Certificate of Conformity

Certification Body:

CertMark International
ABN: 80 111 217 568
JAS-ANZ Accreditation No. Z4450210AK
PO Box 7144, Sippy Downs Qld 4556
+61 (07) 5445 2199
www.CertMark.org

Certificate Holder:

Metecno Pty Ltd
ABN: 44 096 402 934
121 Ingram Road, Acacia Ridge Qld 4110.
Ph: +61 7 3323 8555
www.bondor.com.au

Certificate number: CM40149 Rev2

THIS IS TO CERTIFY THAT

FlameGuard®

Type and/or use of product:

FlameGuard® is certified for use as an external wall, internal wall or ceiling panel system.

Description of product:

FlameGuard® is a panel system manufactured using 0.6mm or 0.7mm Colorbond® G300 steel faces with a mineral wool fibre core material. FlameGuard® is available in the following variations:

- FlameGuard® - 50mm and 75mm thick panel (Non-Fire rated), and
- FlameGuard® Plus - 100mm and 150mm thick panel (Fire rated).

Refer A2 below for further detail.

COMPLIES WITH THE FOLLOWING BCA PROVISIONS AND STATE OR TERRITORY VARIATION(S) **BCA 2019**

	Volume One		Volume Two	
Performance Requirement(s)	BP1.1(a),(b) (i),(ii)&(iii)	Structural reliability	P2.1.1(a),(b) (i),(ii)&(iii)	Structural stability and resistance to actions
	JP1	Energy Efficiency – External walls. Can be used in conjunction with other building elements to achieve a Total R Value Refer to A3	P2.3.1	Fire-resistance of building elements – Limited to FlameGuard® Plus - Refer A3 for FRL of tested specimens
			P2.6.1	Energy Efficiency – External walls. Can be used in conjunction with other building elements to achieve a Total R Value. Refer to A3
Deemed-to-Satisfy Provision(s):	C1.1(b)	Fire-resistance of building elements – Limited to FlameGuard® Plus. Refer A3 for FRL of tested specimens	3.7.4.0	Bushfire - Limited to Flameguard® Plus - BAL FZ
	C1.10(a)(ii) &(ix)	Fire hazard properties. Walls, Ceiling & Other Insulative Material other than sarking - Refer A3		
	G5.2	Bushfire - Limited to Flameguard® Plus - BAL FZ		
State or territory variation(s):	JP1(NSW, NT, QLD), G5.2 (NSW, SA)		P2.3.1 (SA), P2.6.1 (Vic, NSW, NT), 3.7.4.0 (NSW, QLD, SA, TAS)	

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

John Thorpe - CMI

Don Grehan – Unrestricted Building Certifier

Date of issue: 04/07/2019

Date of expiry: 13/12/2021

ABCB

JAS-ANZ

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Limitations and conditions:

1. 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. Refer A3 below.
2. FlameGuard® and FlameGuard® Plus are certified for use up to and including N4 wind Regions.
3. It is the responsibility of the building designer to ensure fitness for purpose.
4. Installation requirements are outside the scope of this certificate and subject to project specific engineering advice. The Certificate Holder has made available the BON0535 Drawing Pack - Flameguard v1.
5. Assessment of the adequacy of weatherproofing under P2.2.2 and FP1.4 of the NCC as external wall cladding is outside the scope of this Certificate of Conformity.
6. The use of this product is subject to these Limitations and Conditions and must be read in conjunction with the Scope of Certification below.

Building classification/s:

1,2,3,4,5,6,7, 8, 9 & 10

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.

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. This may result in the product being classified as a non-conforming building product.

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, CertMark International 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 one.

A2 Description of product

Core	Mineral Wool
Width (cover mm)	1140
Thickness	FlameGuard®: 50mm or 75mm FlameGuard® Plus: 100mm or 150mm
Length	Up to 11m (check for availability)
External Material	0.6mm or 0.7mm G300 Colorbond® steel
Internal Material	0.6mm or 0.7mm G300 Colorbond® steel
Paint System	AS/NZS 2728:2013 & AS 1397-2011

Source: *Certificate Holder*

A3 Product specification

Structure In order to maintain compliance with structure, the following Span Tables must be referred to 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	4
FLAMEGUARD® 0.6mm Steel Skins Wall Span Table for Housing Application	1

Fire Properties

		FlameGuard®		FlameGuard® Plus
Fire Hazard Properties AS/NZS 1530.3-1999	Ignitability Index	0	Ignitability Index	0
	Spread of Flame Index	0	Spread of Flame Index	0
	Heat Evolved Index	0	Heat Evolved Index	0
	Smoke Index	3	Smoke Index	3
Group Number		1		1
Smoke Growth Rate Index ($SMOGRA_{RC}$)		<100		<100
Bushfire		Not Applicable		BAL - FZ

Fire Resistance Levels

Performance for Bondor Vertical FlameGuard® Plus – External Fire only.

Panel Thickness (mm)	Max. panel height (m)	Max. rivet spacing in panel joints (mm)	Intumescent paint on panel core at joins	Max. support distance (X)	Min. support fixing per support	FRL of panel	FRL of column/ structure protected by panel	FRL of wall system
100	12	600	None	3m	2	-/60/60	60/-/-	60/60/60
100	12	None	Item 9	3m	2	-/90/90	90/-/-	90/90/90
100	12	300	Item 9	5.7m	4	-/60/60	60/-/-	60/60/60
150	12	400	None	3.3m	3	-/60/60	60/-/-	60/60/60
150	12	300	Item 9	3.3m	3	-/180/180	180/-/-	180/180/180
150	12	300	Item 9	3.8m	3	-/120/120	120/-/-	120/120/120
150	12	300	Item 9	5.7m	4	-/60/60	60/-/-	60/60/60

Item 9: Cafco Sprayfilm WB3 Intumescent Paint.

Source: *Table 5.2 from Exova Warringtonfire Assessment Report No. 24897-20; dated 22/06/2018.*

Note: Contact Certificate Holder for details on tested specimens, variations and installation requirements to ensure the required FRL is achieved. Any variations to the Exova Report listed in B2 are outside the scope of this Certificate of Conformity.

Performance for Bondor Vertical FlameGuard® Plus – Fire from Either Side

Panel Thickness (mm)	Max. panel height (m)	Max. rivet spacing in panel joints (mm)	Intumescent paint on panel core at joins	Max. support distance (X)	Min. support fixing per support	FRL of panel	FRL of column/ structure protected independently	FRL of wall system
100	12	600	None	3m	2	-/60/60	60/-/-	60/60/60
100	12	None	Item 9	3m	2	-/90/90	90/-/-	90/90/90
100	12	300	Item 9	5.7m	4	-/60/60	60/-/-	60/60/60
150	12	400	None	3.3m	3	-/60/60	60/-/-	60/60/60
150	12	300	Item 9	3.3m	3	-/180/180	180/-/-	180/180/180
150	12	300	Item 9	4.5m	3	-/120/120	120/-/-	120/120/120
150	12	300	Item 9	5.7m	4	-/60/60	60/-/-	60/60/60

Item 9: Cafco Sprayfilm WB3 Intumescent Paint.

Source: *Table 5.3 from Exova Warringtonfire Assessment Report No. 24897-20; dated 22/06/2018.*

Note: Contact Certificate Holder for details on tested specimens, variations and installation requirements to ensure the required FRL is achieved. Any variations to the Exova Report listed in B2 are outside the scope of this Certificate of Conformity.

Energy Efficiency

	FlameGuard®		FlameGuard® Plus	
Panel Thickness (mm)	50	75	100	150
Typica Mass (kg/m^2)	15.6	18.1	20.6	25.6
Total R-Value (m^{2}K/W)	1.6	2.3	3.0	4.4
Note: The above Total R-values are for insulation average temperature of 15˚C. Contact the Certificate Holder for other temperatures.				
Max Panel Length (m)	5	7	9	11

A4 Manufacturer and manufacturing plant(s)

Metecno Pty Ltd
103 Ingram Road
Acacia Ridge QLD 4110.

A5 Installation requirements

Installation requirements are outside the scope of this certificate and subject to project specific engineering advice. The minimum fixing requirements are outlined in the Span Tables referenced in A3 of this Certificate of Conformity and the Certificate Holder has made available the BON0535 Drawing Pack - Flameguard v1.

A6 Other relevant technical data

Non-Combustibility:

The Flameguard® & Flameguard® Plus Core Material has been tested to AS 1530.1-1994 and is deemed Non-Combustible.

Acoustic Properties:

Depending on construction, Flameguard® & Flameguard® Plus may achieve an R_W 28 - 30. Contact Certificate Holder for construction details.

APPENDIX B – EVALUATION STATEMENTS

B1 Evaluation methods

1. Structural Provisions – A5.2(1)(e). Reports from a professional engineer.
2. Fire Safety Provisions – A5.2(1)(d)&(e). Reports from Accredited Testing Laboratories and a professional engineer.
3. Energy Efficiency Provisions – A5.2(1)(e). Reports from a professional engineer.

B2 Reports

a. AWTA Product Testing; NATA Accreditation No. 1356; Fire Testing of Flameguard – AS/NZS 1530.3-1999 Fire indices; Dated 13/03/2009.
b. Bligh Tanner Pty Ltd; Reference No. 2017.0493; Certification of FlameGuard® Panel Span Tables; Dated 20/06/2019.
c. Exova Warringtonfire Australia Pty Ltd; Nata Accreditation No. 3277; Report No. EWFA 24897-20; Fire testing to AS 1530.4:2014 – Determination of FRL; Dated 22/06/2018.
d. Ignis Solutions Pty Ltd; Report No. IGNS-6252 I01 R02; Product Evaluation of Bondor Flameguard; Dated 10/10/2018.
e. James M Fricker Pty Ltd; Report No. 265c; Thermal calculations of FlameGuard® wall panel; Dated 13/02/2018.

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