

SBR LATEX BASED CEMENT MODIFIER FOR WATERPROOF SLURRY, BONDING SLURRY & RENDER / SCREED

Description

NIROBOND LATEX is a milky-white, Styrene-Butadiene co-polymer latex dispersion in an aqueous solution having high bonding characteristics. It is stable under wet alkaline conditions forming a reinforcing polymer matrix within cementitious mixes including concrete, screed and mortar. NIROBOND LATEX is used in mortar and concretes as a polymer modifier to increase resistance to water penetration, improve flexure resistance, acid resistance, abrasion resistance, durability and adhesion to properly prepared substrates. It is used with cement as a reliable water-resistant bonding agent.

Use

NIROBOND LATEX is used to:

- Increase the adhesion power of cementitious mixtures,
- As an anchorage mortar in casting resumption to act as a bonding force between new and old concrete
- For repairing cement and mortar
- Tiles fixing with the traditional method
- Higher plaster resistance
- Small thickness plastering and as a filling mortar
- Floor screeds and floor hardener
- Cementitious rendering as rush coat
- Waterproof renders and cementitious slurries
- Mortars mixed with NIROBOND LATEX can be used for horizontal, vertical, and overhead repair works.

Advantages

- Excellent adhesion to concrete, stonework, masonry, etc.
- Mortar that contains NIROBOND LATEX provides higher compressive and flexural strength with waterproofing effect
- Specifically designed for the use with different cement compositions
- Reduce permeability which helps to reduce attack by chemicals
- Reduces shrinkage and cracking in repair and screed mixes
- Good freeze / thaw resistance
- Improves cohesion and workability
- Nontoxic, can be used with concrete in potable water tank

Characteristics

Appearance	: Milky white liquid
pH	: > 6
Specific gravity	: 1.03 ± 0.02

Tensile adhesion strength	: ≥ 1.5 N/mm ² (concrete failure) (EN 1542)
---------------------------	--

Direction for use with Consumption

Surface preparation

The surface must be sound, clean, and free from oil, grease, or other contaminants. Any loose materials, rust scale, dirt, laitance, etc., shall be removed using suitable methods, and the surface should be roughened by light scrubbing or grit blasting. For areas affected by corrosion, any exposed reinforcement should be treated with appropriate systems. Ideally, surfaces should be in a Surface Saturated Dry (SSD) condition before application.

Application

WATERPROOFING COATING

Prepare the slurry for Waterproofing coating in the weight ratio of NIROBOND LATEX : Water : Cement = 1 : 3 : 8. During mixing, care should be taken to slowly add cement into NIROBOND LATEX to achieve the required consistency, mixing for 2-3 minutes to avoid air entrapment. Apply the waterproofing slurry to the SSD surface using a brush. The second coat can be applied after 5 to 6 hours at right angles. Simple moist curing can be done after 10 hours. For larger areas, glass fabric may be laid as a sandwich layer between the two coats. Protect the freshly laid surface from rain and intense sunlight for 3-5 days to prevent rapid drying of the coating; use wet gunny bags if necessary. Do not allow water to pond on the surface. The waterproofing coating should be protected with a plaster/screed 12-15 mm thick with the desired slope to prevent damage to the film during subsequent activities.

Consumption of mixture: ~350 g/m² per coat

Consumption of NIROBOND LATEX: ~30 g/m² per coat

BONDING COAT

Prepare the bonding coat in the weight ratio of NIROBOND LATEX : Water : Cement = 1 : 2 : 6 for bonding old to new concrete/mortar. Mix by weight and apply it to the prepared substrate. Ensure that the fresh repair mortar/concrete is placed while the bond coat is still tacky.

Consumption of mixture: ~350 g/m² in single coat

Consumption of NIROBOND LATEX: ~40 g/m²

POLYMER MORTAR OR WATERPROOF PLASTER

Prepare the polymer mortar in the weight ratio of NIROBOND LATEX : Water : Cement : Sand = 1 : 4 : 8 : 32. Apply a thin layer of the bonding coat as described above. Apply the mortar onto the surface in a layer 20-30 mm thick. This type of polymer mortar should be used for all repair jobs for optimal performance. Cured plaster with SBR will harden and become watertight.

For greater thickness, apply in multiple layers at intervals of 12 hours.

Consumption of mixture: ~2000 kg/m³

Consumption of NIROBOND LATEX: ~45 g/m²

MASONRY JOINTING

Prepare the jointing mortar in the weight ratio of NIROBOND LATEX : Water : Cement : Sand = 1 : 5 : 10 : 40. Apply a thin layer of the bonding coat as described above. Apply the mortar onto the surface in a layer 20–25 mm thick and shape the joints soon after placing the next level of masonry.

Consumption of mixture: ~1950 kg/m³

Consumption of NIROBOND LATEX: ~35 g/m² for 10 mm thick mortar.

CRACK FILLING

Open the crack lines to form a V groove of 8–10 mm. Prepare the crack filler in the weight ratio of NIROBOND LATEX : Water : Cement : Sand = 1 : 4 : 10 : 30 to create a putty using marble dust (preferably) or a pasty mortar with fine sand. Apply a thin layer of the bonding coat as described above and seal the cracks with the prepared putty.

Consumption of mixture: ~100 g/m

Consumption of NIROBOND LATEX: ~5 g per linear meter of crack.

POLYMER CONCRETE AND SCREED

Prepare the Polymer concrete and screed in the weight ratio of NIROBOND LATEX : Water = 1 : 4 (Cement, sand, aggregate as per grade). Apply a thin layer of the bonding coat as described above. Place the concrete or screed using suitable tools according to standard industry practices.

Consumption of mixture: ~2300 kg/m³

Consumption of NIROBOND LATEX: ~10 % by weight of cement.

POLYMER CEMENT INJECTION GROUT

Prepare the Polymer cement injection grout in the weight ratio of NIROBOND LATEX : Water = 1 : 6 (Cement, sand, aggregate as per grade). Apply it under pressure into open joints, cracks, voids, or honeycombs in concrete or masonry structural members to strengthening the structure and preventing water infiltration.

Consumption of mixture: ~1800 kg/m³

Consumption of NIROBOND LATEX: ~7 % by weight of cement.

Curing

Correct curing of NIROBOND LATEX modified mixes is important. Moisture cure for 24 hours and then allow to dry out slowly. (Note that initial curing is necessary to provide good curing conditions for the hydration of the Portland cement, then the Latex mortar must be allowed to

dry out to permit the latex particles to join together to form the continuous films and strands.

Technical support

NIRMAN CHEMICALS provides technical advisory services for on-site assistance and guidance on mix design, optimum dosage evaluation of trials.

Packaging

NIROBOND LATEX is supplied in 1/2kg, 1kg, 5kg, 20kg & 210 kg

Storage and Shelf life

NIROBOND LATEX must be stored where temperatures do not drop below +5°C. If product has frozen, thaw at +5°C or above and completely reconstitute using mild mechanical agitation. Do not use pressurized air for agitation. Store under cover, out of direct sunlight and protect from extremes of temperature. Shelf life is 12 months when stored as above. Failure to comply with the recommended storage conditions may result in premature deterioration of the product or packaging. For specific storage advice consult our local NIRMAN CHEMICALS representative.

Safety precautions

NIROBOND LATEX does not fall into the hazard classifications. However, it should not be swallowed or allowed to come into contact with the skin and eyes. Suitable protective gloves and goggles should be worn. Splashes on the skin should be removed with water. In case of contact with the eyes it shall be rinsed immediately with plenty of water and medical advice sought immediately. If swallowed, medical attention shall be sought immediately - Vomiting should not be induced.

Fire

NIROBOND LATEX is water based and non-flammable.

Cleaning of Tools

Clean all tools and application equipment with water immediately

Note All Technical Data Sheets are updated on regular basis; it is the user's responsibility, to obtain the most recent issue. Field services where provided, does not constitute supervisory responsibility, for additional information contact our local NIRMAN CHEMICALS representative.

Disclaimer

Whilst any information contained herein is true, accurate and represents our best knowledge and experience, no warranty is given or implied with any recommendations made by us, our representatives or distributors, as the conditions of use and the competence of any labor involved in the application are beyond our control.



NIRMAN CHEMICALS

CORPORATE ADDRESS:

Flat: B4, House: 28/B, Road: 3, Banani DOHS, Dhaka - 1213.

FACTORY ADDRESS:

Noisinghar Chor (Amtola Bazar), Noakanda, Polash, Narsingdi.

HOTLINE: +88 02 983 2929

E: contact@nirmanchemicals.com

W: www.nirmanchemicals.com

FB: [fb.com/nirmanchemicals](https://www.facebook.com/nirmanchemicals)

COMPLETE CONSTRUCTION CARE 2[2]

