



PRODUCT CERTIFICATE

Viking Enviroclad Roofing and Deck Membranes System



KEY INFORMATION

CERTIFICATE: **GM-CM30058 RevE**

1	SUMMARY OF DESCRIPTION OF BUILDING METHOD OR PRODUCT
	Viking Enviroclad Roofing and Deck Membrane System is a single ply, polyester fabric reinforced, thermoplastic polyolefin (TPO) waterproofing sheet membrane for flat or pitched roofs and decks. It can be applied as a fully bonded or mechanically fixed system.
2	SUMMARY OF INTENDED USE OF BUILDING METHOD OR PRODUCT
	Viking Enviroclad Roofing and Deck Membrane System has been assessed as a roof and deck waterproofing membrane.
3	BUILDING CODE PROVISIONS
	<p>Viking Enviroclad Roofing and Deck Membrane System if designed, used, installed and maintained in accordance with the scope of this Certificate, will meet the following provisions of the NZBC:</p> <p>Clause B1 STRUCTURE: Performance B1.3.1, B1.3.2 and B1.3.4 for the relevant physical conditions of B1.3.3 (a), (b) and (h). Viking Enviroclad Roofing and Deck Membrane System meets these requirements.</p> <p>Clause B2 DURABILITY: Performance B2.3.1 (b), 15 years. Viking Enviroclad Roofing and Deck Membrane System meets these requirements.</p> <p>Clause E2 EXTERNAL MOISTURE: Performance E2.3.1, E2.3.2 and E2.3.7 (a), (b) and (c). Viking Enviroclad Roofing and Deck Membrane System meets these requirements.</p> <p>Clause F2 HAZARDOUS BUILDING MATERIALS: Performance F2.3.1. Viking Enviroclad Roofing and Deck Membrane System meets this requirement and will not present a health hazard to people.</p> <p>Water Supplies: Water is not contaminated by Viking Enviroclad Roof and Deck Membrane System which complies with AS/NZS 4020:2005.</p>

4	CERTIFICATE HOLDER DETAILS
	<p>Viking Roofspect, A Division of Viking Group Ltd</p> <p>80 Alexander Crescent, Otara, Manukau City 2023 info@vikingroofspect.co.nz 0800 729 799 www.vikingroofspect.co.nz</p>

ISSUED	LAST UPDATE	EXPIRY
28/03/2018	22/02/2021	28/03/2024
5 SIGNATURE		
 Herve Michoux, Global Mark Managing Director		

6	PRODUCT CERTIFICATION BODY
	<p>Global-Mark Pty Ltd 57 Willis Street Wellington, 6011 customer.service@global-mark.co.nz +64 9 889 0622 www.global-mark.co.nz</p> <p>The complaints process for this certificate can be found here: https://www.global-mark.com.au/?s=complaint</p>



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CERTIFICATE V1.4

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7 CONDITIONS AND LIMITATIONS OF USE

1. Viking Enviroclad Roofing and Deck Membrane System is certified for use as a roof and deck waterproofing membrane:
 - a. on buildings:
 - within the scope limitations of NZS 3604:2011 and NZBC Acceptable Solution E2/AS1, Third Edition including amendment 10 (5/11/2020), Paragraph 1.1; or,
 - within the scope limitations of NZBC Acceptable Solution E2/AS1, Third Edition including amendment 10 (5/11/2020), Paragraph 1.1 with regards to building height and floor plan area when subject to specific structural design; and,
 - situated in NZS 3604:2011 Wind Zones, up to, and including Extra High, and
 - with substrates of plywood or suspended concrete slab, and
 - b. on specifically designed or existing buildings:
 - subject to specific structural and weathertightness design situated in wind pressures up to a maximum design differential ultimate limit state (ULS) specified in #2 below; and,
 - c. with substrates of plywood or suspended concrete slab, and
 - with a minimum fall of 1 in 30 (2 degrees) for roofs; 1 in 40 (1.5 degrees) for decks and 1 in 100 (0.5 degrees) for gutters, and
 - d. where the membrane on a trafficable deck is continually protected by a pedestal protection system and the membrane on a trafficable area of a roof is protected by an Enviroclad walkway.
2. Subject to the structural limitations of the substrate, Viking Enviroclad Roof and Deck Membrane Systems is certified for use:
 - a. up to a maximum design differential Ultimate Limit State wind pressure of 6.5kPa when installed using the standard method of fully bonded with heat welded seams, or
 - b. up to a maximum design differential Ultimate Limit State wind pressure of 2.7 kPa when installed using either of the mechanical fastenings methods, HP-X Fasteners and Piranha Plates or Rhino Bond System
3. Viking Enviroclad Roofing and Deck Membrane System shall be:
 - a. designed and installed in accordance with the requirements of the BRANZ Appraisal 656 (2020) and the Technical Literature “Viking_Roofspec_EnviroClad_Details_201123”, dated 23 November 2020, and
 - b. Installed by a Viking Roofspec trained and licensed installer.
4. APEEL™ protective film applied to some membranes for protection during construction shall be removed within 90 days of installation.
5. For existing buildings, the suitability of the roof or deck shall be confirmed by a professional qualified to design buildings within the scope specified in Condition #1].
6. Product specification and incorporation of the Viking Enviroclad Roofing and Deck Membrane System into the building design shall be carried out by a competent building professional, qualified to design buildings within the scope specified in Condition #1.
7. This certification does not include:
 - a. details not covered by the Technical Literature, which shall be subject to specific weathertightness design, and
 - b. the design and construction of the substrate including movement and control joints, and
 - c. applications where ancillary components other than those provided by Viking Roofspec listed in the Technical Literature are substituted with alternative products, and
 - d. integral roof gardens, steps within the deck and direct downpipe discharge to the deck level

8 HEALTH AND SAFETY INFORMATION



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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>. The purpose of construction site audits is to confirm the practicability of installing the product; and to confirm the appropriateness and accuracy of installation instructions. In issuing this certificate, Global-Mark has relied on the independent expert and/or laboratory advise or reports. In placing the CodeMark mark on the product/system, the certificate holder makes a declaration of compliance with the certification standard(s) and confirms that the product is identical to the product certified herein.

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1. Standard industry safety practices and manufacturer safety requirement as detailed in the technical literature including the applicable SDS must be observed at all times.
2. Please refer to Viking Industry Safety Data Sheets (SDS) as detailed in Section 13 of this certificate.
3. Although, Viking Enviroclad Roof and Deck Membrane Systems have been shown to comply with AS/NZS 4020:2005, it must be noted that all water collected off roof surfaces made from any material is considered non-potable due to possible contamination from other sources. Water collection in this way can only be considered potable if it has been passed through a suitable sterilization system. Sterilization systems such as this have not been assessed and are outside the scope of this Certificate.
4. The first 25 mm of rainfall from a newly installed Viking Enviroclad Roof and Deck Membrane System roof must be discarded before water collection starts. This is to remove residues which may have developed in the processes involved in the production of a Viking Enviroclad Roof and Deck Membrane System membrane roof.

9 SUPPORTING INFORMATION ABOUT DESCRIPTION

The main membrane components are:

STP100 Enviroclad TPO white 1.14mm x 3.0m x 30.4m
 STP110 Enviroclad TPO grey 1.14mm x 3.0m x 30.4m
 STP510 Enviroclad TPO grey 1.52mm x 3.0m x 30.4m
 STP113 Enviroclad TPO grey 1.14mm x 3.66m wide
 STP000 Enviroclad adhesive 19L

STP500 Enviroclad TPO white 1.52mm x 3.0m x 30.4m
 STP110A Enviroclad Apeel TPO grey 1.14mm x 3.0m x 30.4m
 STP510A Enviroclad Apeel TPO grey 1.52mm x 3.0m x 30.4m
 STP513 Enviroclad TPO grey 1.52mm x 3.66m wide

Viking Enviroclad Roofing and Deck Membrane System must be installed using Viking Roofspec ancillary components as described in the Viking Roofspec Applicator Handbook V1.3 (30/05/2016) referenced as the Handbook.

10 SUPPORTING INFORMATION ABOUT INTENDED USE

Nil

11 SUPPORTING INFORMATION ABOUT CONDITIONS AND LIMITATIONS OF USE

1. The following requirements of the BRANZ Appraisal and the Technical Literature "Viking_Roofspec_EnviroClad_Details_201123" for the design of the Viking Enviroclad Roof and Deck Membrane System, shall be considered:
 - a. the requirements of the BRANZ Appraisal and the Technical Literature "Viking_Roofspec_EnviroClad_Details_201123", dated 23 November 2020, include but are not limited to drainage flanges, outlets, grates or cages, and overflow details. Penetrations and upstands of the membrane must be raised above the level of any possible flooding caused by blockage of roof drainage.
 - b. Separation or protection must be provided from heat sources such as fireplaces, heating appliances, flues and chimneys. Part 7 of NZBC Acceptable Solutions C/AS1 amendment 5 (05 November 2020) - C/AS2 amendment 2 (05 November 2020) and NZBC Verification Method C/VM1 amendment 5 (05 November 2020) provide methods for separation and protection of combustible materials from heat sources.
 - c. Viking Enviroclad Roofing and Deck Membrane System is impermeable; therefore, a means of dissipating construction moisture must be provided in the building design and construction to meet code compliance with NZBC Clause E2.3.6.
 - d. Allowance for deflection and settlement of the substrate must be made in the design of the roof to ensure falls are maintained and no ponding of water can occur.
 - e. All falls must slope to an outlet and be built into the substrate. Fall cannot be created with mortar screeds over the membrane.
 - f. Long term properties of the material may be affected by contact with bituminous materials or polystyrene insulation. Viking Roofspec should be contacted for advice in either of these situations.

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2. The following requirements of the BRANZ Appraisal and the Technical Literature “Viking_Roofspec_EnviroClad_Details_201123” for the installation of the Viking Enviroclad Roof and Deck Membrane System, shall be considered:
 - a. Dry storage must be provided for all products and the rolls of membrane must be lying down on pallets.
 - b. Substrates must be dry, clean and stable before installation commences. Surfaces must be smooth and free from nibs, sharp edges, dust, dirt or other materials such as oil, grease or concrete formwork release agents. All surface defects must be filled to achieve an even and uniform surface.
 - c. Concrete substrates can be checked for dryness by using a hygrometer, as set out in BRANZ Bulletin No. 515. The relative humidity of the concrete must be 75% or less before membrane application.
 - d. The moisture content of a timber substructure must be a maximum of 20% and plywood sheet must be dry at time of membrane application. This will generally require plywood sheets to be covered until just before the membrane is laid, to prevent rain wetting.
3. The ongoing care and maintenance of the Viking Enviroclad Roof and Deck Membrane System shall comply with Viking Roofspec Membrane Care and Maintenance Guide V1.0

12 BASIS FOR CERTIFICATION

The certification decision is based on independent technical review(s) of test report(s), engineering opinion(s) and other documented evidence(s), factory audit(s) and site review(s)

Code Clause	Compliance pathway	Evidence
Clause B1 STRUCTURE	Alternate solution	1, 2, 3, 4 and 5
Clause B2 DURABILITY	Alternate solution	1, 2, 3, 4 and 5
Clause E2 EXTERNAL MOISTURE	Alternate solution	1, 2, 3, 4 and 5
Clause F2 HAZARDOUS BUILDING MATERIALS	Alternate solution	1, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14 and 15

13 SUPPORTING DOCUMENTATION FOR CERTIFICATION

Ref	Author	Title	Date and/or revision
1	Viking Roofspec	Enviroclad Brochure	V3.0 2020
2	Viking Roofspec	Enviroclad Applicator Training Handbook	VK_Edition-V1-2019
3	Viking Roofspec	Viking_Roofspec_EnviroClad_Details_201123	23 November 2020
4	BRANZ	Viking Enviroclad Roofing and Deck Membrane - Appraisal No. 656 (2020)	27 May 2020
5 *	BRANZ	BRANZ Appraisals Means of Compliance - Basis of Appraisal - Viking Enviroclad Roofing and Deck Membrane Covered by BRANZ appraisal No 656 (2020)	14 May 2020
6	Carlisle Construction Materials	Safety Data Sheet – Flexible Fast Adhesive Part A	1.0 – 17 Mar 2015
7	Carlisle Construction Materials	Safety Data Sheet – Flexible Fast Adhesive Part B	1.0 – 24 Mar 2015
8	Viking Roofspec	Safety Data Sheet – Enviroclad Adhesive	July 2018
9	Viking Roofspec	Safety Data Sheet – Weathered Membrane Cleaner	July 2018
10	Viking Roofspec	Safety Data Sheet – Clear Cut-Edge Sealant	July 2018
11	Viking Roofspec	Safety Data Sheet – One-Part Pourable Sealer (White)	July 2018
12	Viking Roofspec	Safety Data Sheet – Water Cut-off Mastic	July 2018
13	Viking Roofspec	Safety Data Sheet – Flexible FAST Adhesive Dual Cartridge	July 2018

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14	Viking Roofspec	Safety Data Sheet – Cav-Grip	Mar 2019
15	Viking Roofspec	Safety Data Sheet – Low VOC Untack Cleaner	Mar 2019

* This document was provided commercial in confidence and is not publicly available.

14 CONDITIONS RELATING TO NOTIFICATION

- a) the certificate holder notifies the product certification body in writing of any intended change to any of the following particulars:
 - i. the name, address, or contact details of the certificate holder;
 - ii. any address of a location where a certified product is produced or manufactured;
- b) the certificate holder notifies the product certification body in writing of any intended change, modification, or alteration to any of the following:
 - i. the certified building method or product;
 - ii. the method of its production or manufacture;
 - iii. the product quality plan prepared in respect of the certified building method or product;
 - iv. the application or installation instructions for the certified building method or product;
 - v. any documentation relating to the use and maintenance of the certified building method or product;
- c) if the certificate holder has any reason to suspect that the certified building method or product does not comply with the Building Code, the certificate holder notifies the product certification body in writing of the reason for that suspicion;
- d) if the certificate holder or the product certification body finds that a certified building method or product that has been released on the market does not comply with the Building Code, the certificate holder discloses that fact in disclosure statements published in a form that is acceptable to the product certification body and to the chief executive;
- e) if the certificate is suspended or revoked, the certificate holder—
 - i. notifies all customers to whom the building method or product is regularly supplied; and
 - ii. immediately ceases using the certificate, the mark of conformity, and any reference to the number of the certificate.

End of the document