BRANZ Appraised

Appraisal No. 1302 (2026)

FOSROC NITOPROOF 810 INTERNAL WATERPROOFING MEMBRANE

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BRANZ Appraisals

Technical Assessments of products for building and construction.

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Product

1.1 Fosroc Nitoproof 810 Internal Waterproofing Membrane is a water-based, single-component polyurethane waterproofing membrane for use under trafficable floor finishes in internal wet areas.

Scope

2.1 Nitoproof 810 has been appraised for use as a waterproofing membrane for internal wet areas of buildings, within the following scope:

- on floor substrates of concrete, flooring grade particleboard, plywood, fibre cement compressed sheet and fibre cement sheet tile underlay, and on wall substrates of concrete, concrete masonry, wet area fibre cement sheet lining systems and wet area plasterboard lining systems; and,
- when protected from physical damage by trafficable floor finishes; and,
- where floors are designed and constructed such that deflections do not exceed 1/360th of the span.

2.2 The use of Nitoproof 810 on concrete slabs where hydrostatic or vapour pressure is present is outside the scope of this Appraisal.

2.3 Movement and control joints in the substrate must be carried through the membrane and trafficable floor finish. The design and construction of the substrate and movement and control joints is specific to each building, and is therefore the responsibility of the building designer and building contractor and is outside the scope of this Appraisal.

2.4 The trafficable floor finishes are outside the scope of this Appraisal.

2.5 The membrane must be applied by Fosroc trained and approved applicators.

Building Regulations

New Zealand Building Code (NZBC)

3.1 **In the opinion of BRANZ, Fosroc Nitoproof 810 Internal Waterproofing Membrane, if designed, used, installed and maintained in accordance with the statements and conditions of this Appraisal, will meet the following provisions of the NZBC:**

Clause B2 DURABILITY: Performance B2.3.1 (b) 15 years and B2.3.2. Fosroc Nitoproof 810 Internal Waterproofing Membrane meets these requirements. See Paragraph 9.1.

Clause E3 INTERNAL MOISTURE: Performance E3.3.6. Interior wet area floors and walls incorporating Fosroc Nitoproof 810 Internal Waterproofing Membrane meet this requirement. See Paragraphs 11.1-11.7.

Clause F2 HAZARDOUS BUILDING MATERIALS: Performance F2.3.1. Fosroc Nitoproof 810 Internal Waterproofing Membrane meets this requirement.

Technical Specification

4.1 Materials supplied by Fosroc are as follows:

General

- **Nitoproof 810** - a water-based, single-component polyurethane waterproofing membrane for use under trafficable floor finishes in internal wet areas. It is a green liquid supplied in 15 L pails.

Primers

- **Nitoprime 115** - a single-component, water-based primer for non-porous surfaces. It is a green liquid supplied in 4 L pails.
- **Nitoprime 120** - a single-component, fast-drying primer for concrete and masonry surfaces. It is a milky white liquid supplied in 15 L pails.

Accessories

- **Nitoband SA80** - a grey non-woven polypropylene coated with a highly elastic self-adhesive butyl rubber for use as a bond-breaker and sealing tape. It is 80 mm wide and supplied in a 10 m roll.

Handling and Storage

5.1 All materials must be stored inside, up off concrete floors, in dry conditions, out of direct sunlight and freezing conditions, at temperatures between 5 and 30°C. The membrane products have a shelf life of 18 months from date of manufacture in the original unopened packaging.

Technical Literature

6.1 This Appraisal must be read in conjunction with:

- Fosroc® Nitoproof® 810 (NZ) Technical Data Sheet, v2, Mar 2026.
- Fosroc® Nitoprime® 115 Technical Data Sheet, Mar 2024.
- Fosroc® Nitoprime® 120 Technical Data Sheet, Jul 2019.
- Fosroc® Nitoband® SA80 Technical Data Sheet, Jan 2024.

6.2 All aspects of design, use, installation and maintenance contained in the Technical Literature and within the scope of this Appraisal must be followed.

Design Information

General

7.1 Nitoproof 810 is for use in buildings where an impervious waterproof membrane is required on floors and walls to prevent damage to building elements and adjoining areas.

7.2 The membrane must be protected from physical damage and ultraviolet (UV) light by the application of trafficable floor finishes.

7.3 Movement and control joints may be required depending on the shape and size of the building or room, and the trafficable floor finish specified.

7.4 Timber framing must comply with NZS 3604, or where specific engineering design is used, the framing shall be of at least equivalent stiffness to the framing provisions of NZS 3604, or comply with the serviceability criteria of AS/NZS 1170. In all cases, framing must be provided so that the maximum span of the substrate as specified by the substrate manufacturer is met and all sheet edges are fully supported.

7.5 Timber framing supporting the substrates must be constructed such that deflections do not exceed 1/360th of the span. Where NZS 3604 is used, the allowable joist spans given in Table 7.1 shall be reduced by 20%.

Substrates

Plywood

8.1 Plywood must be a minimum of 17 mm thick complying with AS/NZS 2269, CD Grade Structural with the sanded C face upwards and treated to H3 (CCA treated). LOSP treated plywood must not be used.

8.2 The plywood must be laid with the face grain at right angles to the floor joists. Joists must be at 400 mm centres maximum and the edges of the sheets must be supported with blocking or framing. The plywood must be fixed with 10 g x 50 mm stainless steel countersunk head screws at 150 mm centres along the sheet edges and 200 mm centres to all framing through the body of the sheets.

Fibre Cement Compressed Sheet/Fibre Cement Sheet Tile Underlay

8.3 Fibre cement compressed sheet must be manufactured to comply with the requirements of AS/NZS 2908.2 must be specified by the manufacturer as being suitable for use as a wet area substrate. Fibre cement sheet tile underlay must be suitable for use in internal wet areas. Installation must be in accordance with the instructions of the manufacturer.

Particleboard

8.4 Particleboard must be specified for the end use in accordance with NZS 3602.

Concrete and Concrete Masonry

8.5 Concrete and concrete masonry substrates must be to a specific engineering design meeting the requirements of the NZBC, such as concrete construction to NZS 3101, concrete slab-on-ground to NZS 3604 or NZS 4229, and concrete masonry to NZS 4229 and NZS 4230.

Wet Area Wall Linings

8.6 Plasterboard wall linings must be manufactured to comply with AS/NZS 2588, and be suitable for use in internal wet areas.

8.7 Fibre cement sheet must be suitable for use in wet areas and comply with the requirements of AS/NZS 2908.2.

8.8 Installation of plasterboard or fibre cement wall linings must be carried out in accordance with the instructions of the manufacturer.

Durability

Serviceable Life

9.1 Nitoproof 810, when subjected to normal conditions of environment and use, is expected to have a serviceable life of at least 15 years and be compatible with trafficable floor finishes with a design serviceable life of 15-25 years.

Maintenance

10.1 No maintenance of the membrane will be required provided significant substrate movement does not occur and the trafficable floor finish remains intact. Regular checks must be made of trafficable finishes to ensure they are sound and will not allow moisture to penetrate. Any cracks or damage must be repaired immediately.

10.2 In the event of damage to the membrane, the trafficable finish must be removed and the membrane repaired by removing the damaged portion and applying a patch as for new work.

10.3 Drainage outlets must be maintained to operate effectively, and trafficable finishes must be kept clean.

10.4 Cleaning materials that may affect polymer-based membranes must not be used.

Internal Moisture

11.1 Nitoproof 810 is impervious to water, and when appropriately designed and installed, will avoid the likelihood of water penetrating behind linings or entering concealed spaces.

11.2 Nitoproof 810 is suitable for use to contain accidental overflow to meet NZBC Clause E3.3.2. A means of compliance for containment of overflow is given in NZBC Acceptable Solution E3/AS1.

11.3 Surfaces must be finished with a trafficable finish. A means of compliance to NZBC Clauses E3.3.3 and E3.3.4 is given in NZBC Acceptable Solution E3/AS1.

11.4 Falls in showers and shower areas must be a minimum of 1 in 50. In unenclosed showers, falls must extend a minimum of 1,500 mm out from the shower rose. Floor wastes and drainage flanges must be provided and the floor must fall to the outlet.

11.5 The waterproofing membrane must completely cover shower bases, and for unenclosed showers it must extend a minimum of 1,500 mm out from the shower rose. Further design guidance on waterproofing wet areas, including waterproofing walls and junctions can be obtained from AS 3740, and flooring and wallboard manufacturers.

11.6 Where water-resistant wall finishes such as pre-finished sheet materials are used, they must flash over the membrane a minimum of 30 mm.

11.7 BRANZ recommends the entire floor be covered by a waterproof membrane for bath, shower and spa rooms.

Installation Information

Installation Skill Level Requirement

12.1 Installation of substrates must always be carried out in accordance with the Nitoproof 810 Technical Literature and this Appraisal by, or under the supervision of, a Licensed Building Practitioner (LBP) with the relevant Licence Class.

12.2 Installation and finishing of components and accessories supplied by Fosroc and its approved applicators must be completed by trained applicators, approved by Fosroc.

Preparation of Substrates

13.1 Substrates must be dry, clean and stable before installation commences. Surfaces must be smooth and free from nibs, sharp edges, dust, dirt or other materials such as oil, grease or concrete formwork release agents.

13.2 The relative humidity of concrete substrates must be 75% or less before membrane application. Concrete substrates can be checked for dryness by using a hygrometer as set out in BRANZ Bulletin No. 585.

13.3 All voids, cracks, holes, joints and excessively rough areas must be filled to achieve an even and uniform surface. Junctions of substrate abutments, such as at wall/floor and wall/wall junctions must have a bond breaker installed as set out in the Technical Literature.

13.4 All substrates must be primed and the primer allowed to cure before the membrane is installed. Refer to the membrane supplier for primer specification.

Membrane Installation

14.1 Installation must not be undertaken where the substrate surface temperature is below 10°C or above 35°C.

14.2 All joints, cracks and changes of plane in the membrane must be underlaid with Nitoband SA80 if installed where temperatures of 0°C or less are possible.

14.3 Nitoproof 810 must be thoroughly mixed in accordance with the Technical Data sheet before application.

14.4 The membrane must be applied in a minimum of two coats to give a total dry film thickness of 1 mm. Subsequent coats must be applied at an opposite direction to the previous coat.

14.5 Application can be made by roller (medium/long nap), brush (long bristle), or a rubber or plastic float.

14.6 Clean up may be undertaken with water.

Tiling

15.1 The membrane must be fully cured before tiling. The cured membrane must be protected at all times to prevent mechanical damage, so may require temporary covers until the finishing is completed.

15.2 Tiling must be undertaken in accordance with AS 3958.1. The compatibility of the tile adhesive must be confirmed with the adhesive manufacturer and Fosroc.

Inspections

16.1 Critical areas of inspection are:

- Construction of substrates, including crack control and installation of bond breakers and movement control joints.
- Moisture content of the substrate prior to the application of the membrane.
- Acceptance of the substrate by the membrane installer prior to application of the membrane.
- Installation of the membrane to the manufacturer's instructions, particularly installation to the correct thickness.
- Membrane curing and integrity prior to the installation of trafficable floor finishes including protection from mechanical damage during curing and prior to tile installation.

Health and Safety

17.1 Safe use and handling procedures for the membrane are provided in the Technical Literature. The materials must be used in conjunction with the relevant Material Safety Data Sheet.

Basis of Appraisal

The following is a summary of the technical investigations carried out:

Tests

18.1 The following testing of Nitoproof 810 has been undertaken by BRANZ: testing to AS 4654 including bond strength, cyclic movement, elongation at break, heat ageing, temperature resistance, tensile strength and durability, water vapour transmission rate.

18.2 Nitoband SA80 was tested to the requirements of AS/NZS 4858 and AS 4654.1.

Other Investigations

19.1 An assessment of the durability of Nitoproof 810 was made by BRANZ technical experts.

19.2 Site inspections have been carried out by BRANZ to assess the practicability of installation and to examine completed installations.

19.3 The Technical Literature has been examined by BRANZ and found to be satisfactory.

Quality

20.1 The manufacture of the membrane has been examined by BRANZ, and details regarding the quality and composition of the materials used were obtained by BRANZ and found to be satisfactory.

20.2 The quality management system of the membrane's manufacturer has been assessed and found to be satisfactory.

20.3 The quality of supply of the membrane system materials to the market is the responsibility of Fosroc.

20.4 The quality of installation on-site is the responsibility of the Fosroc trained and approved applicators.

20.5 Designers are responsible for the building design, and building contractors are responsible for the quality of construction of substrate systems in accordance with the instructions of the substrate manufacturer, Fosroc and this Appraisal.

20.6 Building owners are responsible for the maintenance of the trafficable floor finish systems in accordance with the instructions of Fosroc.

Sources of Information

- AS 3740:2010 Waterproofing of domestic wet areas.
- AS 3958.1:2007 Guide to the installation of ceramic tiles.
- AS/NZS 1170:2002 Structural design actions.
- AS/NZS 2269:2012 Plywood - Structural.
- AS/NZS 2908.2:2000 Cellulose-cement products - Flat sheet.
- AS/NZS 4858:2004 Wet area membranes.
- BRANZ Bulletin Number 585 Measuring moisture in timber and concrete, June 2015.
- NZS 3101:2006 The design of concrete structures.
- NZS 3602:2003 Timber and wood-based products for use in buildings.
- NZS 3604:2011 Timber-framed buildings.
- NZS 4229:2013 Concrete masonry buildings not requiring specific engineering design.
- NZS 4230:2004 Design of concrete masonry structures.
- Ministry of Business, Innovation and Employment Record of amendments - Acceptable Solutions, Verification Methods and handbooks.
- The Building Regulations 1992.

BRANZ

In the opinion of BRANZ, Fosroc Nitoproof 810 Internal Waterproofing Membrane is fit for purpose and will comply with the Building Code to the extent specified in this Appraisal provided it is used, designed, installed and maintained as set out in this Appraisal.

The Appraisal is issued only to Parchem Construction Supplies Pty Ltd t/a Fosroc, and is valid until further notice, subject to the Conditions of Appraisal.

Conditions of Appraisal

1. This Appraisal:
   a) relates only to the product as described herein;
   b) must be read, considered and used in full together with the Technical Literature;
   c) does not address any Legislation, Regulations, Codes or Standards, not specifically named herein;
   d) is copyright of BRANZ.
2. Parchem Construction Supplies Pty Ltd t/a Fosroc:
   a) continues to have the product reviewed by BRANZ;
   b) shall notify BRANZ of any changes in product specification or quality assurance measures prior to the product being marketed;
   c) abides by the BRANZ Appraisals Services Terms and Conditions;
   d) warrants that the product and the manufacturing process for the product are maintained at or above the standards, levels and quality assessed and found satisfactory by BRANZ pursuant to BRANZ's Appraisal of the product.
3. BRANZ makes no representation or warranty as to:
   a) the nature of individual examples of, batches of, or individual installations of the product, including methods and quality of work;
   b) the presence or absence of any patent or similar rights subsisting in the product or any other product;
   c) any guarantee or warranty offered by Parchem Construction Supplies Pty Ltd t/a Fosroc.
4. Any reference in this Appraisal to any other publication shall be read as a reference to the version of the publication specified in this Appraisal.
5. BRANZ provides no certification, guarantee, indemnity or warranty, to Parchem Construction Supplies Pty Ltd t/a Fosroc or any third party.

For BRANZ

Claire Falck
Chief Executive

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23 June 2026