



Trinity Apartments reflective pool, Auckland

NURALITE TANKING Systems Brochure

Product Description

Internal and external, horizontal and vertical tanking must prevent the ingress of water and water borne aggressive salts such as chlorides and sulphates penetrating concrete structures.

Any failure or deficiency of inaccessible below ground waterproofing of a structure, can be very difficult and expensive to correct. For that reason Nuralite offers the choice of two proven systems to meet the demanding needs of specifiers.

Nuraseal (formerly called Premseal 100)

Nuraseal is a totally impervious flexible self-adhesive waterproofing sheet membrane. The self-adhesive bottom surface is laminated with siliconized release foil or paper and the top surface of the membrane is covered with a special, durable high strength coloured polyethylene film.

The elastomeric nature of the synthetically modified coating is designed as a homogeneous mixture of a special bitumen and high quality type SBS elastomer, which ensures totally durable waterproofing.

Nuraunderlay

Nuraunderlay is a thick and tough, reinforced bituminous waterproofing membrane, of great strength and durability. The membrane is 3mm thick of APP bitumen with a heavy reinforcing layer of non-woven polyester inside. The 10m x 1m rolls of Nuraunderlay are laid by heat welding the underside of the membrane to a Nuraflex primed surface.



When to use Nuralite Tanking systems

Both systems have been developed for long-term, low maintenance waterproofing of construction features such as

- Foundations
- Basements
- Lift Shafts, Pits
- Reservoirs and Tanks

Warranty

Nuralite warrants both systems against materials defects for 20 years from the date of installation. The warranty must be applied for at the completion of the job.

The workmanship of is covered by a separate workmanship warranty issued by the applicator.

Things to consider

Both tanking applications are designed for permanent waterproofing. Full integrity and benefit in service will be achieved by close supervision of the system application to ensure correct design, perfect detailing on site and total protection of the waterproofing system with no damage caused during backfilling operations.

While both systems provide an excellent and durable method of tanking. The main difference between them is:

Nuraseal is easier to install but, being peel and stick, it requires warmer and drier site conditions for application.

Nuraunderlay is a proven system that can be installed in most conditions with more tolerance to site moisture.

Ensure surfaces are clean, with no lumps, hollows and holes and are as dry as possible. Flush pointed blockwork is essential and corner fillets formed at wall/footing junctions improve drainage.

Care must be taken once the membrane is installed to ensure it is not damaged prior to backfilling. Carefully supervise placement of protection boards and backfilling, to ensure no damage occurs to the membrane in that work.

When you should not use Nuralite Tanking systems

Not where tree roots are prevalent – specify the Nuraply 3PG membrane instead of Nuraunderlay to ensure the roots will not attack the membrane.

Not in situations where the tanking may be damaged mechanically

Not where there is insufficient room for an applicator to work on the substrate in a safe manner.



A – Nuraflux primer applied to substrate

B – Gussets installed in high stress areas

C – Roller used to ensure good seal

General Application Method – Nuraseal

1. The surface to be waterproofed should be dry, smooth, free from dust, dirt, protrusions and cavities.
2. The surface should be primed thoroughly with Nuraflux Primer and allow to dry. The drying time depends on the porosity of the substrate and the environmental conditions (approx. 0.5 - 3 hrs.) **(Picture A)**
3. Apply gussets to high stress areas such as internal and external corners **(Picture B)**
4. Install Nuraseal by removing the release foil and unrolling the membrane along with it. The membrane especially at the overlaps should be firmly pressed down from the center to the sides, to ensure a good seal and to remove entrapped air. **(Picture C)**
5. Top edges overflashed or secured to ensure there are no loose or uncovered edges above or below ground level.

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3. Nuraunderlay is adhered to the substrate by heat fusing the base of the sheet as it is rolled up the substrate.
4. All lap joints are welded as a separate process. As this step is vital, a three pass method is used so that the quality of the weld is checked during the process.
5. Top edges overflashed or secured to ensure there are no loose or uncovered edges above or below ground level

Applicators

All Nuralite authorized applicators have been trained in Nuralite's systems followed by on-site monitoring. Most Nuralite applicators have been working with Nuralite systems for many years.

We work closely with applicators to ensure quality standards are maintained.

If clients require an independent quality check during the course of a job or at completion, please contact a Nuralite technical advisor and a site report will be provided.

Technical Information

A comprehensive set of design details and specifications are available at www.nuralite.co.nz

Nuralite technical advisors are all very experienced and willing to help either on the phone, in your office or on site. Call **09 579 2046** or **0800 Nuralite (0800 687254)**.

Description – Nuraseal

Waterproofing membrane consisting of polyethylene film bonded to a layer of bitumen/polymer adhesive.

Finishing

- ▶ Polyethylene anti corrosive film.
- ▶ Siliconized removable foil / paper.

Technical specifications (average values)

- ▶ Tensile strength (U.E.A.t.c.) L: 450 N T: 300 N
- ▶ Elongation at break (U.E.A.t.c.) L: 30% D: 45%

Dimensions

- ▶ Thickness: 1.5 mm
- ▶ Length: 19.05 m
- ▶ Width: 1.05 m
- ▶ Surface: 20 m²
- ▶ Average weight: 34 kg

Description – Nuraunderlay

Waterproofing membrane consisting of straight run bitumen heavily modified with polymers (APP = Atactic Polypropylene) and reinforced with non-woven polyester.

Finishing

- ▶ Top surfaced finished with white calibrated sand
- ▶ Underside finished with a smooth thermofusible film

Composition

- ▶ Reinforcement: non-woven polyester 180 g/m²
- ▶ Coating mass: plastomer bitumen, consisting of ±70% bitumen and ±30% atactic polypropylene (APP).

Technical specifications (average values)

- ▶ Tensile strength (U.E.A.t.c.) L: 650 N T: 500 N
- ▶ Elongation at break (U.E.A.t.c.) L: 45% D: 45%

Dimensions

- ▶ Thickness: 3 mm
- ▶ Length: 10 m
- ▶ Width: 1 m
- ▶ Surface: 10 m²
- ▶ Average weight: 36 kg

Nuraunderlay and Nuraseal are both non-hazardous products. Nuraflux, primer is a Class III Dangerous Goods and is flammable. Care is required in use.

To the best of our knowledge, the information in this brochure is accurate at the time of printing. Nuralite Waterproofing Ltd reserves the right to alter information, formulation or parameters at any time without notice.

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