Nitoproof 30



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constructive solutions

Bitumen / Rubber latex emulsion

Uses

Nitoproof 30 is a bitumen / rubber latex waterproofing and damp proofing compound designed to use as a damp proof membrane, vapour barrier, waterproofing and protective coating. It is used in the following applications:

Damp proof 'sandwich membrane' in concrete floors.

Waterproof membrane to retaining walls and flat roofs

DP membrane for basement structures

Vapour barrier to cladding panels

Repairing the cracks and crazing in asphalt surfaces

Advantages

Simple to apply by brush

Dries to flexible film

Excellent adhesion to concrete, masonry, etc.

Low water vapour permeability

Can be applied to green concrete

Resistant to sulphates and ground salts

Description

Nitoproof 30 is a single part bitumen latex emulsion for application by brush or squeegee. The incorporation of rubber latex imparts elasticity to the dried coating which is waterproof and resistant to water vapor penetration.

Nitoproof 30 is a suitable for use on most building materials such as concrete, brickwork, metals and stone. It is easily applied and may be used on damp surfaces, provided that no free water is present. It can also be applied and may be used on damp surfaces, provided that no free water is present. It can also be applied to green concrete immediately shuttering has been struck.

Coating thickness: This will vary with the type of application and nature of the surface to be coated. For guidance, a dried two coat application of Nitoproof 30 over A smooth surface should average around 0.7mm in thickness and will provide a damp proof membrane within the requirements of British Standard of Practice CP102:1973.

Technical Support

Fosroc offers a comprehensive range of high performance, high quality products suitable for use within all aspects of the concrete repair and protection industry to specifiers, end users and contractors, as well as on-site assistance all over the world.

Design criteria

External walling and cladding: Nitoproof 30 is recommended for use in structural separation joints between concrete frames, in-situ and pre- cast concrete and composite cladding panels and brick and block walling and as a vapour barrier to cladding panels.

Example of a structural separation joint is shown below.



Protective coatings and crack sealing: Nitoproof 30 is recommended as a damp proof sandwich membrane for ground floor slabs and as a protective membrane to bridge piers, abutments and other concrete sub- substructures prior to backfilling. It is also suitable as a low coast waterproofing to concrete, asphalt and felt roofs. Nitoproof 30 is recommended for reinstating surfaces with leaks due to surface porosity or crazing and it may be used to fill cracks up to 5mm wide. Larger cracks should be chased out to at least 10mm wide and repaired with a joint sealing compound such as Fosroc Plastiseal for roofs or Fosroc Pliastic for roads.



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Example of remedial roof treatment is shown below.



Example of damp proof membrane under floor screed is shown below.



- 1. Plastijoint
- 2. flashing
- 3. Nitoproof 30 saturated glass fibre reinforcement
- 4. sharp sand blinding
- 5. Nitoproof 30
- 6. existing roof
- 7. wood block
- 8. screed
- Nitoproof 30 with bitumen saturated glass fibre reinforcement covering junction between subfloor and wall.
- 10. reinforced concrete column

Properties

Product	Nitoproof 30	
Form	Thixotropic Liquid	
Storage Life	6 months	
Solids content	60%	
Density	1.00 kg / litre	
Application Temperature 5 to 50°C		

Drying time

4 to 6 hours. 24 hours should be left between coatings. Nitoproof 30 should not be applied inside closed spaces unless there is adequate circulation of air.

Coverage

Coverage will depend upon the nature of the surface being treated

Application Instructions

Preparation

Surface must be clean and free dust, dirt, oil, grease, moss and loose material. Nitoproof 30 may be used on damp surfaces but there must be no standing water. Nitoproof 30 may be used on uncured concrete. Metal and timber surfaces should be primed with a coat of Nitoproof 30 and water.

Application

Nitoproof 30 may be applied by brush and squeegee. Where required, Nitoproof 30 may be reinforced by bedding layer of bitumen- saturated glass fibre, such as Marglass 250, into the first full coat, prior to application of subsequent coats.

When used as a sandwich damp course to ground slabs, the final coat should be blinded with clean sharp sand passing through a 3mm sieve to provide a key for the second concrete pour. Limestone should not be used.

When used as a low cost roof treatment, the final coat should be protected from sunlight with solar tiles bedded in the wet final coat or by blinding with clean sharp sand as described above.

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If required, the treated surface may be painted or maximum heat reflection with cement or vinyl based emulsion paint.

Nitoproof 30 is water based and remains soluble until thoroughly dry. It is therefore important that it should not be applied during rain or when rain is expected.

When used as waterproofing system for r.c. flat roofs Nitoproof 30 can be applied by brush or squeegee. It must be thoroughly stirred before use. For efficient waterproofing, a minimum of one priming and three full coats with fiberglass must be used.

(Refer to separate Nitoproof 30 General Specification sheet for more detail). Porous surfaces such as concrete or asbestos cement must first be treated with a coat made up of a solution of Nitoproof 30 and clean cold water mixed in equal part. Metal and timber surfaces must be primed with a coat of Fosroc bituminous Primer No.3 before apply Nitoproof 30. For horizontal surfaces, a squeegee or cheap, soft bristle broom is satisfactory. For vertical surfaces, use a cheap turks head brush. A useful technique that may be employed to keep brushes clean when using Nitoproof 30 is as follows:

Mix a strong solution of detergent and water, minimum 5 litres. Soak the brush in the solution and shake out before use. As work progress, rinse the brush at intervals to prevent it clogging and shake our surplus detergent before resuming.

Nitoproof 30 should be laid on to the surface using the brush in one direction, and not brushed out. During a break in work or when it's completed, the brush should be cleaned in a strong detergent solution and then in running water. Brushes should be of an inexpensive type and considered as expendable. Paint brushes are not suitable. On larger jobs, it is preferable to maintain several brushes in use.

If paint is applied direct to the Nitoproof 30 membrane, severe crazing and cracking of the paint film will occur; although this is not serious, it spoils the appearance of the coat with chippings and, when dry, surface can be painted with cementitious or PVA paint. No solvent based materials should be used as the solvent will soften the bitumen in Nitoproof 30.

Cleaning

A proprietary hand clean set such as "Keroclense 22" or "Swarfega" may be used for removing Nitoproof 30 from the hands. Splashes of Nitoproof 30 on paintwork, etc., should be wiped off at once with a damp cloth.

Thinning

Nitoproof 30 is supplied ready for use. If, however, after thorough agitation the compound appears unduly thick it can be thinned with not more than 0.25 litre of clean water per 5 litres of Nitoproof 30.

Estimating

Coverage

Coverage will depend on the nature of the surface to be treated, but is typically as follows:

Properties

Neat coat Nitoproof 30	1.1 to 1.4m ² /litre
Priming Coat	2.0 to 2.5m ² /litre
Fosroc Primer No 3	12 to 15m ² /litre

Additional Information

Technical Data - ancillary materials

	Fosroc Primer No. 3
Flash point	-1 ⁰ C
Density	0.85kg/ litre
Storage Life	12 months +
Coverage	12.5m ² /litre
Application Temperature	5 to 50 ⁰ C
Drying time	1/2 to 2 hours

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General specifications

Specification

The waterproofing system shall be built – up layers of Nitoproof 30 Bitumen / Rubber Latex Emulsion Waterproofing Membrane.

1. Surface preparation

a) Concrete Roofs

The surface of slab or screed to receive Nitoproof 30 membrane shall be structurally sound and have a wood float finish with a fall for roof surface drainage of 1 in 120 (minimum).

2. Application of Nitoproof 30 waterproofing system

a) The surface shall be cleaned to remove all dirt, dust, laitance etc.

b) The cleaned surface shall be primed by scrubbing well onto the surface a priming coat of Nitoproof 30, made up of solution of Nitoproof 30 and clean water mixed in equal parts, at the rate of 2.8 sq. metres per litre and allowed to dry. The priming coat shall extended at least 240mm up all parapet walls.

c) Apply one net coat of Nitoproof 30 at the rate of 1.4 sq. metres per litre and whilst still wet, embed into the wet coat of layer of Fibreglass membrane, overlapping all joints by at least 50mm and allow to dry. Care shall be taken to ensure that all air pockets are excluded from the fibreglass membrane. d) After the first coat had been dried, apply the third final neat coat of Nitoproof 30 at the rate of 1.4 sq. meters per litre and allowed to dry.

3. Heat reflective finish for non- traffic roof (optional)

Apply two coats of bitumen based aluminium paint at the rate of 8 sq. meters per coat as heat reflecting finish on top of the final coat of Nitoproof 30 membrane.

For maintenance foot traffic, precast panels 40mm x 600mm shall be laid to the maintenance area.

4. Cement and sand protective panels for foot traffic (optional)

a) Sprinkle dry fine sand (passing a 1mm mesh sieve) evenly over the final neat coat of Nitoproof 30 whilst wet at the rate of 1 kg per sq. metre.

b) Over the Nitoproof 30 membrane, lay a 35mm thick cement / sand screed consisting of one part cement and three parts of sand by volume. Divide screed into square panels of 1m x 1m by joining taper groove joints of 12mm width before setting of the cement sand screed occurs.

c) For bigger panel size of 3m x 3m, reinforcement BFC 610 wide mesh or equivalent shall be incorporated into the screed.

d) All vertical joints at parapet walls and skirting shall be sealed with Fosroc Plastijoint or Plastiseal, and for horizontal joints with plastic, bitumen / rubber joint sealant complying with ASTM D6690 or B.S. 2499.



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