

Certificate number: CM40170 Rev4

**Certification Body:**

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

**Certificate Holder:**

  
**FAIRVIEW**  
DEFINING ARCHITECTURE SINCE 1989  
 ABN: 56 111 935 963  
 18-20 Donald St  
 (PO Box 277)  
 Lithgow NSW 2790  
 Ph: 61 2 6352 2355  
 W:  
[www.fairviewarchitectural.com](http://www.fairviewarchitectural.com)

**THIS TO CERTIFY THAT**

**Vitracore G2**

**Type and/or use of product:**

Non-structural lightweight exterior and interior decorative cladding panel.

**Description of product:**

The Vitracore G2 is an aluminium composite panel with a profiled aluminium core.

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

**BCA 2016**

	<b>Volume One (Amdt. 1)</b>	<b>Volume Two</b>
<b>Performance Requirement(s)</b>	FP1.4 Weatherproofing - will contribute to the weatherproofing function of the wall, refer A3 below GP5.1 Construction in Bushfire Prone Areas – (BAL FZ)	Not applicable to this product.
<b>Deemed-to-Satisfy Provision(s):</b>	C1.9(e)(vi) Non-Combustibility - Bonded laminate material	Not applicable to this product.
<b>State or territory variation(s):</b>	NSW and QLD GP5.1, Tas GP5.1, G5.2 Protection (including NSW G5.2, SA G5.2, SA G5.3, Tas G5.3 and Tas G5.4)	Not applicable to this product.

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

**Limitations and conditions:**

- The Vitracore G2 Cladding System must be installed in accordance with the Vitracore G2 Installation Manual Version 2.
- For weatherproofing, Vitracore G2 is to be installed in accordance with BG&E Façade Consultants advice dated 8 June 2016. Contact Certificate Holder for the advice.
- The Vitracore G2 Cladding System panel is not integral to the fire resistance of the wall, in that if it were to be removed from the building there would be no impact on these properties of the underlying wall structure.
- Vitracore G2 is permitted to be used on buildings of Type A, B or C construction, within bushfire prone areas, on buildings fitted with or without an automatic fire sprinkler system and at any distance from a fire source feature.

**Building classification/s:**

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

  
 John Thorpe - CMI

  
 Don Grehan – Unrestricted Building Certifier

**Date of issue:** 24/08/2018

**Date of expiry:** 10/05/2019





# Certificate of Conformity

5. Information contained herein or related hereto is intended only for evaluation by technically skilled persons, with any use thereof to be at their independent discretion and risk. Such information is believed to be reliable, but CertMark International (CMI) shall have no responsibility or liability for results obtained or damages resulting from such use. CMI grants no license under and shall have no responsibility or liability for infringement of, any patent or other proprietary right. 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.
6. This Certificate is issued based on the evidence of compliance as detailed herein. Any deviation from the specifications contained in this Certificate is outside of this document's scope and the installation of the certified product/system will not be covered by this CodeMark certification. This may result in the product being classified as a non-conforming building product/system.

**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](http://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.

**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.

## APPENDIX A – PRODUCT TECHNICAL DATA

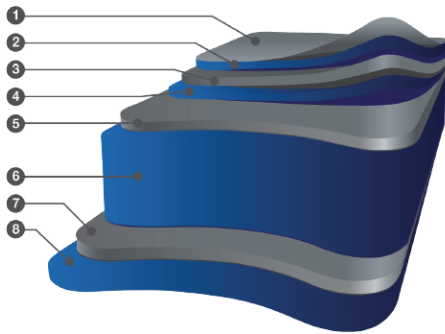
### A1 Type and intended use of product

It is suitable for Vitracore G2 to be fixed through any insulation, weatherproofing sarking-type fire resistance or acoustic material directly to the primary building element or wall frame.

Vitracore G2 is tested and proven to be a non-combustible cladding system and is suitable to be used where non-combustible materials are required.

### A2 Description of product

Vitracore G2 is comprised of 3 layers of aluminium; a face skin, a profiled aluminium core and a rear skin. Between these layers is a film of VE-998 polymer adhesive which is applied as a continuous film during manufacturing resulting in a continuous thickness of 0.101mm, this means the total thickness of the adhesive layers is approximately 0.2mm.



### TYPICAL COMPOSITION

1. Peel-off Protective Film
2. Clear Coating
3. PVDF Coloured Coating
4. Primer Coating
5. 0.7mm Aluminium Skin
6. 3mm Profiled Aluminium Core
7. 0.5mm Aluminium Skin
8. Polyester Anti-corrosion Coating

The composite material is rigid, resistant to blows, breakage and pressure, and has high bending, buckling and breaking strengths.

### Standard Panel Dimensions

Width	Length	Thickness
1250mm	3200mm	4mm
	4000mm	
1500mm	3200mm	4mm
	4000mm	

Source: Vitracore-G2-Product-Introduction.

## A3 Product specification

Classification	Unit	Value
Panel Weight	(Kg/M <sup>2</sup> )	4.6kg/M <sup>2</sup>
Thickness	(mm)	4
Thickness of Aluminium Face	(mm)	0.7
Width	(mm)	1250/1500

## Aluminium Skin

Tensile Strength Alloy/Temper of Aluminium Layers	3003 H24
Dry Film Thickness (Nominal)	0.20-0.30 Mil Primer 0.70-0.80 Mil Topcoat
Gloss	Standard @ 60°: 25-35 Duramar Lg @ 85°: <10
Pencil Hardness	F-2h
Flexibility	0-2 T-Bend; No Pick-Off
Reverse Impact	1.5 X Metal Thickness (Aluminium): No Cracking or Adhesion Loss
Acid Resistance	10% Muriatic Acid - 24 Hrs: No Effect
Acid Rain Test	15 Cycles Min. No Objectionable Colour Change
Alkali Resistance	No Effect
Salt Spray Resistance	Passes 4000 Hrs. Less Than 1/1' Avg. Creepage from Scribe; None or Few #8 Blisters
Humidity Resistance	Passes 4000 Hrs. No #8 Blisters
Exterior Exposure	Max. 5 Fade Max. 8 Chalk
Reaction to fire	The Vitracore G2 aluminium honeycomb core has been tested in accordance with clause 3.4 of AS 1530.1-1994 by the CSIRO and are <b>NOT deemed COMBUSTIBLE</b> according to this test criteria.

## Weatherproofing

In a report from BG&E Façade consultants dated June 2016 the following is stated:

1. The cladding system is a faced sealed system which primarily dependent on the sealant quality and site workmanship.
2. The system has not been tested to either AS 2047-2014 nor AS/NZS 4284:2008, however, we note by adopting the performance based verification in the National Construction Code (NCC) and referring to NCTL test report, the system should meet the weatherproofing clause FP1.4 of the NCC for a positive serviceable static wind pressure of up to 600pa for weather resistance.
3. The Façade Contractor shall design, engineer, fabricate, supply and install the complete façade work strictly in accordance with the installation manual, the Principal's project's requirements and the project's specifications.
4. The drawings provided show general design intentions of the cladding system. The structural capacity of the cladding system and stiffeners must be designed for each specific project requirements.

5. Designers are required to design the cladding system to accommodate deflection movements due to all design loads and changes in temperature without any reduction in the project's specified performance and the relevant Australian Standards.
6. The façade contractor shall comply with manufacturer's instructions for all sealant materials, joint preparation, curing, joint dimensions and backer rods. Façade contractor to seal all joints in accordance with these drawings, approved shop drawings and project's specifications.
7. The façade contractor shall install fixings in accordance with their manufacturer's instructions and procedures. Fixings shall be made weathertight in a manner not restricting thermal or wind movements of the façade.

#### **A4 Manufacturer and manufacturing plant(s)**

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

#### **A5 Installation requirements**

The Vitracore G2 Cladding System must be installed in accordance with the [Vitracore G2 Installation Manual Version 2](#).

#### **A6 Other relevant technical data**

When tested in accordance with AS/NZS 1530.3:1999 The product archives the following results:

Ignitability index	0
Spread of flame Index	0
Heat evolved index	0
Smoke development Index	1

BCA Clause C1.9(e)(vi) states that bonded laminated materials, may be used wherever a non-combustible material is required, providing that:

- A. each lamina, including any core, is non-combustible; and
- B. each adhesive layer does not exceed 1mm in thickness and the total thickness of the adhesive layers does not exceed 2mm; and
- C. The Spread-of-Flame Index and the Smoke-Developed Index of the bonded laminated material as a whole do not exceed 0 and 3 respectively.

The Vitracore G2 aluminium composite sandwich panels with a nominal thickness of 4mm meets all the above requirements, as demonstrated by the various tests, hence can be used where non-combustible material is required.

According to DtS provisions in the BCA for Type A and Type B construction, external walls need to be non-combustible. As Vitracore G2 can be used where non-combustible materials are required it can be used as an element of an external or internal wall.

#### **Means of Demonstrating Conformity**

Clause	Compliance pathway.
<b>FP1.4</b>	Weatherproofing - BG&E Facades; Performance based verification in the National Construction Code (NCC). Weatherproofing including compliance with the NCC for a positive serviceable static wind pressure of up to 600pa for weather resistance; Dated 08/06/2016.

## GP5.1

Construction in Bushfire Prone Areas – (BAL FZ) – when tested in accordance with AS 1530.1. Vitracore G2 is Deemed non-combustible, consequently it is deemed a suitable construction material for use in Bushfire zones and is permitted to be used on buildings of Type A, B or C construction, within bushfire prone areas, on buildings fitted with or without an automatic fire sprinkler system and at any distance from a fire source feature subject to specific engineering design.

Source: Ignis Solutions; Evaluation Report No. 5200 Issue 1 Revision 2 [2017].

## C1.9(e)(vi)

Non-Combustibility - Bonded laminate material- CSIRO; Certificate of testing No. FNC 11458 tested the honeycomb core in accordance with AS 1530.1. Deemed non-combustible in accordance with AS 1530.1-1994. RED Fire Engineers subsequently provided an assessment confirming compliance with this clause.

Source: RED Fire Engineers; Report No. JV15-00082 Revision 8.

## C1.10

Fire Hazard properties – Vitracore G2 can also be used as a wall and ceiling lining where a group 1 material is listed according to BCA specification C1.10.

CSIRO; Report No. FNE 11459 Certificate of testing in accordance with AS/NZS 1530.3:1999.

## APPENDIX B – EVALUATION STATEMENTS

### B1 Evaluation methods

- a. Fire Assessment - A2.2 (a) (i) & (iii) and 1.2.2 (a) (i) & (iii) Reports from NATA accredited test Laboratories, certificates from Professional Engineers.
- b. Weatherproofing - A2.2 (a) (iii) and 1.2.2 (a) (iii) certificates from Professional Engineers.
- c. Structural Reliability - as relevant to Wind Action-A2.2 (a) (iii) and 1.2.2 (a) (iii) certificates from Professional Engineers.

### B2 Reports

- a. BG&E Facades; Performance based verification in the National Construction Code (NCC). Weatherproofing including compliance with the NCC for a positive serviceable static wind pressure of up to 600pa for weather resistance; Dated 08/06/2016.
- b. CSIRO; NATA Accreditation No. 165; Certificate of Testing No. FNC 11458; Honeycomb Core tested in accordance with AS 1530.1 - Deemed non-combustible in accordance with AS 1530.1-1994; Dated 10/08/2015.
- c. CSIRO; NATA Accreditation No. 165; Report No. FNE 11459; Vitracore G2 Panel tested in accordance with AS/NZS 1530.3:1999; Dated 12/08/2015.
- d. RED Fire Engineers; Report No. JV15-00082 Revision 8; Vitracore G2 Fire Assessment; Dated 13/03/2018.
- e. Ignis Solutions; Engineering Advisory Note Evaluation No. IGNS-6081 Issue 01 Revision 01 [2018]; Fairview Cladding Cassette System NCC Compliance; 13/03/2018.
- f. Ignis Solutions; Evaluation Report No. 5200 Issue 1 Revision 2 [2017]; Vitrabond G2 Bushfire Assessment; Dated 20/02/2018.

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