1. GENERAL

This section relates to the application of NURAPLY 3PM roofing systems as external membrane waterproof coverings, with Nurajacks, fastened to:

- Construction plywood
- Cross Laminated Timber
- Concrete
- Accessories

to produce a fully adhered bituminous membrane system.

The specification is ideal for non-insulated structures such as gutters or canopies. Nuraply 3PM is suitable for decks though it must be protected from foot traffic by tiles or timber on Nurajacks. Ventilating the structure beneath the membrane requires specific design.

Note; Nuraply is suitable for roofs and decks, however on decks it must be protected from foot traffic by tiles or timber on Nurajacks.

1.1 DOCUMENTS

Documents referred to in this section are:
BRANZ Good practice guide - Membrane roofing

Documents listed above and cited in the clauses that follow are part of this specification. However, this specification takes precedence in the event of it being at variance with the cited document.

1.2 SUPPLIER'S DOCUMENTS

Supplier's documents from Nuralite Waterproofing Ltd relating to work in this section are:
CODEMARK CM70032 – The Nuraply 3PM Roofing Membrane System
BRANZ Appraisal 547 - Nuraply Roof Membranes
Nuraply 3PM Roofing Membrane Installation Manual
NURALITE ACCESSORIES NURAJACKS & NURAPADS – Technical Brochure
NURALITE Waterproofing Limited: CAD drawings
NURALITE NURAJACK – Installation Video

Copies of the above literature are available from NURALITE Waterproofing Limited.

Web:	www.nuralite.co.nz
Telephone:	0-9-579 2046 Auckland
	0800 Nuralite (0800 687 254)
Facsimile:	0-9-579 5136

Warranties

1.3 WARRANTY - INSTALLERS

The Nuraply applicator warrants this work under normal environmental and use conditions against failure of materials, waterproofing and execution.

5 years:	By the NURAPLY Applicator
From:	Date of completion of the application

Provide this warranty on the installer's standard form.

1.4 WARRANTY - MANUFACTURER

The NURAPLY applicator to provide warranty for the system under normal environmental and use conditions against failure.

20 years: Warranty period
From: Date of completion of the application

Provide this warranty on the NURALITE Waterproofing Limited Materials Performance Warranty form.

Requirements

1.5 NO SUBSTITUTIONS
Substitutions are not permitted to any specified system, or associated components and products.

1.6 QUALIFICATIONS
Roofing to be carried out by competent workers licensed by NURALITE Waterproofing Limited and experienced with NURALITE materials systems and specialist techniques.
Provide on request evidence of experience prior to commencing work.
Contact Nuralite at www.nuralite.co.nz/Applicator_List for a listing of approved applicators.

Performance

1.7 TEST
Where possible, flood test all gutters with a minimum 50mm depth of water at the outlet or scuppers for 24 hours. Make good any lack of water tightness when the surface is completely dry. Not all applications can be flood-test checked. All gutters should be checked.

1.8 PERFORMANCE
Accept responsibility for the weather-tight performance of the completed NURAPLY roofing system, including all penetrations through the roof and junctions with walls and parapets. In the event that there are issues relating to any aspect of this work, arrange for a meeting to resolve these issues. The following should attend:

- NURAPLY roofing applicator
- NURALITE Waterproofing Limited representative
- Contractor
- Principal
- Principal's consultant(s)

Refer to later EXECUTION clause on co-operating with others on the installation of elements which penetrate or adjoin the roofing system; including walls and parapets, skylights, sundry elements fixed through the roofing surface, service pipework, etc.

1.9 AS APPROVED
"As approved" means that the materials are compatible with NURAPLY 3PM roofing and are part of the system required by the roofing supplier for each specific location.

2. PRODUCTS

Select the appropriate NURAPLY 3P system from SELECTIONS and then use the PRODUCTS and EXECUTION clauses required for that particular system.

2.1 NURALITE WATERPROOFING MEMBRANE, BASE LAYER NURAPLY 3PBSA provides a 3mm thick first layer in two layer applications on timber.
NURALITE WATERPROOFING MEMBRANE, BASE LAYER or NURAPLY 3PV-SA provides a 3mm thick first layer in two layer applications on concrete.

2.2 NURALITE WATERPROOFING MEMBRANE, MINERAL FACE

NURAPLY 3PM single layer, 4mm thick reinforced fibre asphalt waterproofing membrane with textured mineral aggregate finish. Top layer over NURAPLY 3PB-SA base sheet for timber. NURAPLY 3PV-SA for concrete.

2.3 OUTLETS

As detailed and rebated into surfaces as required by NURALITE Waterproofing Limited. All outlets supplied by NURALITE Waterproofing Limited.

2.4 EDGE TRIM

To Nuralite Waterproofing Limited details and to suit the specific location. NURATRIM aluminium verge trim where detailed.

2.5 MS DETAIL or NURADECK BANDAGE SYSTEM

Liquid waterproofing to provide additional waterproofing protection.

2.6 COATING OVER NURAPLY 3PM (OPTIONAL)

Surface dressing: NURAGLAZE

2.7 ACCESSORIES

Accessories as required including:

Adhesive/Primer: NURAFLUX No. 10

Primer:	NURAFLUX QD
	NURAFLUX WB
Sealants:	IKO Stickall bitumen
	Soudal Gorilla MS
Bitumen Fillet:	NURALITE Triangular
Penetration Seal:	Lockin Pocket
Mounting Plate:	NURALITE Fixing Plate
Drip Edge:	“L” profile 50mm x 50mm

3. EXECUTION

Conditions

3.1 GENERALLY

Work and materials BRANZ Good practice guide - Membrane roofing, and to NURALITE Waterproofing Limited installation instructions.

3.2 STORAGE

Take delivery of rolls undamaged and include for site handling facilities where required. Stack on selvedge end down, off the ground on a level surface and with accessories. Store in shade or cover in hot sun. Protect liquid components from freezing.

3.3 LAYOUT

Refer to Building Plans for all details. Supplement with Nuralite generic details if situation is not covered on plans. If not detailed on the drawings, confirm the layout to suit site conditions and for the performance of the NURAPLY 3PM system. Stagger junctions of NURAPLY 3PM rolls to avoid 4-layer membrane build-up at corner lap joints. It is usual to lay Nuraply rolls up the slope.

Application - preparation

3.4 PRELIMINARY WORK

Ensure that preliminary work, including formation of falls, flashing rebates, grooves, ducts, provision of battens and fillets and outlets rebated to levels, is complete and properly

constructed to enable the system to work as intended. This work and the substrate to be smooth, clean, and dry.

3.5 ACCEPTANCE OF SUBSTRATE

Confirm that the substrate, including fillets, sumps, rebated outlets, and projections, will ensure NURAPLY work of the required standard. Ensure the substrate is smooth, clean, and dry. Complete “Substrate Readiness Checklist” at end of this specification

3.6 TIMBER SUBSTRATE

Plywood

Ensure that sheets have been stretcher bond laid to falls, are rigid, with joints flush, edges arrised, no lumps or hollows, smooth, clean, dry, and free of debris. Plywood grain across the line of supports below. Plywood sheets supported at 600mm centred rafters and nogs for roofs and decks unless detailed otherwise. All roof edges need to be timber framed to protect the insulation sheets from compression damage. Minimum finished (constructed) falls to be 1:80 for roofs and 1:100 for gutters. Design fall recommended of 1 in 40 for roofs to provide for deflection and construction tolerance.

*Plywood substrates are best fixed with stainless steel counter-sunk screws, glued down and joints tight butted. Specify in *** 799 ***, along with a requirement to bring the substrate up to an acceptable standard for this clause. The design and construction of the substrate and movement and control joints is specific to each building so must be considered by the building designer. Generally require 17mm plywood for roofs, 21mm for decks. Rafters and nogs at 600 centres with all plywood edges supported. Screws to be 150mm spaces around edges and 200mm spaces across the plywood sheets. Tongue and Groove plywood does not negate any of the above requirements.*

Cross Laminated Timber

To be fixed as per the manufacturer’s instructions. Laid to falls, are rigid, with joints flush, edges arrised, no lumps or hollows, smooth, clean, dry and free of debris. Minimum finished (constructed) falls to be 1:80 for roofs and 1:100 for gutters. Design fall recommended of 1 in 40 for roofs to provide for deflection and construction tolerance.

3.7 MOISTURE ABSORBENT SUBSTRATE

Cover a moisture absorbent substrate and ensure that the base is kept covered and dry until over laid.

3.8 FIRST LAYER ON TIMBER

Lay the first NURAPLY 3PBSA layer into NURAFLUX NO.10 or NURAFLUX QD or WB primer to NURALITE Waterproofing Limited requirements, with joints to be welded a minimum of 80mm down the roll edges and 100mm across the roll ends. Lay in order from low points, sumps, through gutters, valleys, eaves, verges main roof and upstands to cover flashings.

3.9 LAYING AND JOINTING SECOND LAYER

Lay the second NURAPLY 3PM layer by heat fusing over the surface of the first layer in the same sequence. Joints in the second layer must not correspond with joints in the first layer. Second layer joints to be welded, a minimum 80mm wide down roll edges and minimum 100mm wide across roll ends, to NURALITE Waterproofing Limited requirements. Roll junctions must be staggered to avoid 4-layer lap-weld build-up of NURAPLY 3PM at corners. Ensure unobstructed drainage flow at outlets.

3.10 WELD JOINTS

Heat fuse joints minimum width 80mm side and 100mm end laps using NURALITE Waterproofing Limited self-checking lap welding techniques.

3.11 PENETRATIONS

Form mould, weld and flash all upstands, downturns, and penetrations to NURALITE Waterproofing Limited details including raised, anti-ponding water deflectors on the upside of penetrations.

3.12 MOVEMENT JOINTS

Form and weatherproof movement joints as designed to NURALITE Waterproofing Limited details.

3.13 JUNCTIONS

Check that adjoining walls and parapets are prepared ready for the installation of NURAPLY roofing. Confirm that openings have been prepared ready for the installation of skylights and other penetrations through the roof.

Required work includes the following:

- Roofing installation neatly finished to all sides of openings and to all wall and parapet junctions.
- Installation of flashings (those required to be installed prior to installation of penetrating elements and/or wall linings).

3.14 CONCRETE SUBSTRATE

Ensure wood float concrete substrate has been allowed to cure for at least 28 days before commencing application. Prepare surface, including vacuum cleaning and patching with NURAPATCH as necessary to leave smooth, clean, dry, and free of debris.

3.15 MOISTURE ABSORBENT SUBSTRATE

Cover the moisture absorbent dry-laid base and ensure that the base is kept covered and dry until NURAPLY is laid. Only apply the NURAPLY BASE SHEET when the moisture content is below 5%.

3.16 FIRST LAYER ON CONCRETE

Lay the first NURAPLY 3PV-SA layer into the NURAFLUX primed substrate to NURALITE Waterproofing Limited requirements, with joints to be welded a minimum of 80mm down the roll edges and 100mm across the roll ends. Lay in order from low points, sumps, through gutters, valleys, eaves, verges main roof and upstands to cover flashings.

3.17 LAYING AND JOINTING SECOND LAYER

Lay the second NURAPLY 3PM layer by heat fusing over the surface of the first layer in the same sequence. Joints in the second layer must not correspond with joints in the first layer. Second layer joints to be welded, a minimum 80mm wide down roll edges and minimum 100mm wide across roll ends, to NURALITE Waterproofing Limited requirements. Roll junctions must be staggered to avoid 4-layer lap-weld build-up of NURAPLY 3PM at corners. Ensure unobstructed drainage flow at outlets.

3.18 WELD JOINTS

Heat fuse joints minimum width 80mm side and 100mm end laps using NURALITE Waterproofing Limited self-checking lap welding techniques.

3.19 PENETRATIONS

Form mould, weld and flash all upstands, downturns, and penetrations to NURALITE Waterproofing Limited details including raised, anti-ponding water deflectors on the upside of penetrations.

3.20 MOVEMENT JOINTS

Form and weatherproof movement joints as designed to NURALITE Waterproofing Limited details.

3.21 JUNCTIONS

Check that adjoining walls and parapets are prepared ready for the installation of NURAPLY roofing. Confirm that openings have been prepared ready for the installation of skylights and other penetrations through the roof.

Required work includes the following:

- Roofing installation neatly finished to all sides of openings and to all wall and parapet junctions.
- Installation of flashings (those required to be installed prior to installation of penetrating elements and/or wall linings).

4. Finishing

4.1 APPLY SURFACE DRESSING TO NURAPLY 3PM (OPTIONAL)
Apply NURAGLAZE as two thin coats to NURALITE Waterproofing Limited details.

4.2 ACCESS BOARDS
Provide access boards for later operations and remove when no longer needed.

4.3 FOOT TRAFFIC
Do not allow construction foot traffic directly on the NURAPLY 3PM installation after laying to avoid dirt and damage to the surface.

In areas where ongoing maintenance traffic is anticipated, fully bond a third layer of Nuraply 3PM in a contrasting colour to act as a walkway and wear course.

4.4 ACCEPTANCE
Arrange for an inspection of the completed work. Protect and maintain roofing until completion of the contract works.

4.5 SUBSEQUENT WORK
Make good any covering cut or deformed by later work. Making good to take the form of inserting a new whole or part infill sheet to maintain the appearance of the covering as originally laid.

Completion

4.6 CLEAN UP
Clean up as the work proceeds.

4.7 LEAVE
Leave work to the standard required by following procedures as specified and to NURALITE Waterproofing Limited details.

4.8 REMOVE
Remove debris, unused materials, and elements from the site.

4.9 DOCUMENTATION
Complete “Project Signoff Checklist” at the end of this specification. Retain all documentation and project photos for later reference.

5. SELECTIONS
Substitutions are not permitted to the following, unless stated otherwise.

5.1 TWO LAYER NURAPLY 3PM SYSTEM

Location:	~
Brand:	NURALITE Waterproofing Limited
First layer:	NURAPLY 3PB-SA plywood NURAPLY 3PV-SA for concrete
Substrate adhesion:	NURAFLUX #10 or NURAFLUX QD or NURAFLUX WB
Second layer:	NURAPLY 3PM

Colour: ~

Finishes

5.2 COATING (OPTIONAL, RECOMMENDED FOR POTABLE WATER COLLECTION)
Brand: NURALITE Waterproofing Limited
Type: NURAGLAZE
Number of coats: 2

5.3 NURAJACKS
A Tile/Paving or Timber Decking support system that is height adjustable and includes a selflevelling head to automatically compensate for the deck gradient or any difference in the level of the substrate.
Available in the following height ranges:

Nurajack 0	28-38mm
Nurajack 1	37.5-50mm
Nurajack 2	50-75mm
Nurajack 3	75-120mm
Nurajack 4	120-170mm
Nurajack 5	170-215mm
Nurajack 6	140-230mm
Nurajack 7	185-275mm
Nurajack 8	235-325mm
Nurajack 9	205-345mm
Nurajack 10	250-385mm
Nurajack 11	300-400mm
Nurajack 12	270-455mm
Nurajack 13	315-500mm
Nurajack 14	365-550mm

Available with two different head configurations:
1. Tile Head
2. Joist Head

5.4 NURAJACK STAR.T
A Tile/Paving or Timber Decking support system with a fixed head that is adjustable from 8mm to 15mm. With addition of Nurajack Star.B, the Nurajack Star.T can be increased in height by an additional 5mm. Up to 3 Star.B bases can be used to achieve a total of 30mm

5.5 NURAPADS
A Tile/Paving or Timber Decking support system that is of a fixed 12mm height. Commonly used on small decks or where there is insufficient space between the internal floor level and the deck to accommodate the NURAJACK system.

5.6 NURAJACK SHIM
A shim available in 1mm, 2mm & 3mm. Suitable for levelling Nurapads or when laying variable thickness stone on Nurajacks.

5.7 NURALITE CLADDING SPACERS
A self-adhesive conical rubber grommet that separates the tile/paver from the opposing cladding/joinery. Available in 5mm, 10mm or 14mm thickness.

5.8 NURAJACK ADJUSTMENT KEY
Adjustment tool for adjusting the Nurajacks from above the tiled/paved surface.

5.9 NURAJACK ACOUSTIC/ISOLATION PAD

Made from either polypropylene or EPDM the Acoustic / Isolation pad acts as an interface between the Nurajack and a membrane (if required by the membrane manufacturer). The Acoustic / Isolation pads add to the acoustic performance of the Nurajack, dampening the noise of footfall between building levels.

5.10 QUANTITIES

Use NURALITE's Quantity Calculator on www.nuralite.co.nz or www.nurajack.co.nz to determine the number of NURAJACKS required. The number required is a function of the deck dimensions and the size and structure of the tiles.

6. EXECUTION Conditions

6.1 STORAGE

Take delivery of jacks and confirm quantities are as documented.

6.2 LAYOUT

If not detailed on the drawings, confirm the layout to suit site conditions. Confirm with the Tile or Paver supplier or architect to determine if additional supports are required under the middle or along the side of the chosen tile or paver or joist.

Installation – Tiles or Pavers

6.3 ACCEPTANCE OF SUBSTRATE

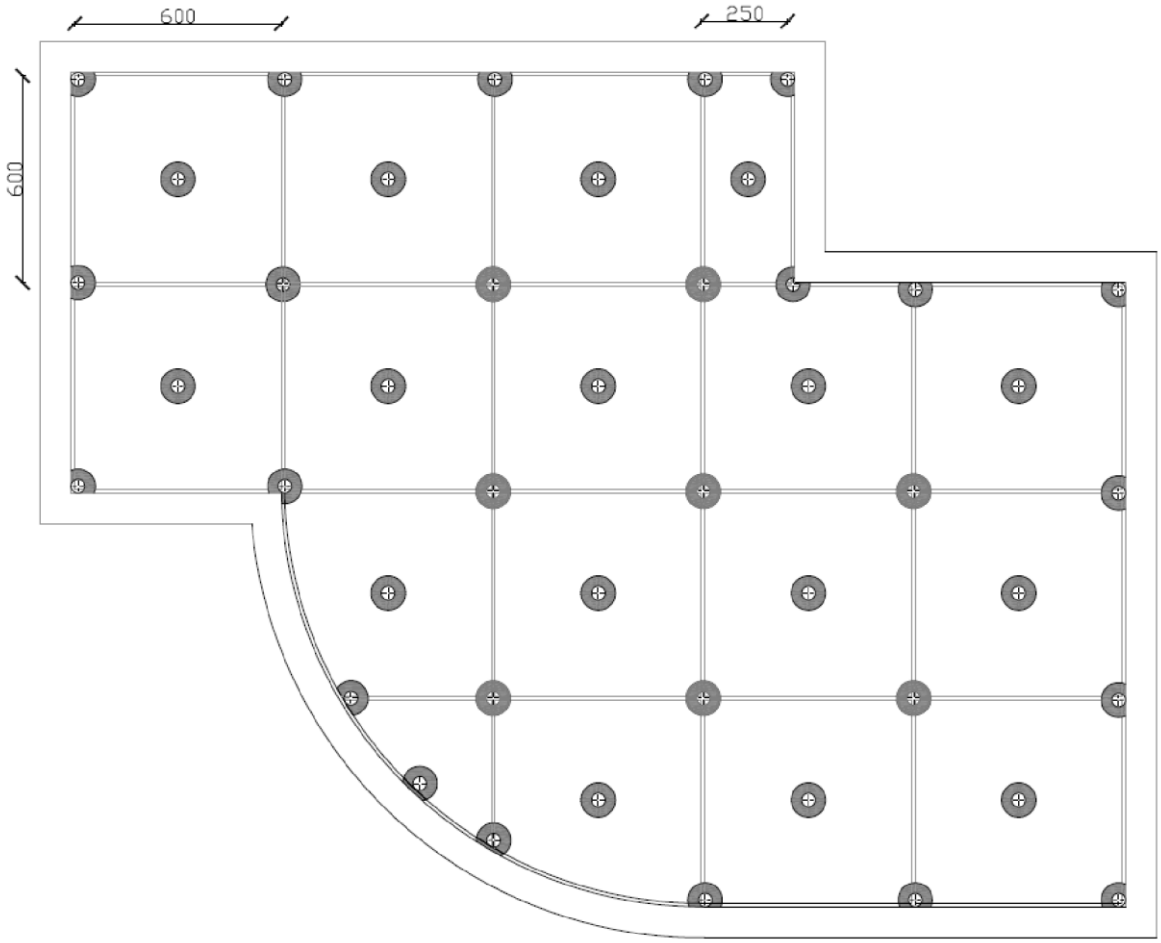
Confirm with the builder that the substrate has been completed. In particular the waterproofing membrane must be certified as being watertight.

6.4 COMMENCEMENT

Start installation in one corner of deck.
Lay paver on supports and adjust heights until the paver is at the required level.
For installation at a corner, remove all fins and slide NURAJACK in under paver. If adjacent to a sidewall, remove two spreader fins and install with fins perpendicular to the wall.

Use a Nuralite Cladding Spacer to brace the paver against the cladding to ensure the paver cannot move around.

THIS DRAWING IS INDICATIVE ONLY AND BY NO MEANS COMPREHENSIVE



If required by the Paving Supplier place an additional NURAJACK under the centre of the paver or tile.

Finishing

6.5 CONTINUATION

Place two NURAJACKS parallel to the installed ones and adjust to the approximate required height. Lay paver on NURAJACKS and fine tune so that the paver is completely stable.

If installing a cut tile/paver against a structure, the Nurajack base can be cut down as far as the thread to ensure the cut tile has support at its edge. This will stop the tile/paver from being unstable.

Remember to brace the pavers against the cladding by using a Nuralite Cladding Spacer. Failure to do this will mean the deck may become loose and unstable.

Repeat the process until all pavers are installed.

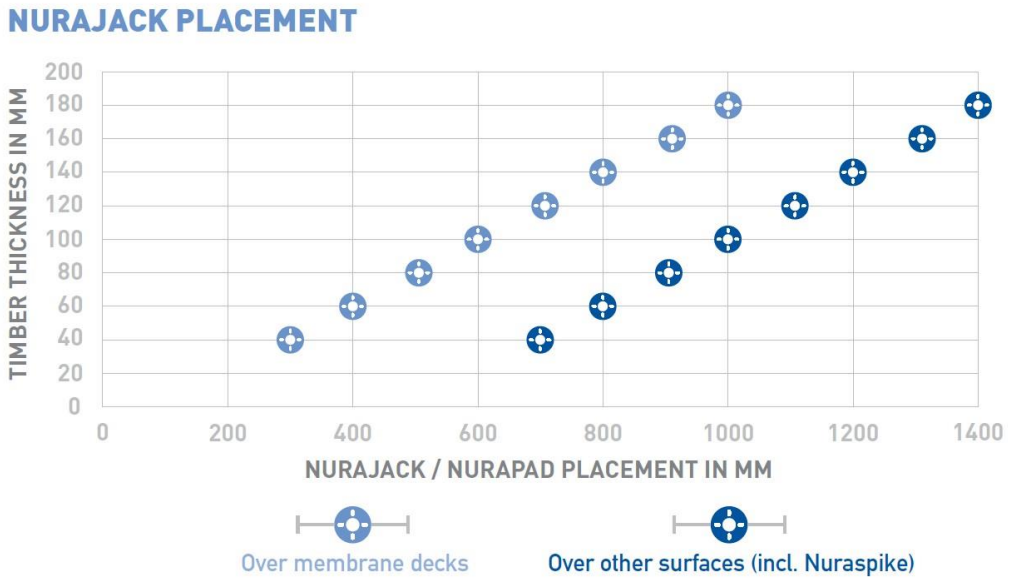
6.6 ACCEPTANCE

Arrange for an inspection of the completed work.

Nurajack Installation with timber overlay

6.7 COMMENCEMENT

Place the Nurajacks directly on to the laying surface. The distance between them will depend on the supporting joist (timber or aluminium), the joist depth and the decking planks' loading capacity. See the below Placement Graph:



6.8 CONTINUATION

Lay the joists on to the paving supports. In the case of natural wood joists, fix them to the Nurajacks by using self-drilling 8mm stainless steel screws. Pay attention especially when Nurapads, SE0, SE1 and SE2 Nurajacks are used, in order to avoid any screw exiting from the back of the pedestal and potentially damaging waterproofing underneath.

Adjust the heights of the Nurajacks so that the joists are completely level. Place the planks on the joists in the opposite direction. Fix the planks using stainless steel screws or clips. Follow the timber decking supplier's specification for decking board spacing between each plank for water drainage.

On smaller decks, Nurapads may be used to separate the deck from the membrane. The joists can be tapered in the opposite direction to the fall of the deck to produce a level timber deck surface.

Completion

6.9 CLEAN UP

Clean up as the work proceeds.

6.10 REMOVE

Remove debris, unused materials and elements from the site.

7. SELECTIONS

7.1 NURAJACKS

Location:	~
Supplier:	NURALITE Waterproofing Limited
Brand:	NURAJACKS
Size:	~
Number:	~

	Accessories	Nurajack Shim, Nuralite Cladding Spacers
7.2	NURAPADS	
	Location:	~
	Supplier:	NURALITE Waterproofing Limited

NURAPLY 3PM MEMBRANE ROOFING SYSTEM INSTALLED ON A TIMBER OR CONCRETE SUBSTRATE WITH NURAJACKS

Brand:	NURAPADS
Size:	~
Number:	~
Accessories	Nurajack Shim, Nuralite Cladding Spacers **ions**

Product Selection and Limitat

Substrate	Concrete	Timber	Existing Membrane
Minimum Finished (Constructed) Falls (excluding Gutte	1:80	1:80	1:80
Recommended Design Fall (excluding gutters) (A)	1:60	1:40	1:60
Gutters	1:100	1:100	1:100
Substrate Comments	Create required slope with a screed. Wait for concrete and screed to cure.	Using 17mm (roofs) or 21mm (decks) plywood, rafters at 600 centers, nogs at 600 centers.	Confirm substrate is sound
Adhesive/Primer			
Nuraflux QD or WB	Yes	Yes	Yes
Nuraflux #10		Yes	
Basesheet			
Nuraply 3PB-SA		Yes	
Nuraply 3PV-SA	Yes		Yes
Capsheets			
Nuraply 3PM	Yes	Yes	Yes
Nuraglaze	Optional	Optional	Optional
Notes			

A) For the purpose of the Codemark certificate roofs must have a minimum finished fall of 1:80.
For design purposes, a minimum 1:40 finished fall should be assumed for plywood and metal substrates or 1:60 for concrete

Safe2Torch Check List (Prior to base sheet Installation)

It is recommended that anyone preparing a specification or applying a membrane should complete this check sheet and if any boxes are ticked avoid the use of a direct torch-on application in these areas.

Project Name: _____

Form Completed by: _____

Company: _____

Area ready: _____

Applicator _____

Decks and Insulation

Timber / Other combustible materials. ☐

Metal deck (refurbishment) where old materials may accumulate in the troughs. ☐

Insulation – unless specifically designed and tested for use with torch-on membranes. ☐

Details

Expansion joints with voids and/or combustible fillers. ☐

Bitumen or timber fillets. ☐

Detail under all abutments to roof tiles, slates and roofing iron. ☐

All timber substrates. ☐

Change in level details with fixed timber or plastic facias and/or all soffits, gutters or restricted spaces. ☐

Windowsills and frames, door sills, louvered vents, air ducts, intakes and outtakes. ☐

Junctions to existing waterproofing with flammable insulation/deck materials. ☐

Vulnerable plastic curbs, domes, pipes and the like. ☐

Working when in close proximity to potentially flammable coatings and shrinkwrap. ☐

Cladding and roofing underlays. ☐

Working in close proximity to stored chemicals, flammable liquids and explosives. ☐

Existing weathering components with concealed flammable materials.

NURAPLY 3PM MEMBRANE ROOFING SYSTEM INSTALLED ON A TIMBER OR CONCRETE SUBSTRATE WITH NURAJACKS

NURALITE
FLAT ROOFS | BUILT RIGHT

These include:

Timber, DPC or sarking membranes beneath fixed metal capping systems. ☐

Existing kitchen extraction plant coated in oils or fats. ☐

Flammable wrapping to trunking/ducting/bitumen sheet rolls and roll inserts. ☐

Timber cladding. ☐

Existing metal or plastic copings/capping's. ☐

Notes

Signed: Date:

Timber Substrate Readiness Check sheet (Prior to base sheet Installation)

Project Name: _____

NURAPLY 3PM MEMBRANE ROOFING SYSTEM INSTALLED ON A TIMBER OR CONCRETE SUBSTRATE WITH NURAJACKS

NURALITE
FLAT ROOFS | BUILT RIGHT

Form Completed by: _____

Company: _____

Area ready: _____

Applicator _____

Fax Number: _____

Structure complies with the New Zealand Building Code and plywood complies with AS/NZ 2269 ☐

H3.2 CCA treated plywood sheets 17mm thick for roofs, 21mm thick for decks. ☐

Plywood sheets supported at 600mm centred rafters and nogs for roofs and decks. Unless otherwise specified. ☐

Sheets stagger lay (fully offset) with falls as per plan. ☐

5mm clearances from all abutments, 5mm radius to all exposed edges. ☐

All sheet edges supported, fixed 150mm on edges and 200mm through girth, edges butt-jointed with no gaps except at abutments. ☐

Sheets fixed by gluing and Stainless Steel countersunk screw fixing. ☐

Fillets installed to all internal junctions and neatly fitted. ☐

Mitres neatly formed. ☐

Rainwater outlets and overflow recesses formed to fit outlets rebated into the Surface. ☐

Sharp edges and lips removed and cavities filleted. All joints flush. ☐

Plinths formed for any exterior ventilation, solar panels or fixtures. ☐

Substrate dry, (less than 20% moisture), clean, firm and suitable condition for laying . ☐

When substrate is ready complete this form and fax to the Nuralite *applicator*

Notes

Signed by head contractor Date:

Concrete Substrate Readiness Check sheet (Prior to base sheet installation)

Project Name: _____

Form Completed by: _____

Company: _____

Area ready: _____

Applicator _____

Fax Number: _____

Structure complies to the New Zealand Building Code and concrete complies with NZS 3101 (2006) ☐

Concrete cured with curing membranes removed. Concrete substrate contains less than 5% moisture content. ☐

Surface smooth and clean with falls as per plan. ☐

Cavities and cracks filled with Nurapatch, flushed off and cured. ☐

Concrete surface firm with any soft concrete or laitance removed. ☐

Ponding areas removed. ☐

Roof drains and overflow recesses formed to fit rebated outlets. ☐

Mortar or Nuralite Bitumen fillets to all upstands and smooth 5mm radius to all external edges ☐

If terminating into a chase, pre-form the chase and ensure it's Straight and 20mm deep. ☐

Plinths formed for any exterior ventilation, solar panels or fixtures. ☐

Construction joints incorporated in slab as per designers specification. ☐

Substrate clean, firm and suitable condition for laying the Nuralite systems. ☐

When substrate ready complete this form and fax to the Nuralite *applicator*

Notes

Signed by head contractor Date:

Checklist for Project Signoff

Project Name: _____
Builder Firm: _____
Applicator Firm: _____
Area covered by QC Sheet _____

Roofing membrane installation item	Comply Y/N/Na	Comments
Substrate readiness form completed		
Under flashings installed to all corners and upstands (pay attention to parapets, gutters, junctions)		
Gutters correctly and neatly installed, particularly the internal corners		
Roof drains & overflows installed to specification and watertight		
Membrane adequately adhered to substrate with no evidence of bubbles or lifting. Correct quantities of primer or adhesive used as per specification.		
Cap sheet and basesheet fully bonded together, no areas of delamination.		
Cap sheet side laps 80mm and end laps 100mm fully welded and tidily seamed off.		
No sign of overheating/excessive bitumen bleed from laps (over 2-3mm).		
Cap sheet and base sheet laps offset satisfactorily. No three layer lap build-ups		
Overall installation free of wrinkles, creases and splits		
All penetration details completed to specification including under/over flashing		
Standard details used throughout including at upstands, parapets, construction joints		
All non-standard details installed as per preapproved specifications (attach approved drawing)		
Gutters and outlets have been flood tested		
Any damage to cap sheet repaired to specification.		

Note: Where an element identified in the above checklist is not applicable, please record N/A in the comply column.

NURAPLY 3PM MEMBRANE ROOFING SYSTEM INSTALLED ON A TIMBER OR CONCRETE SUBSTRATE WITH NURAJACKS

NURALITE
FLAT ROOFS | BUILT RIGHT

Remedial action required:

Note of damaged areas repaired:

Signed Builder _____
Date: _____

Signed Applicator _____ Date: _____

NURAPLY MAINTENANCE PROGRAMME

To get the longest life from a roof it must be regularly inspected & maintained.

When first installed the building owner should arrange inspections each spring and autumn, to enable the effects of annual extremes of weather to be checked. Following that an annual program of roof inspection and cleaning should be established by the building owner as part of general building maintenance.

Roofs exposed to high levels of pollution or in close proximity to trees might require more frequent inspection.

Any inspection of a roof should include the interior of the building for signs of water penetration or condensation and for alterations, which may have affected the roof. Externally, abutting construction, which can affect the performance of the roof, should also be inspected.

Annual Inspections & Cleaning **Inspections**

The inspection should concentrate on “high risk” areas such as hatches, drains and around all roof top equipment, as well as a general inspection of the entire roof. Inspections should also include the examination of the roof deck if possible from the underside for evidence of leaks, deteriorated decking, structural cracks or movement and other deficiencies. Parapets and edging should also be examined for evidence of cracking, deterioration and moisture infiltration.

Damage

If damage is found on the roof surface it should be repaired immediately by an approved Nuralite Applicator. They will use NURAPLY 3PM component products and special techniques to achieve neat, unobtrusive reinstatement of the NURAPLY 3PM.

Cleaning

Location, traffic level, effective drainage, and service use will dictate cleaning requirements. Sweeping clean followed by hose and broom washing of the NURAPLY 3PM roof is recommended, not water blasting. If mould does appear it should be removed with a long-term mould killer such as Nuracide.

The building owner may do this them self or engage an approved applicator if they prefer.

Five Year Authorised Service Checks

To maintain the material defects warranty, every five years the owner must engage an Approved Applicator to inspect the roof and ensure it remains in good condition. Failure to maintain the roof system will void the warranty.

The Applicator must thoroughly check the roof for signs of damage, water ingress or potential problems.

	Applicator	Date	Signed
Inspection 1			
Inspection 2			
Inspection 3			
Inspection 4			

INSPECTION CHECKLIST

1) Surface:

a) bare patches in solar reflective finish or chippings;
b) accumulation of loose chippings;
c) accumulation of silt or vegetation;
d) loose, inadequately supported or broken paving slabs;
e) exposed insulation (protected membrane roofs);
f) areas of ponding.

2) Membrane:

a) blistering, ripples, rucking, detachment;
b) cracks, splits, tears, punctures, indentations;
c) pimpling, pitting, crocodiling;
d) pulled, unbonded laps;
e) softening of surface.

3) Substrate:

a) depressions in surface;
b) lack of support/soft support to membrane.

4) Rainwater outlets:

a) blocked;
b) not bonded to membrane (if bonded type);
c) clamping ring loose (if clamped type).

5) Upstands:

a) damaged/detached flashings;
b) sagging membrane;
c) splits, cracks, tears;
d) membrane unsupported at fillet;
e) unbonded laps;
f) blistering.

6) Eaves/verge:

a) unbonded or peeling membrane;
b) cracking/splitting or strain in membrane;
c) displacement or signs of movement of edge trim.

7) Movement joints, upstand type:

a) unsealed capping joints;
b) dislodged flashing/capping;
c) unbonded laps.

8) Movement joints, proprietary flush type:

a) unbonded laps;
b) splits, cracks, tears.

9) Abutting construction:

a) parapet copings cracked, loose, unsealed;
b) damaged damp-proof course, lack of continuity in damp-proofing;
c) open joints, cracking in construction;
d) loose/missing pointing.

10) Roof fixtures and penetrations:

a) upstand defects as above;
b) roof light glazing defects;
c) damaged/missing flashings;
d) balustrade/vent pipe, loose or missing flashing or collar;
e) plant plinth damaged/missing flashing;
f) lightning conductor tape, fixing loose/detached

NURAPLY 3PM MEMBRANE ROOFING SYSTEM INSTALLED ON A TIMBER OR CONCRETE SUBSTRATE WITH NURAJACKS

PRODUCT CERTIFICATE

This is to certify that

Nuraply 3PM Torch-on Membrane for Roofs and Decks

CODEMARK™

Product description

Nuraply 3PM system is a tough, reinforced, double-layer torch-on bituminous waterproofing membrane system for new and existing roofs and decks.
Nuraply 3PM capsheet is used with one of the Basesheet options:

- Nuraply 3PB
- Nuraply 3PB-SA
- Nuraply 3PV
- Nuraply 3PV-SA

The Nuraply 3PM torch-on membrane system may also incorporate Enertherm PIR insulation board.

Product purpose or use

The Nuraply 3PM double layer torch on membrane system provides a durable waterproofing system for installation by approved installers, on new and existing roofs and decks of any size.

Certificate holder

Nuralite Waterproofing Ltd.
60D Leon Leicester Avenue,
Mt Wellington, Auckland 1060 NZ
Phone 09 579 2046
Email: info@nuralite.co.nz

CodeMark Product Certification Body

Bureau Veritas Australia Pty Ltd
3/435 Williamstown Road,
Port Melbourne VIC, 3207
Ph: 1800 655 190
www.bureauveritas.com.au

Sam Guindi
Product Certification Manager

For and on behalf of
Bureau Veritas Australia Pty Ltd

Complies with the New Zealand Building Code (NZBC):
If designed, used, installed and maintained in accordance with the scope of this certificate, the above mentioned product will meet or contribute to meeting the following provisions of the NZBC:

Durability B2.3.1(b), B2.3.2(a)
External Moisture E2.3.1, E2.3.2, E2.3.7
Hazardous Building Materials F2.3.1

Subject to the following conditions and limitations:

1. Nuraply 3PM torch-on membrane shall be installed in accordance with the Nuraply 3PM Roofing Membrane Installation Manual Edition 1 March 2019, by a Nuralite Waterproofing Ltd approved installer (see www.nuralite.co.nz/applicator to find an approved installer).
2. Where a Nuraply membrane is applied to a timber substrate the timber shall be preservative treated. Such preservative treatments shall not be LOSP (light organic solvent preservative) or CuN (copper nitrate).
3. Nuraply 3PM torch-on membrane is suitable only for light maintenance foot traffic.
4. Nuraply 3PM torch-on membrane shall have a minimum finished fall (excluding gutters) of 1:80.
5. It may be installed on a cold roof with insulation installed below the substrate or as a warm roof (known as Nuratherm) with Enertherm insulation installed above the substrate.
6. The system shall only be used with the following substrates:
   - H3.2 treated Timber, including plywood sheets and reconstituted wood panels (Strandboard), timber substrates complying with AS/NZ 2269:2012 (directly or with Enertherm PIR Boards between) with treated timber trim, battens and framing where timber is detailed and Nuralite product is directly applied
   - Concrete substrates complying with NZS 3101:2006 (directly or with Enertherm PIR Boards between)
   - NPM 900 metal tray decks with Enertherm PIR boards between.
7. The system may be installed in all NZS 3604:2011 Wind Zones, up to and including Extra High.
8. Ventilation of timber roof spaces must be specifically designed.

JAS-ANZ
WWW.JAS-ANZ.ORG/REGISTER

21 April 2020
Date of Issue

CM70032
Certificate Number

MINISTRY OF BUSINESS, INNOVATION & EMPLOYMENT
HĪKINA WHAKATUTUKI

- This certificate is issued by an independent certification body accredited by JAS-ANZ, the product certification body appointed by the Chief Executive of the Ministry of Business, Innovation and Employment under the Building Act 2004. The Ministry does not in any way warrant, guarantee, or represent that the building method or product the subject of this certificates conforms with the New Zealand Building Code, nor accept any liability arising out of the use of the building method or product. The Ministry disclaims to the extent permitted by law, all liability (including negligence) for claims of losses, expenses, damages, and costs arising as a result of the use of the building method(s) or product(s) referred to in this certificate.
- The certificate holder must maintain compliance with the conditions set out in section 15 of the Building (Product Certification) Regulations 2008. This certificate may only be reproduced in its entirety.
  It is advised to check that this certificate is currently valid and not withdrawn or suspended by referring to the Register of Product Certificates on the Building Performance website http://www.building.govt.nz.