Fosroc®
Nitoproof® 210

constructive solutions

Water based rubberised bitumen waterproofing membrane with root penetration inhibitor

Uses

- Waterproofing of: Retaining walls
  Planter boxes
  Building foundation walls
  Below ground tanking structures
- Waterproofing/damp proof sandwich membrane
- Bond breaker for key joints and dowel bars

Advantages

- Self priming on most common substrates (refer Priming)
- Excellent cold flexibility and elongation
- Contains root penetration inhibitor
- Low VOC
- Fast drying
- Excellent resistance to ponding water
- Non-toxic
- Non-flammable

Description

Nitoproof 210 is a single component water based bituminous rubberised waterproofing membrane. Developed for the Residential & Commercial construction industry.

It forms a highly flexible, conformable and seamless waterproofing membrane.

Design Criteria

Nitoproof 210 is designed to be applied in two coats of 750 microns each to achieve membrane thickness of 1.5mm wet film thickness, resulting in a minimum dry film thickness of 1.0 to 1.3mm.

When required, Nitoband Tape system should be installed first in accordance with the Technical Data Sheet for the system.

The stirred Nitoproof 210 is laid onto the surface continually in one direction and each successive coat should be applied perpendicular to the previous coat. Allow 4 hours for film to dry between coats.

Nitoproof 210 should be protected from mechanical damage with Proofex Protection Board PP, or Proofex Sheetdrain 81 drainage and protection sheet, both are available from Fosroc.

Properties

Solids:	60%
Colour:	Black
VOC content:	<15g / litre
Tensile strength:	1.47 MPa
Hardness:	50 - 55 Shore A
Elongation at break:	>300%

Application Instructions

Priming

Substrates must be primed, prior to the application of Nitoproof 210.

Nitoproof 210 is self-priming on most porous surfaces. Dilute Nitoproof 210 1:1 by volume with water, stir until homogeneous and then apply using a brush or a roller. Always add water to Nitoproof 210 and do not dilute more than 1:1.

Apply 1 coat of primer achieving a coverage between 0.4 to 0.8L/m^2 depending on the porosity and condition of the substrate.

For non-porous substrates, such as metals and plastics, Nitoprime 115 may be selected (see separate data sheet for further details)

Substrate moisture

Nitoproof 210 should be applied to dry cementitious substrates. New concrete should be allowed to cure for 28 days; new render finishes should be allowed to cure for 7 days before applying Nitoproof 210.

Application may proceed earlier than the times above if the moisure content has been checked to be <5% (85%RH) when measured with a Tramex CMEX5 Moisture Meter.

Cracks

Cracks larger than 2mm or structural shrinkage cracks must be firstly filled with a flexible polyurethane type sealant such as Nitoseal PU250 or Nitoseal PU400 and then a 50mm wide polyethylene tape placed over the crack prior to the application of Nitoproof 210. Alternatively the cracks can simply be covered with the Nitoband Tape system. See Nitoband system technical data sheet.

Fillets and small repairs

Nitoproof 210 mixed with sand and cement can be used to create corner fillets and repair small voids/minor damage to concrete before membrane is applied. Mix equal parts of fine clean sand and cement, dampen with water then mix in Nitoproof 210 until a smooth paste is achieved. Apply this paste to primed concrete; allow to stiffen before applying the Nitoproof 210 membrane.

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Nitoband Tape, Corners and Detailing Accessories

The Nitoband Tape System is a superior bond breaker system to traditional sealants and bond breaker tapes.

The Nitoband 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 to 150mm pipe diameters).

If being used in tanking and waterproofing applications, the Nitoproof 210 requires a suitable bond breaker at all substrate junctions. Use Nitoband Tape System which includes tape, corners and pipe penetration detailing squares or equivalent bond breaking methods compliant with local waterproofing standards and building recommendations.

Mixing

Nitoproof 210 membrane should be lightly stirred before using.

Membrane Application

Ensure the surface has been appropriately prepared in accordance with this product data sheet.

Nitoproof 210 may be applied with a roller (12mm nap recommended), brush or standard airless sprayer (piston pump unit, 21 - 25 thou tip size) - thoroughly mix product before spraying. Its smooth texture and non-sag formulation makes it suitable for vertical and horizontal application.

The Nitoband System should be installed first. Apply the mixed Nitoproof 210 across the substrate joins extending approximately 70mm either side of the join.

Whilst the Nitoproof 210 is still in a wet state install the Nitoband Tape / corners and accessories ensuring that all air voids are expelled. Nitoband Joint corners should be placed in first followed by the Nitoband Tape.

The Nitoband Tape, corners and pipe detailing squares can be joined via a 50mm overlap, sandwiching a small amount Nitoproof 210 liquid membrane between the overlapping faces

Nitoproof 210 should then be applied in a 2 coat application at 750 - 1000 microns per coat for general waterproofing applications. For heavier sealing properties, total coverage can be increased with subsequent coats.

Minimum Wet film thickness per coat: 0.75mm (750 microns)

Total Dry film thickness: 1.0 to 1.3mm.

Nitoproof 210 is laid onto the surface continually in one direction; maintain wet film thickness. Each successive coat should be applied at 90 degrees to the previous coat.

Brooms, brushes etc. should be regularly washed during the operation and at any breaks as follows: Keep available a container filled with sufficient strong detergent / water solution to fully cover the broom or brush. Soak the brush in the solution and shake out before use. As work progresses, rinse the brush at frequent intervals to prevent it clogging, and again shake out before resuming. During any breaks in work the brushes should be left to soak in this solution.

Conduct a final inspection on the surface of the membrane prior to commencing back-filling to ensure no pinholes exist. A further coat may be required if imperfections or pinholes are present in the membrane.

Recoating

Nitoproof 210 may be recoated 4 hours after previous coat has been allowed to dry.

Shorter times may be acceptable in good drying times.

Key joints and dowel bars

Nitoproof 210 is suitable as a coating on key joints and dowel bars. Provided the Nitoproof 210 is allowed to dry prior to pouring the next section of concrete, it forms an effective slip layer and so allows relative movement between sections.

Drying Times

	23°C, 50% RH	10°C, 50% RH
Recoat time:	4 hours	8 hours
Dry film:	24 hours	48 hours
Backfilling:	3 days	4 days

Protection

Where the membrane is to be back filled, such as with basement applications, Nitoproof 210 should be protected from mechanical damage with Proofex Protection Board PP or Proofex Sheetdrain 81 drainage/protection system also available from Fosroc.

Cleaning

Splashes of Nitoproof 210 on paintwork etc. should be wiped off immediately using a cloth dampened with water and 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.

Where Nitoproof 210 has been allowed to dry on equipment or surfaces it may be removed using either Fosroc Solvent 10 or mechanical means.

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Limitations

Nitoproof 210 is not recommended for continuous water immersion or as a membrane on internal walls subject to back pressure.

Nitoproof 210 has not been designed as an exposed wearing course membrane. Nitoproof 210 must be covered and cannot be exposed to UV on a permanent basis. Not designed to be finished directly over with tiles, screeds, renders or paints.

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. (There are limitations to how hot/cold the surface temperature can be, when applying liquid based membrane or primer).

For example: ambient temperatures may be 10°C but the substrate could be 0°C and have frost issues. The same applies with higher temperatures: ambient temperature may be 26°C but have a substrate temperature of 36°C.

Supply

Nitoproof 210 15 litre	FC000605-15L
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 For pipes <50mm - Each	FC000616-UNIT
Nitoband Pipe Detailing Square Med. For pipes < 110mm - Each	FC000617-UNIT
Nitoband Pipe Detailing Square Large For pipes < 150mm - Each	FC000618-UNIT

Coverage

1.5 to 2.0 litre / m² (2 coats total)

Each 15 litre pail will cover approximately 10m² for 2 coats applied at the minimum 750 microns per coat.

Storage

Nitoproof 210 should be kept in a dry store in the original, unopened containers at temperatures between 5°C and 30°C.

Do not use if there are lumps in the product or the product has a bacterial smell. If stored in high temperature and high humidity locations the shelf life may be reduced.

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.

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