

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 – Nuraply 3PM

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

Finishing

- ▶ Top surface finished with a dense mechanically rolled aggregate layer. Polyethylene film is on the 80mm lap joint strip. Aggregates are available in choice of colours – slate, charcoal, white, red or green (see sample card). May be overcoated with Nuracoat Glaze to maintain appearance.
- ▶ 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)

	Nuraply 3PM	Basesheet
▶ Tensile strength (U.E.A.t.c.):	L: 650 N T: 500 N	L: 650 N T: 500 N
▶ Elongation at break (U.E.A.t.c.):	L: 40% D: 40%	L: 45% D: 45%
▶ Resistance to heat (U.E.A.t.c.):	≥ 140°C	
▶ Low temperature flexibility (U.E.A.t.c.):	- 8°C	
▶ Dimensional stability:	0.5%	

	Nuraply 3PM	Basesheet
▶ Thickness:	4 mm	3 mm
▶ Length:	7.5 m	10 m
▶ Width:	1 m	1 m
▶ Surface:	7.5 m ²	10 m ²
▶ Average weight:	43 kg	36 kg

Nuraply 3PM, Nuracoat Glaze and No. 10 are non-hazardous products.

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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Pounamu Hotel, Queenstown

NURAPLY 3PM SYSTEM Technical Brochure

Product Description

Nuraply 3PM system is a tough, reinforced bituminous waterproofing membrane, of great strength, suitable for light maintenance foot traffic and finished in a choice of five standard shades of mineral chip.

The first layer consists of 10m x 1m rolls of 3mm thick Nurabasesheet which are laid by cold gluing with heat welded lap-joints. The cap sheet is 4mm thick of APP bitumen with a heavy reinforcing layer of non-woven polyester inside topped off with embedded mineral chips. The mineral chip surface provides a natural look while providing UV protection.

The membrane is manufactured by ATAB of Belgium. ATAB manufacture over 10 million square meters of membranes per annum.

BRANZ have appraised the Nuraply 3PM system as suitable for flat roofs.



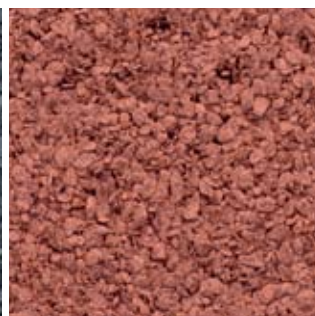
Nuraply 3PM - white



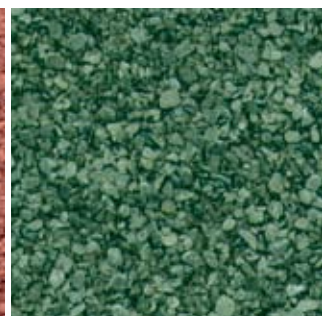
Nuraply 3PM - slate



Nuraply 3PM - charcoal



Nuraply 3PM - red



Nuraply 3PM - green

***Actual colours may vary from those illustrated.
Refer to Nuraply 3PM sample sheet for more accurate colour examples.**



NOTE: The BRANZ appraisal only covers a two layer Nuraply 3PM system so in future we recommend only specifying Nuraply 3PM as a two layer system.





Pounamu Hotel, Queenstown



North Shore house

When to use it

Nuraply 3PM has been developed for long-term, low maintenance waterproofing of steep or low pitched roofs and canopies in new or restoration situations.

Warranty

Nuralite warrants Nuraply 3PM against materials defects for 20 years from the date of installation. The warranty must be applied for at the completion of the job. For this extended warranty to remain current the customer must maintain the roof and have it inspected every five years by a qualified Nuralite applicator.

The workmanship is covered by a separate workmanship warranty issued by the applicator. Nuralite will inspect the completed job if requested.

Building Code Verification



BRANZ has appraised the Nuraply 3PM system and have concluded that it complies with NZBC E2 – weathertightness and B2 – durability.

We are happy to work with clients on any building consent issues, especially if something outside the scope of usual work is planned.

Things to consider

The substrate provides the foundation for a successful system. The two most common substrate problems are movement and ponding. To alleviate these ensure when plywood is being used that:

- ▶ The treated plywood substrate is at least 17.5mm thick, 20mm on decks, supported at 400mm x 400mm. The plywood must be tightly butted

and staggered or brick pattern laid. Stainless steel fixings and glue bonding of the plywood must be used.

- ▶ Falls are as much as possible. The BRANZ certificate is for a minimum of 1:40 for roof decks and 1:60 for gutters. Lower falls can be accommodated after consultation with our technical advisors. Pay attention to detailing around scuppers as they often are a source of ponding.

New concrete should be clean and free from defects, cured for a minimum of 28 days, graded to correct falls with a wood float finish incorporating fillets to upstands with all sharp edges removed.

Ventilation is very important to keep the ceiling space cooler, and so limit substrate movement, as well as removing condensation buildup. A Nuravent every 20m² is recommended but attention must be paid to placement relative to rafters to allow for cross flow air movement. Soffit vents can also be useful addition to a flat roof design.

Building maintenance is important. Annual cleans and visual inspections are recommended. Five yearly detailed inspections by Nuralite applicators are a warranty requirement.

To maintain appearance Nuracoat Glaze can be applied over top of the membrane. A passive mould killer may need to be applied to kill moss and mould debris during the life of the system. The membrane must not be waterblasted to avoid damage to the aggregate finish.

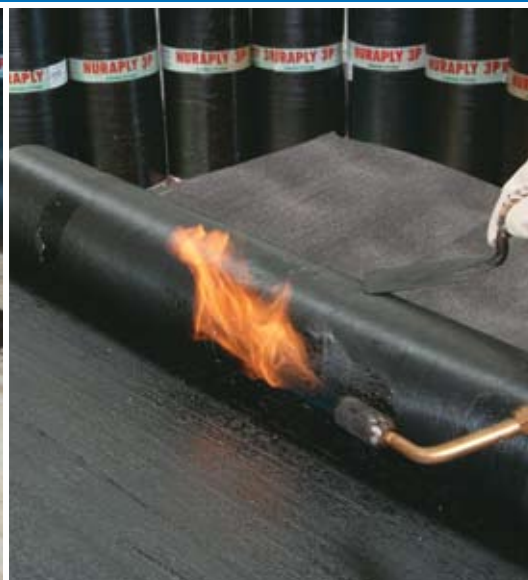
When you should not use Nuraply 3PM

Not for concrete or roof decks where excessive moisture or moisture vapour occurs – specify Nuraply 3PV ventilation system to allow moisture to continue to vent. Nuraply 3PV can be topped with 3PM if a two layer system is desired.

Not if the membrane is being tiled over. The preferred method is to use Nuraply 3P and keep the membrane



A/ Nurabond No. 10 adhesive



B/ Melting off protective sheet



C/ Welding lap joints

accessible by using Nurapads.

Not if water is being collected for drinking. Specify instead Nuraply 3P with a Nuracolour finish.

Not in box gutters as the chips slow the egress of the water. Use Nuraply 3P finished with Nuracoat BAC for these situations.

Not for Green roofs or planter boxes – specify the Nuraply 3PG system and related drainage mat to ensure the plant roots will not attack the membrane and that there is proper drainage within the waterproofing system.

Not in situations where the Nuraply 3P is likely to be exposed to high foot traffic or may be mechanically or chemically damaged. In these cases ensure the Nuraply 3P is completely protected by overlaying of pavers or similar.

Accessories

Nuratrim – a smart way to provide a sharp edge finish where the Nuraply must lap over the roof edge. Detailed to ensure watertightness. Available in mill finish, aluminium, powdercoated or painted.

Nuravents – low profile vents are unobtrusive but have a large capacity for air circulation.

See separate Nuralite Accessories brochure for a detailed discussion of these products

Drains & Scuppers – Nuralite recommends Allproof products for this purpose. Their complete range is stocked at Nuralite and is available to all Nuralite applicators.

General Application Method

1. Nurabond No. 10 cold adhesive is applied to the substrate. This ensures the Nuraply 3PM will be fully bonded to the substrate. **(Picture A)**

2. The base of the Nurabasesheet is lightly heated to melt the protective film – but not the sheet itself. This ensures the membrane is completely undamaged when it is laid. **(Picture B)**

3. The membrane is laid up the slope of the roof to allow for the best drainage flow towards the gutter.

4. The 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. The Nuraply 3PM cap sheet is offset from the runs of Nurabasesheet and is then fully heat welded to the Nurabasesheet.

6. 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.

(Picture C)

Applicators

All Nuralite authorized applicators have been trained in Nuralite's system 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.