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Certificate no: CMNZ70114

Version: 6

Original issue date: 08 September 2021 Version date: 12 December 2023

1. Certificate Holder Details



PGF INSULATION SDN BHD

2449, Lorong Perusahaan Sepuluh Kawasan Perusahaan Perai 13600, Perai Penang, Malaysia info@ecowool.com.my +604 390 8460 www.elimentinsulation.co.nz

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
www.bureauveritas.com.au

Complaints: The complaints process for this certificate can be found here: www.bureauveritas.com.au/your-feedback

Sam Guindi – Bureau Veritas Product Certification Manager



Product Certificate

ELIMENT® Insulation - Glass Mineral Wool Insulation

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 and be found in item 6. Conditions and I mitations 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.

ELIMENT® Insulation - Glass Mineral Wool Insulation is a non-combustible resin bonded glass mineral wool thermal insulation material. It is supplied in blanket form (ELIMENT® Insulation Blanket) and slab form (ELIMENT® Insulation Slab).

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]

ELIMENT® Insulation - Glass Mineral Wool Insulation is suitable for installation in walls and ceilings in new and existing timber and steel framed buildings.

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: Performance Clauses B2.3.1 (a)

Clause C3 Fire affecting areas beyond the fire source: Performance Clauses C3.7 (a) (contributes to)

Clause E3 Internal moisture: Performance Clauses E3.3.1 (contributes to)
Clause F2 Hazardous building materials: Performance Clauses F2.3.1

Clause H1 Energy efficiency: Performance Clauses H1.3.1 (a), H1.3.2E (contributes to)



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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.

- ELIMENT® Insulation Glass Mineral Wool Insulation is certified for use in any building located in any climate zone (as defined Acceptable Solution H1/AS1 Appendix C).
- 2. ELIMENT® Insulation Glass Mineral Wool Insulation shall be installed in accordance with the installation instructions applicable to the product:
 - ELIMENT® Ceiling Blanket Installation Instructions version BCII6899, 29 September 2023
 - ELIMENT® Ceiling Slab Installation Instructions version SCII6899, 29 September 2023
 - ELIMENT® Wall Blanket Installation Instructions version BWII6899, 1 June 2021
 - ELIMENT® Wall Slab Installation Instructions version SWII6899, 13 September 2023
- 3. ELIMENT® Insulation Glass Mineral Wool Insulation shall:
 - a. be separated by 25 mm minimum from any rigid roof substrate or flexible roof underlay
 - b. remain dry during installation and throughout the life of the building
 - c. Avoid blocking ceiling vents and take care around downlights and other sources of heat. Check downlight compliance labels and manufacturer's installation instructions before installing around and over downlights, as well as NZS4246:2016 for recommended clearances for different downlight ratings.

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 Verification Method B2/VM1

C3 Fire affecting areas beyond the fire source - By analysis and comparison with Verification Method C/VM2

E3 Internal moisture - By comparison with Acceptable Solution E3/AS1

F2 Hazardous building materials - By comparison with the performance requirements of Building Code clause F2.3.1

H1 Energy efficiency - By testing and comparison with Acceptable Solution H1/VM1



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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 Second edition (Amendment 12), 28 November 2019
- 2. C/VM2 Verification Method: Framework for Fire Safety Design For New Zealand Building Code Clauses C1-C6 Protection from Fire (Amendment 6), 5 November 2020
- Acceptable Solutions and Verification Methods for New Zealand Building Code Clause E3 Internal Moisture Second edition (Amendment 7), 5
- 4. H1 Energy Efficiency, Acceptable Solution H1/AS1, Energy efficiency for all housing, and buildings up to 300 m², Fifth edition Amendment 1, 4
- 5. TUD SUD Test Report No. 7191263506-MEC21-YWA, Non-combustibility test on Ecowool Brownie V2 roofing blanket insulation material, 30 July 2021
- 6. CETEC VOC Emission Test Certificate, 21 July 2021
- R&D Services Test Report RD16031-R2 Thermal Resistance Test Report 25 mm Brownie EWBL, 1 February 2016
- 8. TUV Test Report No.719083340-MEC14/01-TYK Thermal Conductivity Brownie EWBL 1.35 50 mm, 24 March 2014
- 9. TUV Test Report No.719083340-MEC14/02-TYK Thermal Conductivity Brownie EWBL 1.45 50 mm, 24 March 2014
- 10. R&D Services Test Report RD16714 Thermal Resistance Test Report 50 mm Brownie EWBL 1.60, 14 December 2016
- 11. R&D Services Test Report RD15720-R2 Thermal Resistance Test Report Brownie Rigislab 50 mm, 15 December 2015
- 12. R&D Services Test Report RD19581-R2 Thermal Resistance Test Report Brownie Wall Slab R3.2, 5 August 2019
- 13. R&D Services Test Report RD19582-R2 Thermal Resistance Test Report Brownie Wall Slab R3.6, 5 August 2019
- 14. R&D Services Test Report RD19580-R2 Thermal Resistance Test Report Brownie Wall Slab R4.1, 5 August 2019
- 15. BRANZ Report DI0518/DU01 Thermal Resistance of Polyglass Fibre Insulation R3.2, 27 August 2015
- 16. BRANZ Report DI0518/DU03 Thermal Resistance of Polyglass Fibre Insulation R2.2, 18 September 2015
- 17. BRANZ Report DI0518/DU04 Thermal Resistance of Polyglass Fibre Insulation R2.6, 22 September 2015
- 18. BRANZ Report DI15702-01 Thermal Resistance of ELIMENT® Insulation Ceiling Slab R3.6, 19 January 2022
- 19. BRANZ Report DI15702-02 Thermal Resistance of ELIMENT® Insulation Ceiling Slab R4.0, 27 January 2022
- 20. BRANZ Report DI17304-02 Thermal Resistance of ELIMENT® Insulation Ceiling Slab R7.0, 15 May 2023
- 21. James Fricker CPEng (Australia), Review of Thermal Insulation Tests, 27 November 2023.
- 22. ELIMENT® Insulation Ceiling Segment Data Sheet version CTDS, 21 July 2021
- 23. ELIMENT® Insulation Wall Segment Data Sheet version WTDS, 21 July 2021
- 24. ELIMENT® Ceiling Blanket Installation Instructions version BCII6899, 29 September 2023
- 25. ELIMENT® Ceiling Slab Installation Instructions version SCII6899, 29 September 2023
- 26. ELIMENT® Wall Blanket Installation Instructions version BWII6899, 1 June 2021
- 27. ELIMENT® Wall Slab Installation Instructions version SWII6899, 13 September 2023



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10. Supporting Information About Description (Optional)

Any supporting information for section 3.

WALL - Slab Products for ELIMENT® Insulation Glass Mineral Wool Insulation - R Value@15°C

- R2.2 90mm x 0.58m x 1.14m
- R2.4 90mm x 0.58m x 1.14m
- R2.6 90mm x 0.58m x 1.14m
- R2.8 90mm x 0.58m x 1.14m
- R3.2 140mm x 0.58m x 1.14m
- R3.6 140mm x 0.58m x 1.14m
- R4.1 140mm x 0.58m x 1.14m
- R2.2 90mm x 0.56m x 1.14m
- R2.4 90mm x 0.56m x 1.14m
- R2.6 90mm x 0.56m x 1.14m
- R2.8 90mm x 0.56m x 1.14m
- R3.2 140mm x 0.56m x 1.14m
- R3.6 140mm x 0.56m x 1.14m
- R4.1 140mm x 0.56m x 1.14m

WALL - Blanket Products for ELIMENT® Insulation Glass Mineral Wool Insulation - R Value@15°C

- R1.8 75mm x 1.2m x 12m
- R2.2 90mm x 1.2m x13m
- R2.4 90mm x 1.2m x 10m
- R2.6 90mm x 1.2m x 7m
- R2.8 90mm x 1.2m x 5m
- R3.6 140mm x 1.2m x 5m

CEILING - Slab Products for ELIMENT® Insulation Glass Mineral Wool Insulation - R Value@15°C

- R3.6 165mm x 0.432 m x 1.22m
- R4.0 195mm x 0.432m x 1.22m
- R5.0 230mm x 0.432m x 1.22m
- R6.0 278mm x 0.432m x 1.22m
- R7.0 285mm x 0.432m x 1.22m
- R7.0 285mm x 0.60m x 1.2m



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- R7.0 285mm x 0.46m x 1.22m
- R7.0 2 layers of 165mm x 0.432m x 1.22m (total thickness 330mm, effective thickness 320mm)

CEILING – Blanket Products for ELIMENT® Insulation Glass Mineral Wool Insulation - R Value@15°C

- R2.7 120mm x 1.2m x 10m
- R2.9 130mm x 1.2m x10m
- R3.3 145mm x 1.2m x 8.5m
- R3.6 160mm x 1.2m x 10m
 R4.0 180mm x 1.2m x 8m

MASONRY - Blanket Products for ELIMENT® Insulation Glass Mineral Wool Insulation - R Value@15°C

- R1.0 40mm x 1.2m x 30m
- R1.3 50mm x 1.2m x 15m
- R1.3 55mm x 1.2m x 30m

Refer to the ELIMENT® Insulation Data Sheets, 21 July 2021 for details of these products.

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

All CodeMark certificates that are current must be registered with MBIE. MBIE maintains a register of valid product certificates. <u>Please find</u> 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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