordinarily favorable characteristics when used as a polymer component in hydraulically setting mortars. By addition of **Nafufill® SBR**, 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.

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

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.



Application Instruction for Nafufill® SBR

Area of application	Mixing Ratio (pbw))	Coverage
As Bond Coat	1kg SBR+4kg Water+7kg Cement	8 sqm / 1kg SBR in 2 Coats
As waterproofing Coat	1kg SBR+4kg Water+7kg Cement	8 sqm / 1kg SBR in 2 Coats with 6hrs gap between subsequent coat.
Fine Mortar for Concrete Cosmetic	1kg SBR+4kg Water+25kg Nafuquick Powder	Coverage May vary on different Crack size
Repair cum waterproof Plaster	5kg SBR+15kg Water+50kg Cement +150kg Sand	Cement Sand Ratio Should be maintained (1:3) Coverage should be maintained 20kg mortar in 1sqmtr in 10mm thickness.

Technical Data for Nafufill® SBR

Characteristic	Unit	Value	Comments
Density	Kg/dm ³	1,01	± 0.01
Adhesive strength in Tension:	N/mm ²	7 days: 2,2 28 days: 2,5 90 days: 3,7	Failures by Fracture in the concrete. Specimens stored at 23°C & 50% RH
Compressive strength of Mortar system	N/mm ²	7 days: 35 28 days: 57	4x4x16 cm prisms tested
Flexural strength of mortar system	N/mm ²	28 days: 11.0	4x4x16 cm prisms tested

Product Characteristics for Nafufill® SBR

Type of Product	Latex polymer 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/R0/AUG2020, 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.