



**vitracore G2<sup>®</sup>**

BONDED ALUMINIUM PANEL / MANUFACTURED BY FAIRVIEW

**PRODUCT INFORMATION**

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## **ABOUT VITRACORE G2**

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Vitracore G2 is the ideal façade product for all types of construction, from residential developments to large-scale government infrastructure projects. Vitracore G2 panels can be installed like traditional Aluminium Composite Panels (ACP), yet are the safe option as they do not contain the combustible polyethylene elements of ACPs.

The lightweight nature of the panels, aid in installation procedure and efficacy, reducing overall construction cost. Providing an almost limitless range of colours and finishes, including the option of customisable graphic panels, Vitracore G2 is the decisive solution to high demand and industry requirements.



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## KEY FEATURES

The outstanding performance of Vitracore G2 is made possible by a range of significant components that make this product ideal for application in Type A, B, and C buildings where non-combustible materials are required.

Vitracore G2 was the first bonded aluminium panel to be awarded the status 'deemed non-combustible' under the Building Code of Australia (BCA) under Clause C1.9e and is fully tested as required to AS1530.1 and AS1530.3.

PRODUCT	VITRACORE G2
Product DNA	Bonded aluminium panel
Finish	The highly recognised Kynar 500 <sup>®</sup> PVDF Paint System known for its high durability, providing the optimum resistance to weather and industrial pollution.
Fixing System	A cassette style concealed fixing system which is the same to fabricate and install as traditional ACPs.
Application	Type A, B, and C constructions where non-combustible materials are required such as mixed-use developments, residential construction, and large-scale government infrastructure projects like hospitals.
Warranty	15-year warranty, subject to standard terms and conditions.

## PANEL SPECIFICATION

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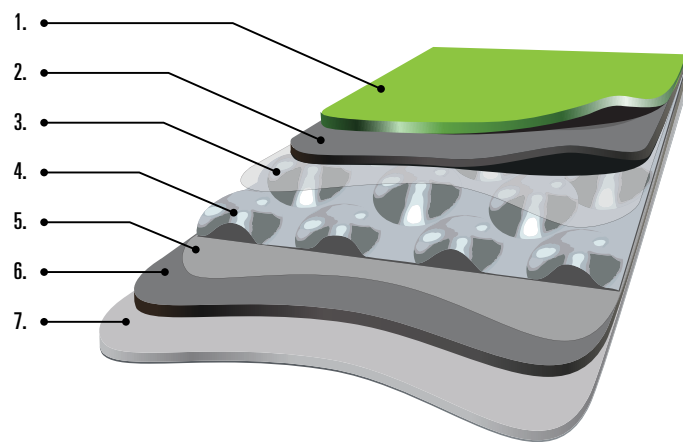
The typical composition of Vitracore G2 consists of seven elements, each complying with non-combustibility requirements as specified in 2019 BCA C1.9. The overall thickness of each panel is 4mm with a weight of 4.6kg/m<sup>2</sup>, compared to the average weight of a solid aluminium panel which is 8.1kg/m<sup>2</sup>, making Vitracore G2 panels easier and faster to install, especially useful on large infrastructure projects.

Available in a range of sizes to suit various requirements, we also offer custom sizing where required.

## TYPICAL COMPOSITION

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1. PVDF Coloured Coating
2. 0.7mm Aluminium Skin
3. < 0.1mm Adhesive
4. 3mm Profiled Aluminium Core
5. < 0.1mm Adhesive
6. 0.5mm Aluminium Skin
7. Polyester Anti-corrosion Coating



### DIMENSIONS

Thickness: 4mm  
Weight: 4.6kg/m<sup>2</sup>

### ALUMINIUM SKINS

Surface material both sides:  
Aluminium sheets of a minimum 3000 series.  
- Face skin: 0.7mm  
- Rear skin: 0.5mm

### CORE MATERIAL

The core is profiled 0.3mm aluminium core, expanded to 2.8mm.

## PANEL SIZES

WIDTH	LENGTH
1250	3200
	4000
1500	3200
	4000

CUSTOM SIZES ARE AVAILABLE, PLEASE SPEAK TO THE FAIRVIEW TEAM

## MATERIAL DATA

CLASSIFICATION	TEST STANDARD	UNIT	RESULT
Temperature Limit		°C	-50 ± 80
Core Shear Properties	ASTM C393/393-11	MPa	Core shear ultimate strength: 0.91 Facing Stress: 130.7
Tensile Properties of Facing Aluminium Panel	ASTM E8/E8M15a	MPa	Tensile Strength: 172.9 MPa Elongation: 8.4%
Tensile Strength	ASTM C297/C297M15	MPa	0.81
Facing Peel Torque	ASTM D1781-98 (2012)	mm N/mm <sup>2</sup>	270
Thermal Resistance	ASTM C318-10	m <sup>2</sup> K/W	0.005
Acoustic Resistance	ISO 717-1	dB	R <sub>w</sub> (C, Ctr) = 22 (-1,-2)



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## FINISH

Vitracore G2 uses only the highly recognised PVDF Kynar 500<sup>®</sup> or FEVE paints known for their excellent durability. These premium paints provide the ultimate resistance to weather and industrial pollution. More than 50 years of South Florida Exposure Testing is continuing to confirm the superior chemical and physical properties of fluoropolymer coatings.

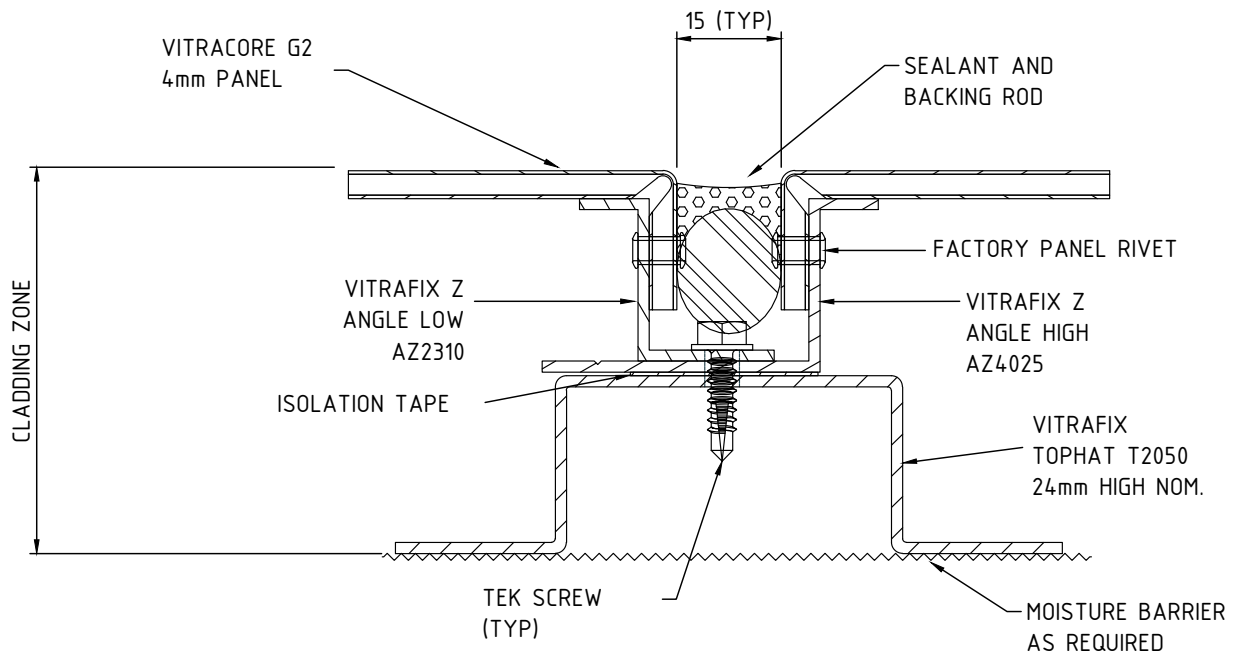
Vitracore G2 has an unlimited colour range as we can match almost any finish and colour required.

Vitracore G2 panels also come in a range of anodised finishes, offering both standard and customised colours and textures. For a truly individual façade, it can also be used with our custom graphic cladding solution, VitraART, which comes with a 10 year exterior warranty, subject to conditions.

The use of VitraART on Vitracore G2 panels allows designers to incorporate custom graphics, from a brick or stone wall to an individualised large-scale full panel print.



## FIXING SYSTEM



This is a concept drawing only, please refer to the Vitracore G2 Technical Information.

## APPLICATION

Vitracore G2 is suitable for application on Type A, B, and C constructions including hospitals, mixed-use developments, and residential projects. The 2019 BCA clause C1.9e (vii) highlights the use of bonded laminated panels wherever non-combustible materials are required.

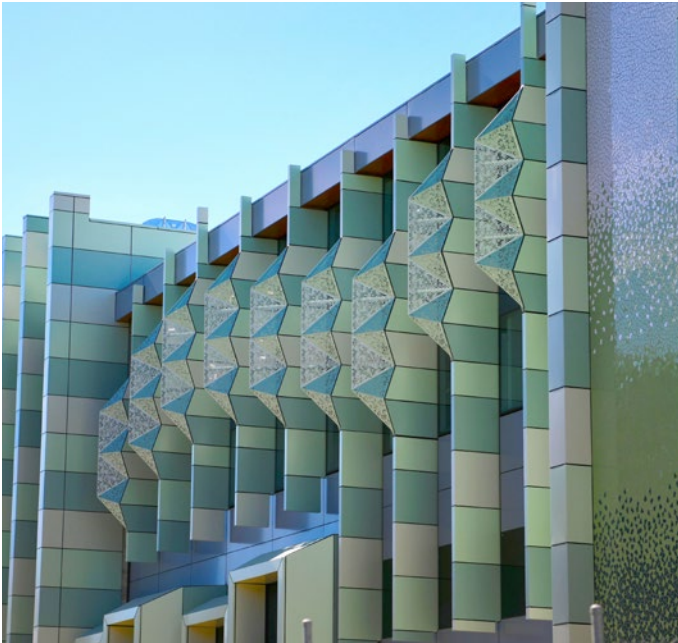
## WARRANTY

Vitracore G2 is an incredibly durable material when used in the right application.

Vitracore G2 includes a 15-year warranty, subject to standard terms and conditions.



## CASE STUDY



### NSW FORENSIC PATHOLOGY AND CORONER'S COURT

**PROJECT:** NSW FORENSIC PATHOLOGY AND CORONER'S COURT

**ARCHITECT:** SILVER THOMAS HANLEY & COX ARCHITECTURE

**BUILDER:** WATPAC NSW

**INSTALLER:** GRANGE GLASS & ALUMINIUM

**PRODUCT:** VITRACORE G2 (APPROX. 3980M2)

**COLOUR:** FRESH GREEN, PURE WHITE, COOL GREY, IRISH MOORE, BECHETT

Greater Western Sydney is now home to the new NSW Forensic Pathology and Coroner's Court. The facility was relocated from Glebe to Lidcombe to provide more space and vastly improved technology for the NSW Justice and NSW Health departments.

Fairview's deemed-to-satisfy non-combustible Vitracore G2 panels were chosen to achieve the unique exterior as designed by Silver Thomas Hanley and Cox Architecture. The design features vertical fins with pyramid details in five complementary finishes - Fresh Green, Pure White, Cool Grey from Fairview standard range and custom colours, Bechett and Irish Moore.

The former Lidcombe Hospital site was completely renewed. The modern and highly functional design benefits from the cost effectiveness of Vitracore G2 which provides outstanding surface flatness and high quality PVDF coating system, an excellent choice for resistance to weather and industrial pollutants.

**Vitracore G2 is a high performance cladding panel ideal for infrastructure projects.**





## DOCUMENT TRACKING

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VERSION #	DATE	CHANGES
1.0	03/08/20	Initial Issue

## DISCLAIMER

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