

**VERIFICATION
OF
NURADECK
ROOFING
AND
WATERPROOFING
SYSTEMS**

FOR

**NURALITE
WATERPROOFING
LIMITED**

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CONTENTS

1. INTRODUCTION
2. TECHNICAL AND SPECIFICATIONS
3. HANDLING AND STORAGE
4. DESIGN INFORMATION
5. BUILDINGS TO NZBC ACCEPTABLE SOLUTION E2/AS1
FEBRUARY 2005
6. STRUCTURE
7. DURABILITY
8. MAINTENANCE
9. OUTBREAK OF FIRE
10. SPREAD OF FIRE
11. EXTERNAL MOISTURE
12. INTERNAL MOISTURE
13. INSTALLATION INFORMATION
14. SYSTEM INSTALLATION
15. WARRANTIES
16. HEALTH AND SAFETY
17. BUILDING REGULATIONS
18. QUALITY
19. APPENDICES:
 - i. Materials Performance Warranties
 - ii. Installation Details
 - iii. Nuratrim Aluminium Eaves Trim Data Sheet
 - iv. Nuravents Data Sheet
 - v. Nurapads Paving Support
 - vi. Nuradeck Systems Producer Statement
 - vii. Producer Statement Nuralite Roofing Systems Collection of Drinking Water
 - viii. Nuradeck Roofing and Water proofing Systems Service History
 - ix. Verification Inspections
 - x. Nuradeck Projects Picture Gallery
 - xi. Testimonials
 - xii. Nuradeck Tech Sheet & Sample
 - xiii. Nuradeck Maintenance Guidelines

VERIFICATION OF THE NURADECK ROOFING AND WATER-PROOFING SYSTEMS

1.0 INTRODUCTION

1.1 Scope

The Managing Director of Nuralite Waterproofing Ltd has commissioned the Joyce Group Limited to review the Nuradeck System and prepare a verification report identifying how compliance with the NZ Building Code for the following clauses is achieved:

- Clause B2 Durability
- Clause E2 External Moisture

1.2 Verification Report

The report considers the data provided by Nuralite Waterproofing Ltd and its associated manufacturing partner for Nuradeck Systems.

Nuradeck Systems have waterproofed buildings in New Zealand, the Pacific Islands, Singapore, Taiwan and Hong Kong for over 12 years.

The former owner of Nuralite, Phil Fry, was involved introducing and developing the original Nuradeck type liquid gel fibreglass reinforced waterproofing to New Zealand, from Australia over 25 years ago. The Nuradeck system represents the latest improvements of the original technology. The original technology was based on a reinforced coating developed for driving vehicles over, as waterproofing for carparks.

2.0 TECHNICAL SPECIFICATION

2.1 Product Information

Nuradeck is a tough coloured acrylic gel, liquid-applied, elastomeric, jointless fibreglass reinforced membrane.

Nuradeck materials manufactured in New Zealand, supplied for use in New Zealand, the Pacific Islands and Asia have been specifically developed over many years and tested in New Zealand to suit the New Zealand, Pacific and Asian conditions.

The Nuradeck system is designed for application externally or internally to roofs, decks, gutters or walls constructed in concrete, plywood and stable sheet materials.

The Nuradeck system is made up of a quick drying, water-based coloured Nuradeck Gel, applied in a series of coats, encapsulating fibreglass reinforcing

to form a jointless flexible membrane 1-1.5mm thick. The satin surface finish is stippled and slip resistant.

2.2.1 Physical & Test Data

PHYSICAL DATA		
COLOUR: Most standard or matched colours		CHEMICAL RESISTANCE: Resistant to most commercial chemicals in low concentration
GLOSS Satin Finish		
*DRY FILM BUILD: 400 Microns *TENSILE STRENGTH: 0.3MPa		FIRE RESISTANCE: Does not support combustion
*ELONGATION AT 20°C 300% *WATER SWELLING: 7% (7 days immersion)		APPLICATION AIR TEMPERATURE RANGE: 10°C to 35°C SOLVENT: Water
*WATER PONDAGE No water transmission (7 days immersion) WATER VAPOUR Slightly permeable, but prone to trapped moisture PERMEABILITY: vapour bubbling.		PACKAGING: NURADECK GEL: 20 litres pails FIBREGLASS MATT: 30kg ± rolls
* UNREINFORCED FILM OF NURADECK GEL		

2.3 Component Products

2.3.1 Nuradeck Gel is a thick quick drying coloured acrylic gel.

Nuradeck Gel is formulated in four compositions for varying climatic and application conditions:-

- Nuradeck Standard Gel (general purpose)
- Nuradeck Winter Grade Gel (for cold application conditions)
- Nuradeck C Gel (for poor weather application conditions and greater chemical resistance)
- Nuradeck 'H' Gel (for heavy use areas)

The range of products have been specifically developed and manufactured in British Standard or matched colours for conditions in New Zealand, the Pacific and Asia.

2.3.2 The chopped strand fibreglass reinforcing mat is nominally 300gm/m² emulsion bound grade. A 230gm/m² grade is also used for fine detail application.

2.3.3 Edge Trim

Install in accordance to Nuralite Waterproofing Ltd details (*Appendix ii – details 1-5*) and to suit the specific location. Nuratrim aluminum verge trim may be used where detailed. *Refer Appendix iii.*

2.3.4 Ventilators

Nuravents in plywood roofs to Nuralite Waterproofing Limited specification. Round or square Nuravents are available. *Refer Appendix iv.* The General guide is one Nuravent per 20m² of roof area.

3.0 HANDLING AND STORAGE

3.1 Handling and storage of all Nuradeck materials whether on/or off site is under the strict control of Nuralite Waterproofing Limited and their associated specialist applicators.

Dry storage in shaded situations must be provided. Avoid freezing liquid accessories.

The accessories should always be stored off the ground on a level surface.

4.0 DESIGN INFORMATION

4.1 Typical Nuradeck Systems substrate requirements are as follows: -

4.1.1 Load-bearing structure incorporating either:-

- i. A stable insitu concrete deck or pre-cast components with a stable topping layer.
- ii. A stable timber framed structure clad with plywood or a stable sheet substrate.
- iii. The deck is to be constructed to graded falls of a minimum of 1:50 with sufficient slope to drain all surfaces. Rebate outlets to avoid water buildup in these areas.
- iv. Rain water collection gutters are to be constructed to minimum graded falls of 1:100. Rebate outlets to avoid water build up in those areas.

4.1.2 Nuradeck Systems are composed of a fibreglass reinforcement layer encapsulated in liquid applied acrylic elastomeric gel.

4.1.3 Integral roof or deck features, such as perimeter walls, skylights, rainwater collection points, and guttering which are fundamental to an effective roofing system must be designed and constructed in accordance with the performance qualities of the Nuradeck System. Ponding water must not occur on Nuradeck, to avoid premature deterioration by dry/ wet/ increase/ freeze/ thaw conditions.

4.1.4 The completed and cured Nuradeck system is suitable for foot and wheeled traffic and furniture. A period of post installation hardening to full strength, occurs after Nuradeck is laid.

- 4.1.5 Nuradeck is a very effective internal only “wet areas” waterproofing, for tiling over, or as a finish on both floors and walls.
- 4.1.6 On external roofs and decks, Nuradeck can be overlaid with timber decking or Nurapad supports and paving. Nuradeck has never been recommended for tiling over on external surfaces. Nuraply 3P is the alternative system for that purpose. For specific requirements, Nuradeck C grade can be used for external water proofing under tiles, when acrylic-compatible tile adhesives and pointing are used.
- 4.1.7 Plywood must comply with AS/NZS2269: 2004 Plywood – Structural and treated to NZ Timber Preservation Council Hazard level H3.1. LOSP treated plywood is compatible with, Nuradeck.
- Plywood must be Structural Grade Plywood fixed with glue and stainless steel screws with the sanded C Face to receive the Nuradeck with butted joints with no gaps between the sheets. Upstands to be filleted, with sharp edges arrissed.
- 4.1.8 Standard Nuralite systems design details are provided for Nuradeck installations, *see Appendix ii for the complete set.*
- 4.1.9 Nuradeck is compatible with, and can be applied over the Nuraply 3P system to create deck or terrace surfaces, defined walkways or other trafficable areas, or to accommodate very difficult flashings details.
- 4.1.10 Nuradeck is used widely for maintenance and remedial work to solve leaking problems and to overlay and renovate existing finishes such as butyl rubber, tiles, asphalt and bituminous membranes.

5.0. BUILDINGS CONSTRUCTED TO NZBC ACCEPTABLE SOLUTION E2/AS1 FEBRUARY 2005

5.1 Substrate

- 5.1.1 Existing concrete substrates should be treated with Nuracide Mould Killer and cleaned to new concrete standard. Level with Nurapatch to remove any ponding water if possible.
- 5.1.2 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.
- 5.1.3 Plywood shall be 17.5mm thick laid to correct falls in a stagger bond pattern across support elements with face grain running in one direction, glued and screwed to timber framing. Screws are to be counter-sunk and spaced at 100mm centres on edges and 200mm centres on intermediate supports.

Sheets at butt joints shall finish flush with no lumps or hollows to provide a smooth, clean and dry deck free of debris. Fillets are to be provided at all

upstands and all downturns are to have sharp edges rounded off. Rainheads to be formed around downpipes.

- 5.1.4 Other stable sheet products shall be 18mm thick laid in a stagger bond pattern to correct falls, glued and screwed to timber framing. Sheets must be laid across the joists. The method of installation shall follow the manufacturer's specific instructions.

Fillets shall be installed at upstands and all sharp edges shall be rounded with butt joints finishing to an even plane.

5.2 Roof Drainage

- 5.2.1 Roofs must be constructed so that falls and drainage to comply with Paragraph 8.5.6 of NZBC Acceptable Solution E2/AS1 February 2005. The roof must be constructed with 1.50 minimum falls and gutters must be constructed 1.100 minimum falls.

5.3 Junctions and Penetrations

- 5.3.1 Junctions of the roof to walls must comply with paragraph 8.58 and penetrations must comply with 8.59 at NZBC Acceptable Solution E2/AS1 February 2005.

6.0 STRUCTURE

6.1 The Load-Bearing Structure

This is the surface on which the Nuradeck roofing protection system rests. Its function is to resist deformation from the permanent load of its own weight and by temporary loads imposed by the use to which it is put, maintenance and weather conditions such as snow, rain, wind etc.

6.2 The Laying Surfaces and Inclination

The load-bearing structure also creates the laying surface for the Nuradeck system.

It is the function of the load-bearing structure to remain true and level in plane and ensure there is sufficient incline for the down flow and removal of rainwater.

- 6.3 Structural movement of the substrate must be adequately allowed for, and movement joints provided. The configuration and location of the joints in the substrate should be carefully considered. Conventional construction and movement (including seismic) joint details may be used.

The BRANZ Good Roofing Membrane Practice gives guidance in this area. Nuralite provided contributions to this book are acknowledged in it.

- 6.4 The Nuradeck installation must be considered as part of the total roof design, and as such will need to be stopped at formed waterproof construction and structural movement control joints where these are installed. Construction/control joints must be constructed in accordance with the details of the current technical literature for Nuralite Roofing Systems.

Structural movement control joints can create stress on roof membranes if they are not designed and installed correctly.

- 6.5 Ventilation to the roof cavity must allow for airflow throughout the cavity. The number of air vents will depend on the depth of the cavity and whether soffit vents are installed. One Nuravent per 20m² of roof area plus air induction vents in soffits are recommended.

7.0 DURABILITY

7.1 Serviceable Life

The first Nuradeck type acrylic formation and system in New Zealand, which the former owner of Nuralite was then associated with occurred in 1979. These systems remain in service, under their original name. Performance and durability of professionally applied reinforced acrylic gel technology, over 25 years with minimal maintenance, has been very good.

Nuradeck roofing installations have exceeded 12 years use in New Zealand the Pacific and Asia.

Based on the history of this type of product in New Zealand, and my observations of the Nuradeck System in service (*see Appendix ix*) I conclude that Nuradeck Systems are expected to have a serviceable life of at least 15 years provided the installation is designed, installed, specified and maintained in accordance with Nuralite Waterproofing Ltd technical literature.

7.2 Chemical Resistance

Nuradeck is resistant to wind borne salt deposits and most commercial chemicals in low concentration.

8.0 MAINTENANCE

- 8.1 Preventative maintenance is very important to ensure long term performance of a Nuradeck installation.
- 8.2 After any structural alteration or the installation of plant or equipment, the Nuradeck installed should be inspected by a specialist applicator and remedial work carried out as required.

- 8.3 A Nuradeck installation should be regularly checked for damage, to remove rubbish or debris and to ensure gutter outlets do not become blocked. The surface should be washed down with a hose and broom to clean it.
- 8.4 Damage repair shall be carried out by an approved applicator using Nuradeck component products in accordance with the instructions of Nuralite Waterproofing Ltd to achieve neat unobtrusive reinstatement.
- 8.5 Nuradeck can be easily cleaned, Nuracide mould killed, patched, reinforced sanded, and generally repaired at any time of its in service life. Completely overcoating with a new layer of Nuradeck Gel in the same colour, or a new colour is a simple operation. Upgrading Nuradeck to ensure an enduring life cycle is easy and low cost.
- 8.6 Appendix xiii has a complete description of the maintenance requirements for a Nuradeck system

9.0 OUTBREAK OF FIRE

Direct heat sources in Nuradeck roofs such as flues and chimneys must incorporate heat shield casing. In service Nuradeck does not support combustion.

10.0 SPREAD OF FIRE

- 10.1 Nuradeck systems may be used on roofs of buildings intended for all Purpose Groups, including SC and SD, subject to the requirements of NZBC Acceptable Solution C/AS1 Part 7, Paragraph 7.11.1.
- 10.2 Nuradeck systems may be used for cladding fire-rated roof construction, providing the roof construction complies with the requirements of NZBC Acceptable Solution C/AS1 Part 7.

11.0 EXTERNAL MOISTURE

- 11.1 Nuradeck Roofing and Waterproofing Systems, when installed in accordance with the Nuralite Waterproofing Ltd technical data will provide a surface finish which will shed precipitated water and melted snow, and prevent the penetration of water that could cause undue dampness or damage to building elements.
- 11.2 The Nuradeck Systems must be installed and maintained in a weatherproof state at a minimum recommended fall of 1:50. All finish details must be as described in the Nuralite Waterproofing Ltd technical data.

- 11.3 At penetrations, Nuradeck terminations must be raised to a level above that of any possible ponding which may be caused by blockage of roof drainage facilities.

11.4 Provision for Snow

Specific weather tightness design for preventing the ingress of snowmelt water is required in accordance with the requirements of NZBC Acceptable Solution E2/AS1 February 2005 Paragraph 1.3.

12. INTERNAL MOISTURE

- 12.1 The impermeability of Nuradeck Systems requires that consideration must be given to the effective control of moisture in the roof structure. Closed-in construction spaces under the Nuradeck must have adequate ventilation to prevent the accumulation of moisture. Venting and vapour barrier requirements will depend on the level of moisture that is present in the construction at the time of the installation, the “R” or “insulation” value of the ceiling/roof construction, and the type of occupancy.

13. INSTALLATION INFORMATION

13.1 Installation Skill Level Requirement

Installation of Nuradeck Systems must be completed by Nuralite Waterproofing Limited trained associated specialist applicators.

14. SYSTEM INSTALLATION

14.1 Application – Preparation

14.1.1 Preliminary Work

Ensure that preliminary work, such as formation of falls and flashing rebates, grooves and ducts, provision of battens, rounded edges, fillets and overflows, installation of NURAVENTS and countersinking edges and outlets, is complete and properly constructed to enable the Nuradeck system to work as intended. This work and the substrate need to be smooth, clean and dry. Falls on roofs to be 1 in 50 minimum and gutters 1 in 100 minimum.

14.1.2 Acceptance of Substrate

Confirm that the substrate, including falls, surface finish, fillets, sumps, countersinking terminations and projections, will permit Nuradeck work of the required standard.

14.1.3 Concrete Substrate

Ensure concrete substrate, is minimum 28 days cured, graded to correct falls, woodfloat finish, no sharp edges clean and free of debris.

14.1.4 Plywood / Stable Sheet Substrate

Ensure that sheets have been stagger bond laid, and fixed with stainless steel screws glued across rafters to correct falls, are rigid with butt joints flush, no lumps or hollows, smooth, clean, dry and free of debris. All upstands to be filleted, all downturns to have edges rounded off and countersinking drainage areas to avoid water pooling.

14.1.5 Moisture Absorbent Substrate

Apply Nuradeck Gel thinned with water to a maximum of 20% by volume at the rate of 8-10m² per litre. Allow to dry. Ensure penetration of the surface.

14.2 Applying the Nuradeck System

14.2.1 Joint Reinforcing

Use a 50mm brush or roller and Nuradeck Gel to apply 50mm wide fiberglass reinforced strips over all plywood joints. Allow to dry.

14.2.2 Base Coat

Roll on one full coat of Nuradeck Gel at 6m²/ per litre and allow to dry.

14.2.3 Fibreglass Reinforcing Mat

Roll out fibreglass mat into a wet coat of Nuradeck Gel taking care to keep edge of the mat in a straight parallel line, and avoiding wrinkling.

Work from the low point of the deck.

Force the mat into wet Nuradeck Gel with the roller, until gel comes through and saturates the fibreglass. Continue this process until full length of the area has been covered. Thin the Nuradeck Gel with water if necessary to ensure saturation of the fibreglass mat (very important to avoid “wicking” of water).

A further coat of a thinned or neat Nuradeck Gel can be applied to ensure the fibreglass is fully saturated with gel.

Allow to dry. Sand the surface if necessary, to remove any “daggy” areas or roughness in fibreglass finish.

Apply two (2) or more topcoats of Nuradeck Gel at about 4.0m² per litre per coat, ensuring that an even finish is achieved with all fibreglass completely sealed in Nuradeck Gel at a total coverage of 1.5 litre of Gel on every square metre of substrate.

- Work from the low points up the deck.
- “Teasing” the cut edge of the fibreglass helps to make overlaps less visible.
- Overlap fibreglass edges a minimum of 25mm.
- Dry and cure each coat before applying the next coat.

14.2.4 Penetrations

Form and flash all upstands, downturns and penetrations in accordance with the Nuradeck technical detail specification. *Refer Appendix ii.*

14.2.5 Movement Joints

Form and flash movement joints as designed in accordance with the Nuradeck technical specifications.

14.3. Finishing

14.3.1 Finishing

Finish all Nuradeck laying, detailing, terminations, cappings and over flashings to a fully weatherproof condition, to ensure performance of the Nuradeck installation as intended.

14.3.2 Foot Traffic

Foot traffic is not allowed on the Nuradeck installation after laying. Soft flat-soled shoes are necessary for essential foot traffic.

14.3.3 Access Boards

Provide access boards and Nuradeck protection for later operations and remove when no longer needed.

14.3.4 Acceptance

Arrange for an inspection of the completed installation of the Nuradeck Systems.

14.3.5 Subsequent Work

Make good any Nuradeck cut or damaged by later work by cutting out, filling in or overlaying damaged areas with Nuradeck application as required. Repairs can be neatly made in a Nuradeck installation at any time.

14.3.6 Clean up

Clean up as work proceeds.

14.3.7 Leave

Leave work to the standard required by following procedures, as described in the specification and according to Nuralite Waterproofing Ltd details.

14.3.8 Remove

Remove debris, unused materials and elements from the site.

15. WARRANTIES

- 15.1 The applicator of the Nuradeck Waterproofing System will provide a dedicated Nuralite Waterproofing Limited Materials Performance Warranty. *Refer Appendix i*
- 15.2 The applicator of the Nuradeck Waterproofing System will provide a dedicated Workmanship Warranty as specified.

16. HEALTH AND SAFETY

- 16.1 Nuradeck Gel is a non-hazardous product. Nuradeck fibre glass mat can cause skin irritation.
- 16.2 The Nuradeck system is a suitable surface for the collection of drinking water. The Nuradeck installation should be fully cured and washed or rained heavily on before connecting to water tanks, to remove minor curing resin deposits. *Refer Appendix vii for Producer Statements*
- 16.3 Nuradeck products contact to sensitive areas should be avoided. Wash and clean up with water or soap and warm water.

17. BUILDING REGULATIONS

- 17.1 In my opinion the Nuradeck Waterproofing System, if designed, specified, installed, maintained and used in accordance with the statements and conditions of the Nuralite Waterproofing Limited technical data, and the conditions of this report, will meet or exceed the following provisions of the NZBC.
- Clause B2 Durability*
Performance B2.3.1(b) 15 years.
The Nuradeck Waterproofing System meets this requirement. See paragraphs 7.1 and 7.2 of this report.
- Clause E2 External Moisture*
Performance E2.3.1 and E2.3.2. The Nuradeck Waterproofing System meets these requirements.
See paragraphs 11.1 to 11.5 of this report.

18. QUALITY

- 18.1 All Nuradeck manufacturing personnel, facilities and procedures are rigidly monitored checked and tested at the New Zealand production plant. The production plant has operated for fifteen years and is environmentally compliant certified.

Quality monitoring is conducted by International Primary Resin Suppliers Territorial Authorities and BRANZ Inspectors, under the BRANZ Q.C.A. programme. The special acrylic-compatible fibreglass reinforcing is

manufactured to ASTM D578-00 standard specification for glass yarns-designation under Lloyds Register Quality Assurance Standard ISO9001:2000.

- 18.2 The quality of Nuradeck materials supplied by Nuralite Waterproofing Limited is the responsibility of Nuralite Waterproofing Ltd.
- 18.3 Quality on site is the responsibility of Nuralite Waterproofing Limited associated specialist applicators.
- 18.4 Designers are responsible for the building design, and building contractors are responsible for the quality of construction of substrate systems in accordance with the designer's specifications and guidance of Nuralite Waterproofing Limited.
- 18.5 Building owners are responsible for the maintenance of the Nuradeck Systems in accordance with the instructions of Nuralite Waterproofing Ltd.

SOURCES OF INFORMATION

- AS/NZS 2269: 1994 Plywood-Structural
- Approved Document for New Zealand Building Code External Moisture Clause E2, Building Industry Authority, February 2005.
- NZ Building Code Handbook and Approved Documents, Building Industry Authority 1992.
- BRANZ Good Roofing Membrane Practice Reprint October 2003.

Ron Thurlow
JOYCE GROUP LIMITED

Appendices

i) Materials Performance Warranty

ii) Installation Details

(also available on www.nuralite.co.nz)

iii) Nuratrim Aluminum Eaves Trim Data Sheet

iv) Nuravents Data Sheet

v) Nurapads Paving Support

vi) Nuradeck Systems Producer Statement

**vii) Producer Statement for Nuradeck Roofing Systems
Collection of Drinking Water**

viii) Nuradeck Roofing and Waterproofing Systems Service History

PERFORMANCE HISTORY- WELLINGTON REGION

To establish a performance record and view installation details of the Nuradeck system, inspections were made on completed projects –

1. 46 Grafton Road

The installation was completed in 2000 by Builders Plastics Ltd.

The system was applied on a concrete sub-strate over a garage and on a concrete stairway providing access to the garage roof.

The garage roof was accessible to foot traffic as it provides the access area for the cablecar to service the home.

The membrane was in good order and no splits, delaminations or mechanical damage was evident.

There was some evidence of debris build up in the gutter and the surface was dirty in part. This had not had any detrimental affect on the membrane.

No leaking through the membrane system was identified.

2. Cnr Kainui and Waipapa Road, Kilbirnie.

The system was completed in 2004 by Thistle Roofing.

The system was applied on a plywood substrate to a front door landing.

The system was applied including upstands behind wall claddings.

Internal corners were formed with fillets as recommended.

The membrane was in good order and no splits, delamination or mechanical damage was evident.

No water penetration through the membrane to the soffit below was evident.

3. 1 & 1a Hadfield Terrace, Kelburn

The system was completed in 2005 by an installer under the supervision of Ivan Cook Nuralite Technical Adviser Southern Region.

The system was applied on a plywood substrate to a landing from an upper bedroom.

The system was applied including upstands behind wall claddings and at a door threshold. A sill flashing was fitted at the door threshold. Internal corners were formed with fillets as recommended.

The membrane was in good order and no splits, delaminations or mechanical damage was evident.

No evidence of water penetration through the membrane to the soffit below was evident.

ix) Nuradeck Roofing And Waterproofing Systems -Service History And Testimonials

These are illustrative only and aside from the projects examined in Appendix vii) they have not been independently verified

The Nuradeck Roofing and Waterproofing System and its predecessors have been fixed successfully on a range of buildings and have provided trouble free performance for periods in excess of 20 years which exceeds the NZ Building Code B2 Durability requirements of 15 years.

Building Description	System Installed
City Council Building Moving Time Ball	Whangarei
War Memorial Museum Roofs	Auckland
High Court Gutters (over Butyl Rubber)	Auckland
Delamere Luxury Lodge Roofs	Waiheke Island
Parnell Apartment Roofs (replacing two layer EPDM)	Auckland
Showgrounds Public Terraces	Auckland
Franklin Council Hall Gutters (replacing butyl rubber)	Pukekohe
Westpac Bank Roofs (over butyl rubber)	Hamilton
Council Libraries Roofs and Gutters	Orewa & Whangaparaoa
American Embassy roofs decks and gutters	Fiji
Carpark Decks Taipei and Kaohsiung	Taiwan
Tengah Military Airbase Roofs and other Roofs	Singapore
Wool House Roof Decks (replacing butyl rubber)	Wellington
Anglican Cathedral Roofs and Gutters	Wellington
ARO street development Roof and deck	Wellington
Richmond Working Men's Club Deck	Christchurch

The summary is for varied locations where Nuradeck Systems have been installed throughout New Zealand protecting structures ranging from baches and luxury homes to police stations and Civic buildings.

Since date 1994 Nuradeck systems have been used successfully throughout the Pacific Islands, Asia and New Zealand.

x) Nuradeck Projects Picture Gallery

*These are illustrative only and aside from the projects examined in Appendix vii)
they have not been independently verified*

xi) Testimonials

*These are illustrative only and aside from the projects examined in Appendix vii)
they have not been independently verified*

xii) Nuradeck Tech Sheet and Sample

xiii) Nuradeck Maintenance Guidelines

NURADECK

MEMBRANE CARE AND MAINTENANCE GUIDE

Introduction

NURADECK liquid gel and fibreglass jointless membrane is suitable for decks, terraces, roofs and solid concrete carparks and can be finished in any selected colour.

Key features of NURADECK are

- 1.2mm thick tough jointless, vehicle and foot trafficable waterproofing system
- Reinforced, liquid, coloured, slip resistant finish
- For exterior decks, carparks, terraces, roofs and gutters
- For internal only “wet areas” waterproofing, under tiles
- 15 years Materials Performance Warranty
- Skilled Applicator installation service

Periodic Inspections

A periodic inspection program should be established by the building owner.

Inspections should begin when the system is completed followed by two inspections in the first year and then annually thereafter.

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 or deck area. Inspections should also include the examination of the roof or 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.

Cleaning, Maintenance and Repair

NURADECK has an integral mould inhibitor in the surface, so maintenance will be minimal. Location, traffic level, effective drainage, and service use will dictate maintenance requirement. Sweeping clean and occasional hose and broom washing of a NURADECK system is recommended, not waterblasting.

Surface wear can sometimes necessitate the need to resurface the membrane so that it retains a quality appearance. Redressing the NURADECK surface requires cleaning, followed by a new application of NURADECK Gel. This restoration is quick and inexpensive, if required.

If the NURADECK is damaged, the damaged areas must be thoroughly cleaned. A qualified NURALITE Applicator then uses NURADECK component products and special techniques to achieve neat, unobtrusive reinstatement of the NURADECK.