Nitobond SBR

FOSROC constructive solutions

Mortar and Screed modifier cum bonding aid

Uses

For modifying and improving bonding of floor toppings, renderings and mortars; repair of worn, damaged and spalled concrete, repair of large cracks; polymer modified floor screeds; waterproof plasters for masonary and slurries.

Advantages

- Simple to use - Single component, gauged as required.
- High adhesion - Provides excellent bond to concrete, adhesion plaster, masonry, stone work, etc.
- Improves durability -Gives weather resistant mortar with improved impermeability to chlorides and other harmful agents.
- Reduces permeability- Provides waterproof screeds, plasters and permeability slurries.
- Increases strength - Improved tensile and flexural properties allow thin applications.
- Versatile - Compatible with all common hydraulic cements.
- Cost effective - Nitobond SBR is economical to use

Description

Nitobond SBR is modified styrene butadiene rubber emulsion specially designed for use as a bonding aid and gauging liquid for cementitious systems. It is resistant to hydrolysis and can therefore be used for external applications too.

Technical Support

Fosroc provides a technical advisory service supported by a team of specialists in the field.

Properties

Specific gravity 1.02 to 1.03 g/cc

Typical mechanical properties of 1 : 3 cement sand mortar at W/C - 0.45 for control and W/C - 0.35 for mortar containing Nitobond SBR (5 lites / 50 kg cement). Tested in accordance with BS 6319 & wet cured.

Mechanical properties	Control	Nitobond SBR
Compressive strength (N/mm²)		
3 days	11.5	12.5
7 days	13.0	14.5
28 days	22.0	24.0

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Tensile strength (N/mm²) @ 28 days	2.5	3.5
Flexural strength (N/mm²) @ 28 days	5.0	6.5

Note : Increased dosages of Nitobond SBR and further water reduction leads to improved mechanical properties.

Chemical resistance :

Cementitious based materials have limited chemical resitance. The addition of Nitobond SBR to cement mortars reduces permeability and therefore helps reduce the rate of attack by aggressive chemicals.

Application instructions

Surface Preparation:

The object of the surface preparation is to achieve a clean sound surface with a good mechanical key. All substrates should be cleaned and free of dust, plaster, oil, paint, grease, corrosion deposits, and any other deleterious substances. Laitence should be removed by mechanical means. Smooth substrates must be mechanically roughened e.g. by scabbling, needle gun or grit blasting to provide an adequate key.

Corroded reinforcing steel should be exposed around its full circumference and cleaned to remove all loose scale and corrosion deposits. It is always preferably to clean the steel to a bright condition. Use of emery cloth, grit or sand blasting is recommended.

Priming

Reinforcing steel must be primed with Nitozinc Primer immediately after cleaning. The concrete substrate should be thoroughly dampened with water and any excess water removed before being primed by thoroughly scrubbing in a slurry coat of 1 volume Nitbond SBR to 1 volume water to 3 volumes fresh cement.

In order to obtain a smooth consistency the cement should be blended slowly into the liquids. Stir frequently during use to offset settlement.

Avoid 'puddling' of the slurry coat. The topping must be applied on to the wet slurry. If the slurry dries out it must be removed and the clean substrate reprimed.

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Typical Mix designs :

1. **Patching and repair mortars and plaster for masonary**

Cement	50 kg
Zone II sand	150 kg
Nitobond SBR	5 - 9 litres
Recommended water addition	11 - 15 litres
Recommended thickness	8 to 30mm

2. **Heavy duty floor screeds**

Cement	50 kg
3-6mm Granite chips	75 kg
Zone II sand	75 kg
Nitobond SBR	5-9 litres
Recommended water addition	8-12 litres
Recommended thickness	10-25mm

The screed should be of a semi-dry cohesive consistency.

Cleaning

Tools and equipment should be washed with water immediately after use.

Additional Guidance

Prepare surfaces thoroughly. Toe-in at edges wherever possible to avoid feather edging.

All surfaces including edges must be primed.

All applications should be wet on wet, the primer must not be allowed to dry.

The level of added water in the mix designs may need adjustment to achieve the required consistency. In general water content should be kept to the minimum necessary.

For consistent performance the use of clean, dry sand is recommended. Where wet sand is used, reduce the addition of water as appropriate.

In order to prevent rapid drying, mortars should be properly cured with Concure WB, curing compound.

Protect uncured mortar from frost.

Do not retemper mortar or primer after initial set.

Minimum application temperature is 10^0C. For permanently immersed conditions consult Local Fosroc office.

Estimating

Packaging

Nitobond SBR is supplied in 1, 5, 20,25, 50, 100 & 200 litre plastic containers.

Coverage

Slurry primer - approximately 4- 5 m^2/ litre depending on substrate porosity.

Storage

Shelf life

Nitobond SBR has a shelf life of 12 months if kept in a dry store in unopened condition.

Precautions

Health & Safety instructions

Nitobond SBR should not come in contact with skin and eyes or be swallowed. Protective gloves and goggles should be worn during handling the product.

If contact with skin occurs, wash well with soap and water. Eye contamination should be washed thoroughly with clean water and medical advice sought. If swallowed seek medical attention immediately - Do not induce vomiting.

Fire

Nitobond SBR is non flammable.

Additional information

Nitobond SBR is part of a wide range of adhesives, repair mortars, sealing compounds and flooring products specially designed and manufactured by Fosroc for the construction industry. Separate datasheets are available on all these products.

Important note :
Fosroc products are guaranteed against defective materials and manufacture and are sold subject to its standard terms and conditions of sale, copies of which may be obtained on request. Whilst Fosroc endeavours to ensure that any advice, recommendation, specification or information it may give is accurate and correct, it cannot, because it has no direct or continuous control over where or how its products are applied, accept any liability either directly or indirectly arising from the use of its products whether or not in accordance with any advice, specification, recommendation or information given by it.

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