



EXPIRES 31 Mar 2026

BEAL Appraisal Certificate



The TRAFFIGARD Waterproofing System from Hitchins NZ Ltd.



Product

- 1.1 The TRAFFIGARD Waterproofing System from Hitchins NZ Ltd, is a tried and proven liquid applied membrane used primarily for the waterproofing of roofs, decks and wet area floors and walls.
- 1.2 The TRAFFIGARD Waterproofing System comprises a primer coat, base coat, laminated reinforced layer of fiber-glass mat and resin, fill in coat and two top colour coats.
- 1.3 The TRAFFIGARD Waterproofing System is used for the waterproofing of wet area floors and walls, roofs and decks by persons trained and approved by Hitchins NZ Ltd. within the scope and limitations described in the Appraisal-holder's Technical Manual.

Building Regulations

- 2.1 In the opinion of BEAL, the TRAFFIGARD Waterproofing System, when designed, installed and maintained in accordance with the statements and conditions of this Appraisal Certificate, will meet the following provisions of the New Zealand Building Code:

Clause B1 MECHANICAL / ADHESION PROPERTIES

The TRAFFIGARD Waterproofing System meets the requirements of Performance B1.3.2. See paragraph 7.1

Clause B2 DURABILITY

Performance B2.3.1 (b) 15 years for new or repair work. The TRAFFIGARD Waterproofing System meets this requirement. See paragraph 8.1

Clause D1 ACCESS ROUTES

Performance D1.3.3. (h) The TRAFFIGARD Waterproofing System meets this requirement. See paragraph 9.1

Clause E2 EXTERNAL MOISTURE

Performance E2.3.1. The TRAFFIGARD Waterproofing System meets this requirement. See paragraph 10.1

Clause E3 INTERNAL MOISTURE

Performances E3.3.3, E3.3.4 & E3.3.5 Wet area Floors and Walls incorporating the TRAFFIGARD Waterproofing System meets this requirement. See paragraph 11.1

Clause F2 HAZARDOUS BUILDING MATERIALS

Performance F2.3.1. The TRAFFIGARD Waterproofing System meets this requirement and will not present a health hazard to people. See paragraph 12.1

- 2.2 The TRAFFIGARD Waterproofing System has been appraised as an **Alternative Solution** in terms of the NZBC.

Applicant:

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The most up to date version of this BEAL Appraisal Certificate can be viewed at www.beal.co.nz

Scope and Limitations

- 3.1 The TRAFFIGARD Waterproofing System has been appraised for use as a waterproofing membrane over roofs, decks, floors and wall substrates that are sound construction and in compliance with the NZBC, Hitchins product data-specs, Hitchins specifications and Hitchins Traffigard waterproofing technical manual;
- 3.2 The design and construction of any suspect supporting structure and substrate, including control joints, or termination points or the like, are to be to specific design and are therefore the responsibility of the owner/building designer and are outside the scope of this Appraisal Certificate.
- 3.3 The TRAFFIGARD Waterproofing system shall be installed only by Hitchins NZ Ltd. trained and approved applicators.

Technical Literature

- 4.1 The TRAFFIGARD Waterproofing System Technical Literature **Ver 9** must be read in conjunction with this Appraisal. All aspects of design, use, installation and maintenance contained within the Technical Literature and scope of this Appraisal Certificate must be followed.
- 4.2 For a copy of this Technical Literature please contact Hitchins NZ Ltd.

Technical Specification

- 5.1 The product can be applied over well prepared surfaces and sound substrates that have been prepared as covered in the Hitchins Traffigard specifications and the Traffigard System application instructions. Materials and accessories supplied by Hitchins Ltd. are as follows:

- **TRAFFIGARD Formstick**
is a 2 component waterbourne epoxy primer for cementitious substrates
- **TRAFFIGARD Preseal**
is an alkyd solvent based single component primer for plywood substrates
- **TRAFFIGARD Epoflush**
is a 2 component epoxy flushing compound to fill screw holes and blemishes in the plywood substrate
- **TRAFFIGARD Bodycoat Summer Grade**
is a single component hi-build thixotropic acrylic summer grade resin.
- **TRAFFIGARD Bodycoat Winter Grade**
is a single component hi-build thixotropic acrylic winter grade resin.
- **TRAFFIGARD Aquaflex Tape**
incorporates a neoprene rubber membrane with flexible cloth on both sides for bandaging upstand junctions and expansion joints.
- **TRAFFIGARD Fibreglass Chopped Strand Mat**
is available in bandages 150mm and 270mm widths and full sheets 1 meter wide in grades 300, 250, 200 & 150 gram weights.
- **TRAFFIGARD Topcoat Summer Grade**
is a single component hi-build colour coat in 12 standard colours.

- **TRAFFIGARD Topcoat Winter Grade**
is a single component hi-build colour coat in 12 standard colours

J61 Silica sand

is added to the topcoat to provide non-slip properties where required

Traffiglaze

is a single component clear acrylic glaze to provide improved durability and waterproofing

Formrok 335

is a 2 component coloured urethane to provide improved durability, chemical and ponding resistance properties

Coverbond (Bond Cement)

is a 2 component acrylic based waterproof membrane (incorporating fine mesh reinforcement over the Traffigard membrane on plywood substrates and for embedding tiles.

Traffigard One

Is a single component moisture cured thixotropic hi-build polyurethane finish with excellent durability and chemical resistant properties.

They all form part of the multi-layer stage Traffigard Membrane System.

- 5.2 Refer to the TRAFFIGARD Waterproofing System Technical Literature for the method of application.

Handling and Storage

- 5.3 All components must be stored inside, in a well ventilated area, up off concrete floors, kept dry, out of direct sunlight and away from freezing conditions. The membrane products, in the original unopened containers, have a shelf life of 24 months from date of manufacture.

Design Information

General

- 6.1 The TRAFFIGARD Waterproofing System is used for the waterproofing of roofs, decks and wet area floors and walls, such as bathrooms, toilet areas, laundries and where applicable, kitchens.

- 6.2 Before any application can be carried out, it is essential that a careful inspection of the intended areas to be waterproofed, is completed as set out in the e TRAFFIGARD Waterproofing System Technical Literature.

Adhesion - Clause B1.3.2

- 7.1 The applied TRAFFIGARD Waterproofing System has good adhesion to a wide range of substrates and therefore meet the requirements of clause B1.3.2.

Durability - Clause B2

- 8.1 The TRAFFIGARD Waterproofing Membrane, when used in accordance with this Appraisal Certificate and in keeping with Hitchins specifications, subject to normal conditions of environment, use, and good housekeeping maintenance, is expected to have a serviceable life of at least 15 years.

Access - Clause D1

- 9.1 The TRAFFIGARD Waterproofing system, when used in accordance with this Appraisal Certificate and maintained as described in the manufacturer's technical literature, will provide adequate slip resistance for access routes.

External Moisture - Clause E2

- 10.1 The TRAFFIGARD Waterproofing System will comply with the requirements of this clause when the system is applied to roofs and decks, which shall follow the



procedures set out in the Technical Manual, subject to the limits described therein and elsewhere in this appraisal document.

Internal Moisture—Clause E3

11.1 The TRAFFIGARD Waterproofing Membrane System will comply with the requirements of this clause when the system is applied to walls and floors in wet areas, which shall follow the procedures set out in the Hitchins specifications and Technical Manual, subject to the limits described therein and elsewhere in this appraisal document.

Hazardous Building Materials - Clause F2

12.1 Performance F2.3.1. The cured TRAFFIGARD Waterproofing Membrane System when installed according to the requirements of this appraisal meets this requirement and will not present a health hazard to people using the building.

Installation Information

Installation Skill Requirement

13.1 Installation of the TRAFFIGARD Waterproofing Membrane System must be carried out under the supervision of a person who has been trained and approved by Hitchins New Zealand Ltd.

13.2 Application Over Repaired Substrates

The installation of the TRAFFIGARD Waterproofing Membrane System over any repaired parts of a substrate such as a floor or wall in wet areas, other than for very minor repairs, is subject to specific design and outside the scope of this Appraisal Certificate.

13.3 Membrane Remedial Work

The TRAFFIGARD Waterproofing Membrane mechanical damage is easily repaired and resurfaced with the Traffigard Membrane system. Hitchins NZ Ltd provides a comprehensive range of specifications to cover surface preparation, remedial work to the TRAFFIGARD Waterproofing Membrane system.

13.4 Health and Safety

The safe use and handling of the coating system and related components are provided in the Technical Literature. The products must be used in conjunction with the relevant materials safety data sheet for each component.

Basis of Appraisal

BEAL use the compliance verification procedure to demonstrate compliance with the relevant clauses of the NZBC based on a risk analysis procedure. The following is a summary of the technical investigations carried out:

Assessments

14.1 The following assessments of the TRAFFIGARD Waterproofing System have been undertaken by BEAL: Review of test data and technical literature supplied by Hitchins NZ Ltd.

Previous Assessments

- Both CSIRO and The Joyce Group have carried out extensive assessments of the performance of the TRAFFIGARD Waterproofing Membrane and were able to verify compliance with the relevant provision of the New Zealand Building Code.

Testing

14.2 The following testing of the TRAFFIGARD Waterproofing System has been undertaken by CSIRO to verify conformance with AS4858 Wet Area Membranes:

- Durability by way of adhesion testing to a particle-board substrate
- Durability by way of tensile and elongation testing before and after conditioning
- Durability by way of testing of crack-bridging over cyclic moving cracks
- Water vapour resistance
- Water absorption according to AS 3558

In-service History

14.3 The TRAFFIGARD Waterproofing System has been in use and, when subject to the manufacturer's requirements, performed satisfactorily for the past 45 years in New Zealand and other parts of the world, in a wide range of conditions.

Other Investigations

15.1 An opinion has been given by BEAL of the durability of the TRAFFIGARD Waterproofing System based on test data and in-service history.

15.2 The installation of the TRAFFIGARD Waterproofing System was also evaluated (including site visits) in practical building situations assessing the following;

- Ease of installation
- Potential risks of non-performance when being installed
- Any external factors that could affect the quality of the installed product
- Ease of repair or maintenance

15.3 The Technical Literature has been examined by BEAL and found to be satisfactory.

Quality

16.1 The manufacture of the TRAFFIGARD Waterproofing system has not been assessed by BEAL, but details regarding the history and composition of the materials used were obtained by BEAL and found to be satisfactory.

16.2 The quality of materials, components and accessories supplied by Hitchins NZ Ltd. is managed through the use of a Building Product Quality Plan.

16.3 The Hitchins NZ Ltd. Building Product Quality



Plan, based on a manufacturing quality plan, ensures continuous conformance with the quality requirements from purchase to application by experienced and approved applicators.

16.4 Hitchins NZ Ltd.'s Building Product Quality Plan is reviewed and audited at least annually by BEAL or appointed agent.

16.5 Designers are responsible for the substructure design, and building contractors are responsible for the quality of construction of the substructure or new substrate in accordance with the instructions of the substrate manufacturer and this Appraisal Certificate.

16.6 Building owners are responsible for the maintenance of the TRAFFIGARD Waterproofing Membrane System in accordance with the manufacturer's instructions and this Appraisal Certificate.

Sources of Information

- The Building Regulations 1992, reprinted 1 January 2017.
- NZS 3604:2011 Timber framed Buildings
- AS/NZS2269 Plywood - Structural
- NASH Standards 1 & 2
- NZS3109 Concrete Construction
- (NZ) Code of Practice for Internal Wet-area Membrane Systems
- HITCHINS TRAFFIGARD Installation Manual
- TDS 1410-3 v1 for Traffigard Bodycoat summer
- TDS 1410-1 v1 for Traffigard Topcoat
- TDS 1435 v5 Flexible Polyurethane topcoat
- TDS 1444 v1 for Fastdry Water-borne Epoxy Primer
- TDS 1450 v2 for Urethane Alkyd Primer for Plywood
- TDS 1451 v6 for Epoxy flushing compound
- CSIRO Test Report 3702 dated Jan 2007
- Joyce Grp Site Assessment Report dated Sep 2004

Concluding statement

17.1 In the opinion of BEAL, the TRAFFIGARD Waterproofing Membrane System is fit for purpose and will comply with the NZBC to the extent specified provided that it is used, designed, installed and maintained as set out in this Appraisal Certificate.

The Appraisal Certificate is issued only to Hitchins NZ Ltd., and is valid until further notification, subject to the conditions of this Appraisal.

Conditions of Appraisal

1. This appraisal Certificate :
2.
 - a) Relates only to the TRAFFIGARD Waterproofing Membrane System as described herein;
 - b) Must be read, considered and used in full, together with the current version of the Technical Literature
 - c) Does not address any legislation, regulations, codes or standards, not specifically named herein;
 - d) Is copyright of BEAL

2. The Appraisal Certificate holder continues to meet the quality requirements of the Hitchins NZ Ltd. Building Product Quality Plan and has the plan audited and Appraisal certificate revalidated by BEAL on an annual basis.

3. Hitchins NZ Ltd. shall notify BEAL and obtain approval of any changes of the product specification or quality assurance prior to product being marketed including any trade literature, web site info or the like.

4. BEAL makes no representation as to:
- a) The nature of individual examples of, batches of, or individual installations of the product, including methods and workmanship;
 - 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 the Appraisal Certificate holder.

5. BEAL's verification of the building product or system complying with one or more of the above-mentioned criteria is given on the basis that the criteria used were those that were appropriate to demonstrate compliance with the NZBC at the date of this Appraisal Certificate. In the event that the criteria is withdrawn or amended at a later date, this Appraisal may no longer remain valid.

6. Any reference in this Appraisal Certificate to any other publication shall be read as a reference to the version of publication specified in this Appraisal Certificate.

Authorised Signatory



C R Prouse - Director
BEAL Testing Services
[January 2021]

