

Certificate no: CMNZ70161

Version: 0

Original issue date: 04 April 2024

Version date: 04 April 2024

1. Certificate Holder Details



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2. Product Certification Body

Bureau Veritas Australia Pty Ltd
11/500 Collins Street
Melbourne VIC 3000 Australia
product.certification@bureauveritas.com
Ph: 1800 855 190
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Complaints: The complaints process for this certificate can be found here:
www.bureauveritas.com.au/your-feedback

Sam Guindi – Bureau Veritas Product Certification Manager



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Product Certificate

BENTECH Bentonite® Heavy Duty GCL Tanking Membrane

3. Description of Building Method or Product

Name of the product or method in Aotearoa New Zealand, including any brand names used. Description of what it is and the components that make up any system and its physical attributes including the materials and make-up of the product, where applicable. Matters that should be taken into account in the use or application of the building method or product can be found in item 6. Conditions and Limitations of Use. Continuation of description can be found in item 10 – Supporting Information about Description. [Delete if not applicable]. The building method's or building product's catalogue or model identification number or numbers or other unique identifiers that might be used to identify the building product or building method

The BENTECH Bentonite® Heavy Duty GCL Tanking Membrane is a GCL (Geosynthetic Clay Liner) Tanking Membrane comprised of woven and non-woven geotextile, with a thick layer of natural Sodium Bentonite in the centre. This certificate covers the following products:

- GCL-NP5500 and
- GCL-NP5500/HDPE

4. Intended use of Building Method or Product

Intended use of the building method or product as described in the product manual and other instructional materials. A statement of the function or purpose of the building method or product. Continuation of intended use can be found in item 11 – Supporting Information about Intended use. [Delete if not applicable]

The BENTECH Bentonite® Heavy Duty GCL Tanking Membrane is designed for use as an underground Geosynthetic tanking membrane and can be used under slabs, against precast panels, blocks or rock walls, and all below grade foundations.

5. New Zealand Building Code Provisions

The performance clauses of the New Zealand Building Code that are relevant to the intended use and with which the building method or product complies or contributes to (where used as part of a system).

How the building method or product complies or contributes can be found in item 8. Basis for Certification. Any qualifications on the extent of that compliance can be found in item 6. Conditions and limitations of use.

Clause B2 Durability: B2.3.1(a), B2.3.2

Clause E2 External Moisture: E2.3.3, E2.3.7

Clause F2 Hazardous Building Materials: F2.3.1



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6. Conditions and Limitations of Use

The building method or product's use is to be in accordance with the installation instructions and requirements against which the building method or product was assessed.

Conditions or limitations of conformity for the performance requirements the building method or product is compliant with, including any requirements for people with the qualifications and skills to install or use the building method or product, any known or demonstrated situations where the building method or product should not be used. A statement as to whether there are any matters that should be taken into account in the use or application of the building product or building method and, if so, what those matters are.

1. The BENTECH Bentonite® Heavy Duty GCL Tanking Membrane is certified for use as tanking in buildings:
 - i) under slabs,
 - ii) against precast panels, blocks or rock walls, and
 - iii) all below grade foundations
2. The BENTECH Bentonite® Heavy Duty GCL Tanking Membrane shall be designed and installed in accordance with the Bentech Bentonite® NP5500 GCL & Bentech Bentonite® NP5500 GCL/HDPE Heavy Duty Tanking Membranes Product Technical Statement (PTS) & Installation Guide – V 7/23.
3. Where the Bentech Bentonite® NP5500 GCL or NP5500 GCL/HDPE is installed, the work site shall be prepared and back-filled in accordance with the Bentech Bentonite® NP5500 GCL & Bentech Bentonite® NP5500 GCL/HDPE Heavy Duty Tanking Membranes Product Technical Statement (PTS) & Installation Guide – V 7/23.

7. Health and Safety Information

Health, safety, and well-being declarations associated with installation, maintenance, and use of the building method or product, and their specific editions and dates necessary to ensure the performance requirements of clauses F1 to F9 of the Building Code can be met.

The compliance with any manufacturer's installation instructions, maintenance, OH & S Statements, MSDS's and other Health and Safety declarations will provide the necessary Health and Safety Information pertaining to the product.

8. Basis for Certification

How the performance requirements in the Building Code were met for each of the provisions. Where used as part of a system, the specific contribution to compliance.

B2 Durability – by testing and comparison with provisions of Verification Method B2/VM1

E2 External moisture - by testing and comparison with provisions of Acceptable Solution E2/AS1

F2 Hazardous building materials - by testing and comparison with the performance requirements of clause F2.3.1



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9. Supporting Documentation for Certification

Reference to any acceptable solutions, verification methods, New Zealand Standards, or other compliance pathways referenced against each individual performance requirement the building method or product is compliant with, and their specific version and date. Reference to documents describing tests and evaluations and any other documents relied on for certification or used to prove compliance, including their full title, specific version and date.

1. Acceptable Solutions and Verification Methods for New Zealand Building Code Clause B2 Durability Amendment 12 (28 November 2019)
2. Verification Methods E2/VM1 and Acceptable Solutions E2/AS1, E2/AS2 and E2/AS3 for New Zealand Building Code Clause E2 External Moisture. Amendment 10 (5 November 2020).
3. CTC (China Building Material Test & Certification Group) National Research Centre of Testing Techniques for Building Materials – Test Report No. 20111A02564 (Date of Issue: 30/08/2011). (CNAS accreditation No. L0690)
4. TRI-Environmental (Geosynthetic Testing & Services -Suzhou- Co. Ltd.) - Test Report No SDH23156, (Date of Issue 21 July 2023), (GAI-LAP accreditation No. 79)
5. Bentech Bentonite® NP5500 GCL & Bentech Bentonite® NP5500 GCL/HDPE Heavy Duty Tanking Membranes Material Safety Data Sheet V7/23
6. Bentech Bentonite® Specification – Bentech Bentonite®NP5500 GCL & Bentech Bentonite®NP5500 GCL/HDPE Heavy Duty Tanking Membranes V7/23
7. Bentech Bentonite® NP5500 GCL & Bentech Bentonite® NP5500 GCL/HDPE Heavy Duty Tanking Membranes Product Technical Statement (PTS) & Installation Guide – V7/23

10. Supporting Information About Description (Optional)

Any supporting information for section 3.

Fibres of the two geotextiles are interlocked by a patented needle-punching process which encapsulates the natural Sodium Bentonite, keeping it evenly distributed between the two layers of geotextile.

Bentech Bentonite® NP5500 GCL/HDPE incorporates an additional layer of 0.17 thick HDPE affixed to the white geotextile surface.

11. Supporting Information About Intended Use (Optional)

Any supporting information for section 4.

N/A

12. Supporting Information About Conditions and Limitations of Use (Optional)

Any supporting information for section 6.

N/A



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All CodeMark certificates that are current must be registered with MBIE. MBIE maintains a register of valid product certificates. [Please find the register here.](#)

If the certificate is not listed on this register or it appears as (SUSPENDED), it is not a valid CodeMark certificate and does not have to be accepted by a building consent authority as establishing compliance with the New Zealand Building Code.



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