Fosroc®
Nitoproof® 310

constructive solutions

Fibre enhanced single component water based latex waterproofing membrane

Uses

Nitoproof 310 is ideally suited as a general purpose under tile wet area membrane. Typical applications include:

- Wet areas and shower alcoves
- Under tile balcony areas
- Under tile terrace areas
- Sandwich seal between existing and new substrates, e.g. old to new concrete; cement screeds over concrete and CFC surfaces

Advantages

- Low VOC
- Non-hazardous
- Elastomeric and flexible with good tensile strength properties
- Once cured will not re-emulsify,
- Excellent chemical resistance
- Excellent adhesion to primed surfaces
- Compatible bonding properties for polymer modified cement based tile adhesives
- Australian Made

Description

Nitoproof 310 is a fibre enhanced single component water based latex membrane that has been designed for a range of waterproofing applications where the membrane is to be covered over with tiles, screeds, concrete beds.

Nitoproof 310 provides a user friendly single component membrane that achieves good film build, with reinforced and elastomeric properties once the membrane has dried.

Nitoproof 310 offers excellent adhesion properties over many primed building substrates. It is fully compatible with polymer modified cement based tiles adhesives, screeds and renders.

Nitoproof 310 is ideally suited as a general purpose under tile wet area membrane.

Standards compliance

Nitoproof 310 has been tested by CSIRO to the requirements of AS/NZS 4858:2004 Wet Area Membrane as a Class III membrane against AS 3740:2021 Waterproofing of Wet Areas Within Residential Buildings; CSIRO test report SW8500.

Copies of the report are available from the Fosroc website.

Design Criteria

Nitoproof 310 is designed to be applied by thick brush or roller. Nitoproof 310 should be applied as two (2) coats with a minimum Wet Film Thickness of 1.5mm (coverage of 1.5 litres/m²) resulting in a minimum Dry Film Thickness of 1.2mm.

Properties

Wet form

Specific Gravity of mixed product:	1.3 kg/litre
Solids content:	>64 %
Appearance:	Thixotropic paste
Colour:	Light Grey
VOC content:	17g / litre

Cured membrane properties to AS 4858:2004

Elongation at break (control):	504% (Class III) 2.25 MPa
Elongation after 56 days water immersion:	412% (Pass)
Elongation after 28 days bleach immersion:	432% (Pass)
Elongation after 56 days detergent immersion:	330% (Pass)
Elongation after heat ageing 7 days @ 50°C:	545% (Pass)
Resistance to cyclic movement:	Pass
Water vapour transmission (ASTM E96:2016):	0.56 g/m²/24hr (Pass)
Water absorption (AS3558.1:1999):	Max 1.58%

Drying times @ 23°C

Recoat:	2 to 4 hours
Dry film:	8 to 12 hours
Flood testing:	7 days
Resistance to ponding water:	7 days
Tiling/Toppings:	24 hours

Based on normal ambient conditions of 23°C @ 50% RH. Allow a further minimum 24 hours of drying time @ 10°C.

Fosroc®
Nitoproof® 310

Application Instructions

Internal wet areas should be waterproofed in accordance with AS3740.

Surface preparation

Surfaces must be clean, sound, stable and free of: loose foreign material; existing coatings; laitance; release agents; curing compounds and oil/grease residues.

Concrete and masonry substrates should have a moisture content reading not exceeding 5% when tested using a Tramex CMEX5 moisture meter.

All screw / nail heads must be sealed with a neutral cure silicone such as Nitoseal SC100 and allowed to cure, then all sheet joints covered with Nitoband tape and associated detailing accessories if required (e.g. internal / external corners and pipe detailing collars) or Nitoseal SC100, in conjunction with a bond breaking tape as mentioned under the heading Cracks). See Nitoband tape system technical data sheet .

Also remove any protrusions from the surface that may pierce the membrane.

Priming

Substrates must be primed, prior to the application of Nitoproof 310 membrane.

For porous masonry surfaces, Nitoprime 120 should be applied at approx. 7m²/L or for a more robust primer, apply one coat of Nitoproof 510 at 5m²/L (see TDS for further details on each).

For non-porous substrates, such as CFC, wet area timber, ceramic tile, metals and plastics, Nitoprime 115 should be applied at approx. 12m²/L (see TDS for further details)

Damp surfaces - entrapped moisture

Seek technical advice from Fosroc.

Static Cracks <2mm

For static cracks up to 2mm wide clean out thoroughly before filling with a neutral cure such as Nitoseal SC100 and allow the sealant to skin over, then apply a 1.5mm thick coat of Nitoproof 310 extending 100mm either side of the crack as a pre-treatment.

Allow all pre-treatment areas to cure for 2-3 hours before general application of the membrane.

Movement joints and cracks >2mm

Cracks larger than 2mm and movement joints must be firstly filled with a neutral cure silicone such as Nitoseal SC100 and allowed to form a skin, then a 50mm wide polyethylene tape placed over the crack prior to the application of a 1.5mm thick coat of Nitoproof 310 extending 100mm either side of the crack as a pre-treatment.

Alternatively the cracks can be covered with the Nitoband tape system. See Nitoband tape system technical data sheet.

Nitoband Tape, Corners and Detailing Accessories

Option 1. The Nitoband tape system is used as a superior bond breaker system to traditional sealants and bond breaker tapes.

The Nitoband tape system includes tape (for change of direction – such as wall/wall and wall/floor joints etc.), both 270° external and 90° internal corners, an adjustable internal Corner as well as three (3) size variations on pipe detailing squares (suitable from 6mm > 150mm pipe diameters).

The Nitoband tape system including tape, corners and pipe penetration detailing squares is the preferred bond breaking system. Install Nitoband tape corners and accessories as per separate Nitoband tape system Technical Data Sheet.

Option 2. Use a neutral cure silicone sealant such as Nitoseal SC100 to form a 12mm fillet and allow the sealant to cure before applying the membrane.

Option 3. Use Nitoseal MS250 / MS400 to form the fillet, allow to cure then apply a polyethylene bond breaker tape (>12mm wide) before applying the membrane.

Mixing

Nitoproof 310 membrane should be lightly stirred before using. Make sure not to entrain any air while stirring.

Membrane Application

Apply the first coat of Nitoproof 310 to the primed surface using a thick brush or roller.

A minimum of 2 coats is recommended to be applied for 'total' coverage of 1.5 litres/m².

Wet Film Thickness = 1.5mm (total 2 coats).

After waiting the required 2 to 4 hours (@23°C) re-coat time, re-apply a second coat of Nitoproof 310 at 90° to the first coat, ensuring complete coverage is achieved and no air bubbles exist.

A third coat may be required if imperfections are present in the membrane.

Conduct a final inspection on the surface of the membrane prior to commencing tiling to ensure no pinholes exist.

Once the waterproofing is completed, do not disturb the area for at least 24 hours. Tiling can commence approximately 24 hours after last coat, in which case polymer modified cement based tile adhesive should be used.

Fosroc®
Nitoproof® 310

Cleaning

In a wet state Nitoproof 310 will clean up with water. Once dried, product will need to be removed by Fosroc Solvent 10 or by mechanical means.

Splashes of Nitoproof 310 water based membrane on paintwork etc. should be wiped off immediately using a cloth dampened with a strong detergent solution. Brushes and brooms etc. should be soaked in a strong detergent solution immediately after application has finished. Hands and skin may be cleaned using a proprietary waterless hand cleaner, but prevention of soiling is better practice by wearing gloves and overalls.

Limitations

Nitoproof 310 is not designed for use as a UV exposed membrane.

Nitoproof 310 should not be applied when surface temperatures are below 5°C or above 30°C.

Please Note:

Application of all liquid applied membranes and primers should always refer to the surface temperature conditions before commencing and not just ambient temperatures. Polymer modified cement based tile adhesive is recommended for direct adhesion to the membrane.

Supply

Nitoproof 310:	15 litre drum	FC000602-15L
Nitoprime 115:	4 litre	FC000600-4L
Nitoprime 120:	15 litre	FC000601-15L
Nitoproof 510 Part A:	10 litre	FC000625-10L
Nitoproof 510 Part B:	10 litre	FC000626-10L
Nitoband tape 120mm wide x 10m Roll		FC000612-UNIT
Nitoband Corner Internal 90° 135mm x 135mm – Each		FC000614-UNIT
Nitoband Corner External 270° 135mm x 135mm – Each		FC000615-UNIT
Nitoband Corner Adjustable Internal 135mm x 135mm – Each		FC000613-UNIT
Nitoband Pipe Detailing Square Small <50mm - Each		FC000616-UNIT
Nitoband Pipe Detailing Square Medium < 110mm - Each		FC000617-UNIT
Nitoband Pipe Detailing Square Large < 150mm - Each		FC000618-UNIT

Coverage

Nitoproof 310:	1.5 litres/m² (Total 2 coats) 10m² / 15 litre drum
Nitoprime 115:	10 - 12m²/litre
Nitoprime 120:	6 - 8m²/litre
Nitoproof 510:	5m²/litre (as a primer)

The coverage figures are theoretical – due to wastage factors and the variety and nature of possible substrates, practical coverage figures may be substantially reduced.

Storage

Store in the original unopened containers in cool, dry conditions at temperatures between 5°C and 30°C. Storage above this temperature may reduce storage life.

Important notice

A Safety Data Sheet (SDS) is available from the Fosroc website. Read the SDS and TDS carefully prior to use as application or performance data may change from time to time. In emergency, contact any Poisons Information Centre (phone 13 11 26 within Australia) or a doctor for advice.

Product disclaimer

This Technical Data Sheet (TDS) summarises our best knowledge of the product, including how to use and apply the product based on the information available at the time. You should read this TDS carefully and consider the information in the context of how the product will be used, including in conjunction with any other product and the type of surfaces to, and the manner in which, the product will be applied. Our responsibility for products sold is subject to our standard terms and conditions of sale. Parchem does not accept any liability either directly or indirectly for any losses suffered in connection with the use or application of the product whether or not in accordance with any advice, specification, recommendation or information given by it.

*Manufactured and sold under license from Fosroc International Limited. Fosroc and the Fosroc logo are trade marks of Fosroc International Limited, used under license.

Parchem Construction Supplies Pty Ltd
1956 Dandenong Rd Clayton VIC 3168
Ph: 1800 812 864
www.fosroc.com.au ABN 80 069 961 968

Distributed in New Zealand by: Concrete Plus Ltd
150 Hutt Park Road Gracefield Ph: 0800 657 156
www.fosroc.co.nz NZBN 9429033691282