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Certificate number: CM40149

THIS IS TO CERTIFY THAT

Equitilt FlameGuard™ and Equitilt FlameGuard™ Plus

Type and/or use of product:

Insulated external wall, internal wall or ceiling panel system.

Description of product:

Equitilt FlameGuard™ and Equitilt FlameGuard™ Plus are panel systems manufactured using 0.6mm COLORBOND® G300 steel faces with a mineral wool fibre core material and available in the following sizes:

- Equitilt FlameGuard™ – 50mm and 75mm thick panel; and
- Equitilt FlameGuard™ Plus – 100mm and 150mm thick panel.

Refer A2 below for further detail.

COMPLIES WITH THE FOLLOWING BCA PROVISIONS AND STATE OR TERRITORY VARIATION(S)

BCA 2022

	Volume One	Volume Two
Performance Requirement(s):	B1P1 (1),(2)(a),(b) & (c) Structural reliability	H1P1(1),(2)(a),(b) & (c) Structural stability and resistance to actions
Deemed-to-Satisfy Provision(s):	C2D2(2) Fire-resistance of building elements – FRLs are Limited to Equitilt FlameGuard™ Plus panel systems	H2D6(4) Weatherproofing – Roof and wall cladding
	C2D10(6)(g) Non-combustible building materials – Refer <i>limitation and condition 2</i> .	H3D2(1)(g) Non-combustible materials
	C2D11(1)(b) & (i) Fire hazard properties. Walls, Ceiling & Other Insulative Material other than sarking - Refer A3	H3D3 Fire-resistance of building elements – FRLs are Limited to Equitilt FlameGuard™ Plus panel systems
	F3D5(1)(c) Weatherproofing – Wall cladding	H6D2(1)(b)(i) Energy Efficiency – Walls – Contributes to the overall energy efficiency of the building - Refer A3
	G5D3 Construction in bushfire prone areas – Protection – residential buildings – BAL FZ	H7D4 Bushfire- Refer A3
	J4D6 Energy Efficiency – Walls – Contributes to the overall energy efficiency of the building - Refer A3	
State or territory variation(s):	G5D3 (NSW)	H7D4 (NSW, Qld, SA)


Richard Donarski – CMI


Don Grehan – Unrestricted Building Certifier

Date of issue: 01/03/2024

Date of expiry: 01/03/2027



Certificate of Conformity

SUBJECT TO THE FOLLOWING LIMITATIONS AND CONDITIONS AND THE PRODUCT TECHNICAL DATA IN APPENDIX A AND EVALUATION STATEMENTS IN APPENDIX B

Limitations and conditions:

Building classification/s:

- | | |
|--|---|
| <ol style="list-style-type: none"> 1. Where Equitilt FlameGuard™ wall panels are used externally on a building of Type A or B construction, the wall panels must be fixed in accordance with C2D15 to comply with C2D10(6)(g). 2. The wall panels will be limited by wind load shown in the manufacturer's specifications on the span certified for the product type, thickness, core density and fixing configuration as per the product's certified span tables referenced in A3 of this Certificate of Conformity. 3. Installation and configuration of FRL Systems referenced in the FRL tables in A3 of the Certificate of Conformity must in accordance with the requirements outlined in Warringtonfire - Fire Assessment Report 24897 Revision 24.1 dated 27/06/2023. Any deviation to this report is outside the Scope of this Certificate of Conformity. 4. The structural support members are designed and engineered separately as per project requirements by building designers and engineers. The minimum fixing requirements are outlined in the Span Tables referenced in A3 of this Certificate of Conformity. 5. In all installations the minimum clearance between the underside of panel and the adjoining ground surface level below must comply with the specifications in Part 7.5.7 of ABCB Housing Provisions. 6. The Group number has been determined in accordance with testing conducted to AS ISO 9705 and assessment against AS 5637.1:2015 as Group 1, refer A3. 7. When used as internal wall and ceiling linings, this product as a Group 1 fire rated product, must comply with the group number specified in Table S7C4 of Specification 7 of the BCA 2022, Volume 1. Refer A3. 8. In order to maintain compliance with BAL, it is the responsibility of the Building Designer to ensure compliance is achieved in accordance with AS 3959-2018. 9. It is the responsibility of the architectural designer and engineering parties to ensure that the details in this Design and Installation Guide are appropriate for the intended application. 10. Other than the items and information listed, the remainder of the information contained in the product's literature is outside the scope of this certification. 11. The use of the certified product/system is subject to these Limitations and Conditions and must be read in conjunction with the Scope of Certification below. | <p>Class 1,2,3,4,5,6,7,8,9 & 10</p> |
|--|---|

Scope of certification: The CodeMark Scheme is a building product certification scheme. The rules of the Scheme are available at the ABCB website www.abcb.gov.au. This Certificate of Conformity is to confirm that the relevant requirements of the Building Code of Australia (BCA) as claimed against have been met. The responsibility for the product performance and its fitness for the intended use remain with the Certificate Holder. The certification is not transferrable to a manufacturer not listed on Appendix A of this certificate.

Only criteria as identified within this Certificate of Conformity can be used for CodeMark certification claims. Where other claims are made in a client's Installation Manual, Website or other documents that are outside the criteria on this Certificate of Conformity, such criteria cannot be used or claimed to meet the requirements of this CodeMark certification.

The NCC defines a Performance Solution as one that complies with the Performance Requirements by means other than a Deemed-to-Satisfy Solution. A Building Solution that relies on a CodeMark Certificate of Conformity that certifies a product against the Performance Requirements cannot be considered as Deemed-to-Satisfy Solution.

This Certificate of Conformity may only relate to a part of a Performance Solution. In these circumstances other evidence of suitability is needed to demonstrate that the relevant Performance Requirements have been met. The relevant provisions of the Governing Requirements in Part A of the NCC will also need to be satisfied.

This Certificate of Conformity is issued based on the evidence of compliance as detailed herein. Any deviation from the specifications contained in this Certificate of Conformity is outside of this document's scope and the installation of the certified product will not be covered by this Certificate of Conformity.



Certificate of Conformity

Disclaimer: The Scheme Owner, Scheme Administrator and Scheme Accreditation Body do not make any representations, warranties or guarantees, and accept no legal liability whatsoever arising from or connected to, the accuracy, reliability, currency or completeness of any material contained within this certificate; and the Scheme Owner, Scheme Administrator and Scheme Accreditation Body disclaim to the extent permitted by law, all liability (including negligence) for claims of losses, expenses, damages and costs arising as a result of the use of the product(s) referred to in this certificate.

When using the CodeMark logo in relation to or on the product/system, the Certificate Holder makes a declaration of compliance with the Scope of Certification and confirms that the product is identical to the product certified herein. In issuing this Certificate of Conformity, CMI Certification Pty Ltd (CMI) has relied on the experience and expertise of external bodies (laboratories and technical experts).

Nothing in this document should be construed as a warranty or guarantee by CMI, and the only applicable warranties will be those provided by the Certificate Holder.

APPENDIX A – PRODUCT TECHNICAL DATA

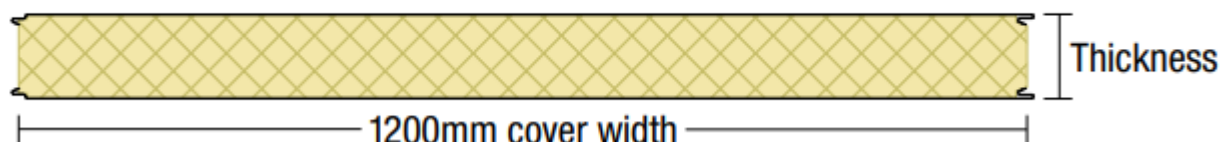
A1 Type and intended use of product

As per page 1.

A2 Description of product

Core	Mineral Wool
Width (cover mm)	900, 1140 & 1200
Thickness	Equitilt FlameGuard™: 50mm or 75mm Equitilt FlameGuard™ Plus: 100mm or 150mm
Length	Up to 11m
External Material	0.6mm G300 COLORBOND® steel
Internal Material	0.6mm G300 COLORBOND® steel
Paint System	AS/NZS 2728:2013 & AS 1397-2011

Dimensions



Source: Certificate Holder

A3 Product specification

Structure

In order to maintain compliance with structure, the following Span Tables must be referred to for which have been certified by a licensed Professional Engineer.

Document Name	Version
FLAMEGUARD™ SPAN TABLES FOR WIND REGION A & B – NON-CYCLONIC (EXTERNAL WALL APPLICATIONS WITH SINGLE MUSHROOM FIXING) Mineral Wool Core 0.6mm Steel Skins	4
FLAMEGUARD™ SPAN TABLES FOR WIND REGION C & D – CYCLONIC (EXTERNAL WALL APPLICATIONS ONLY) Mineral Wool Core 0.6mm Steel Skins	1
FLAMEGUARD™ SPAN TABLES (INTERNAL WALL AND CEILING APPLICATIONS ONLY) Mineral Wool Core 0.6mm Steel Skins	5
FLAMEGUARD™ 0.6mm Steel Skins Wall Span Table for Housing Application	1
FLAMEGUARD™ SPAN TABLES (INTERNAL CEILING APPLICATIONS ONLY) Mineral Wool Core 0.6mm Steel Skins	3

Source: Bligh Tanner Pty Ltd; Reference Number: 2017.0493; Dated 06/03/2023.

Non-Combustibility

Each lamina of the Equitilt FlameGuard™ and Equitilt FlameGuard™ Plus panels have been tested in accordance with AS 1530.1-1994 and is NOT deemed combustible.

Fire Properties

AS/NZS 1530.3-1999 Indices for Equitilt FlameGuard™ and Equitilt FlameGuard™ Plus panels.

Ignitability Index	0	Range 0-20
Spread of Flame Index	0	Range 0-10
Heat Evolved Index	0	Range 0-10
Smoke Index	3	Range 0-10

Source: AWT Product Testing, Testing in accordance with AS/NZS 1530.3-1999, dated 13/03/2009.

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Material Group Numbers

Group Numbers have been determined in accordance with testing conducted to ISO 9705:2003 (R2016) and AS 5637.1:2015. Construction requirements for Group 1 and Group 2 are shown below, please refer Metecno® for more information.

Group 1:

Equitilt FlameGuard™ and Equitilt FlameGuard™ Plus with aluminium 'wall-wall' and 'wall-ceiling' angles fixed with aluminium rivets or screws at maximum 300mm centres is classified as Group 1.

Smoke Growth Rate Index (SMOGR_{RC}) is 0.8 m²s⁻²x1000.

Source: Warringtonfire Australia Pty Ltd; Wall and ceiling lining tested in accordance with AS ISO 9705:2003 (R2016) and AS 5637.1:2015; Dated 17/06/2019.

Bushfire Attack Level (BAL)

Product	Bushfire Attack Level
Equitilt FlameGuard™	BAL—12.5 to BAL—40.
Equitilt FlameGuard™ Plus	BAL—FZ.

Source: Ignis Labs Report No. IGNL-7022-99-06 Issue 01 Revision 3 [2023] dated 05/07/2023.

Fire Resistance Levels (FRLs)

The Warringtonfire - Fire Assessment Report 24897 Revision 24.1 dated 27/06/2023 outlines the various Fire Resistance Levels of the various systems and configurations that only apply to the 100mm and 150mm Equitilt FlameGuard™ Plus panels. Tables 7 to 9 outline the various FRL systems from -/60/60 up to -/180/180 as follows:

FRL Table Reference	Table and page no.
Performance for Bondor vertical Equitilt FlameGuard™ panel system	Table 7 page 69
Performance for Bondor horizontal Equitilt FlameGuard™ Plus system	Table 8 page 70
Performance of Bondor Equitilt FlameGuard™ Plus incorporating penetrations	Table 9 page 70

Source: Exova Warringtonfire Assessment Report No. 24897 Revision 24.1; dated 27/06/2023.

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Thermal & Energy Efficiency

Core: Mineral wool, $k=0.0367 \text{ W/m}\cdot\text{K}$ @ 23°C

Calculated Panel Thermal Resistance	Equitilt FlameGuard™		Equitilt FlameGuard™ Plus	
Nominal (minimum) thickness, mm	50	75	100	150
Panel Insulation R ($\text{m}^2\cdot\text{K/W}$)				
Insulation R @ 6°C	1.48	2.22	2.97	4.45
Insulation R @ 15°C	1.42	2.13	2.84	4.25
Insulation R @ 23°C	1.36	2.04	2.72	4.09
Insulation R @ 30°C	1.32	1.97	2.63	3.95
Total R for Application as Wall Panels ($\text{m}^2\cdot\text{K/W}$)				
Total R @ 6°C (heat flow out)	1.64	2.38	3.13	4.61
Total R @ 15°C (heat flow out)	1.58	2.29	3.00	4.41
Total R @ 23°C (heat flow out)	1.52	2.20	2.88	4.25
Total R @ 30°C (heat flow in)	1.48	2.13	2.79	4.11

The temperatures are the average for the insulation material

Notes:

- Determinations based upon AS/NZS 4859:2018, Materials for the thermal insulation of buildings.
- Insulation R adjusted for temperature per AS/NZS 4859.2:2018, Clause 5.
- The Total R values for insulation average temperatures of 6°C correspond to surface temperatures of -6° outdoors for 18° indoors.
- The Total R values for insulation average temperatures of 15°C correspond to surface temperatures of 12° outdoors for 18° indoors.
- The Total R values for insulation average temperatures of 30°C correspond to surface temperatures of 36° outdoors for 24° indoors.
- The requirements of Part 13.2.5(5) of the ABCB Housing Provisions and Volume One J3D6(1) do not apply to walls constructed using insulated sandwich panels.

The following are assumed:

- 0.6mm steel outdoor and indoor skin, $k=45 \text{ W/m}\cdot\text{K}$
- Indoor surface is painted

The Total R assumes still air within the room:

- Outdoor air film, $R=0.04 \text{ m}^2\cdot\text{K/W}$.
- Indoor air film, $R=0.12 \text{ m}^2\cdot\text{K/W}$. (still air)

Source: James Fricker Report No. i265c updated 03/09/2023.

A4 Manufacturer and manufacturing plant(s)

This field is optional. Contact the Certificate Holder for details.

A5 Installation requirements

Installation and configuration of FRL Systems referenced in the FRL tables in A3 of the Certificate of Conformity, must in accordance with the requirements outlined in Warringtonfire - Fire Assessment Report 24897 Revision 24.1 dated 27/06/2023. The minimum fixing requirements are outlined in the Span Tables referenced in A3 of this Certificate of Conformity.

A6 Other relevant technical data

Acoustic Properties 50mm Equitilt FlameGuard™ achieved R_w 29, C -2 & C_{tr} -4.
100mm Equitilt FlameGuard™ Plus achieved R_w 30, C -2 & C_{tr} -4

Source: CSIRO Report No. TL511/R1 dated July 2010.

APPENDIX B – EVALUATION STATEMENTS

B1 Evaluation methods

1. Fire Safety Provisions – A5G3(1)(d)&(e). Reports from Accredited Testing Laboratories and a professional engineer.
2. Structural Provisions – A5G3(1)(e). Reports from a professional engineer.
3. Thermal Provisions – A5G3(1)(e). Reports from a professional engineer.
4. Weatherproofing Provisions – A5G3(1)(e). Reports from a professional engineer.

B2 Reports

1. AWTA Product Testing; NATA Accreditation No. 1356; Fire Testing of Flameguard – AS/NZS 1530.3-1999 Fire indices; Dated 13/03/2009. Report provide evidence for compliance with C2D10(6)(g).
2. Bligh Tanner Pty Ltd; Reference No. 2017.0493; Certification of FlameGuard™ Panel Span Tables; Dated 06/03/2023. Report confirms compliance with B1P1(1),(2)(a),(b),(c), H1P1(1),(2)(a),(b),(c)&(3), H2D6(4) & F3D5(1)(c).
3. CSIRO; NATA Accreditation No. 165; Report No. FCO-2349; Likely combustibility of Bondor Flameguard Panel; Dated 10/06/2014. Report supports compliance with C2D10(6)(g).
4. CSIRO; NATA Accreditation No. 165; Report No. FNC 0339; Combustibility test for materials in accordance with AS 1530.1-1994; Dated 11/06/2004. Report supports compliance with C2D10(6)(g).
5. CSIRO; NATA Accreditation No. 165; Report No. FNC12440; Combustibility Test for Materials in Accordance with AS 1530.1-1994; Dated 09/09/2019. Report supports compliance with C2D10(6)(g).
6. CSIRO; NATA Accreditation No. 165; Report No. FNE11603; Simultaneous determination of ignitability, flame propagation, heat release and smoke release; Dated 21/01/2016. Report supports compliance with C2D10(6)(g).
7. Ignis Labs; Report No. IGNL-7072-99-06 Issue 01 Revision 3 [2023]; Bondor Bushfire Compliance; 05/07/2023. Report confirms the compliance with G5D3 & H7D4.
8. James M Fricker Pty Ltd; Report No. i265c; Thermal calculations of FlameGuard™ wall panel; Dated 03/09/2023. Report provides thermal performance values in accordance with the requirements of J4D6 and H6D2(1)(b)(i).
9. Warringtonfire Australia Pty Ltd; NATA Accreditation No. 3277; Report No. EWFA 24897 Revision 24.1; Fire testing to AS 1530.4:2014 – Determination of FRL; Dated 27/06/2023. Report outlines FRLs achieved for LuxeWall™ Flameguard™ as required by C2D2(2) and H3D3.
10. Warringtonfire Australia Pty Ltd; NATA Accreditation No. 3277; Job No. RTF190071; Wall and ceiling lining tested in accordance with AS ISO 9705:2003 (R2016) and AS 5637.1:2015; Dated 17/06/2019. Report provides evidence for compliance with C2D11(1)(b)&(i).

The Certificate Holder has chosen not to make the above evidence of compliance publicly available, due to the documents being considered commercial in confidence.