



Paneltec
INDUSTRIES



vitracore G2[®]

DEEMED NON-COMBUSTIBLE COMPOSITE PANEL / MANUFACTURED BY FAIRVIEW

APRIL 2018

ABOUT VITRACORE G2

Vitracore G2 is Australia's leading deemed non-combustible aluminium composite panel.

The benefits of Vitracore G2 include its high mechanical properties and simple fabrication. The outstanding surface flatness of is enhanced with a high quality PVDF coating system, which provides optimum resistance to weather and industrial pollutants and comes in an unlimited range of colours, as well as a selection of natural finishes.

100% developed and manufactured by Fairview and distributed throughout New Zealand by Paneltec, Vitracore G2 is exactly the same as traditional aluminium composite panel, however, the advanced technology of the core is constructed from a complete aluminium structure rather than from a combustible material as per traditional composite panels.

Not only is does it look similar to traditional ACP, it is also the same to fabricate and install. The technology of the core also allows continual production; providing an exceptionally consistent and cost effective product.

Vitracore G2 is ideal for all façade and soffit applications requires minimal maintenance and comes with a 15 year warranty with longer warranties available on a project specific basis.

KEY FEATURES



FIRE RATING

Vitracore G2 is an A2 rated and is one of few aluminium composite panels (ACPs) globally that is deemed non-combustible under the Building Code of Australia (BCA) when tested to AS1530.1 & AS1530.3 and compliant with clause C1.12 Part (f).



PAINT SYSTEM

Vitracore G2 only uses the highly recognised PVDF KYNAR 500 or FEVE paints known for their high durability, providing the optimum resistance to weather and industrial automation.



CODEMARK

Vitracore G2 is CodeMark certified to comply with the building code of New Zealand ensuring that you are specifying a quality assured product.



WEATHERPROOFED

Vitracore G2 is weatherproofed to E2 requirements and tested according to NFPA 4284 and passed to a high level.



COST EFFECTIVE

Vitracore G2 is a very light and ridged panel that is very quick to fabricate and to install and structure of the panel also helps to reduce costs.



CONCEALED FIX SYSTEM

Vitracore G2 is the same to fabricate and install as traditional ACP by CNC routing panels into the concealed fix z-angle cassette system.



LIGHTWEIGHT

Vitracore G2 is incredibly rigid and lightweight and is therefore also easy to install.



WARRANTY

Vitracore G2 has up to 15 year's warranty when installed by a licensed installer.



FIRE RESISTANCE

In today's architecture, it is the technical details, as well as the appearance that count; such as sustainability, thermal insulation, and fire protection. The specification and use of non-combustible façade panels has now become an industry norm amongst architects and industry professionals.

Vitracore G2 was the first ACP panel to be awarded the status 'deemed non-combustible' under the Building Code of Australia (BCA) including Clause C1.12 part (f) and is fully tested to AS1530.1 and AS1530.3. Vitracore is also an A2 fire rated panel that achieves Group 1 in the NZBC

Here are the test results of Vitracore G2.

VITRACORE G2			
TEST STANDARD	RESULT		
AS1530.1	DEEMED NON-COMBUSTIBLE		
AS1530.3	PASS	Ignitability Index	0
	PASS	Heat Evolved	0
	PASS	Spread of Flame	0
	PASS	Smoke Developed	1

INFRASTRUCTURE

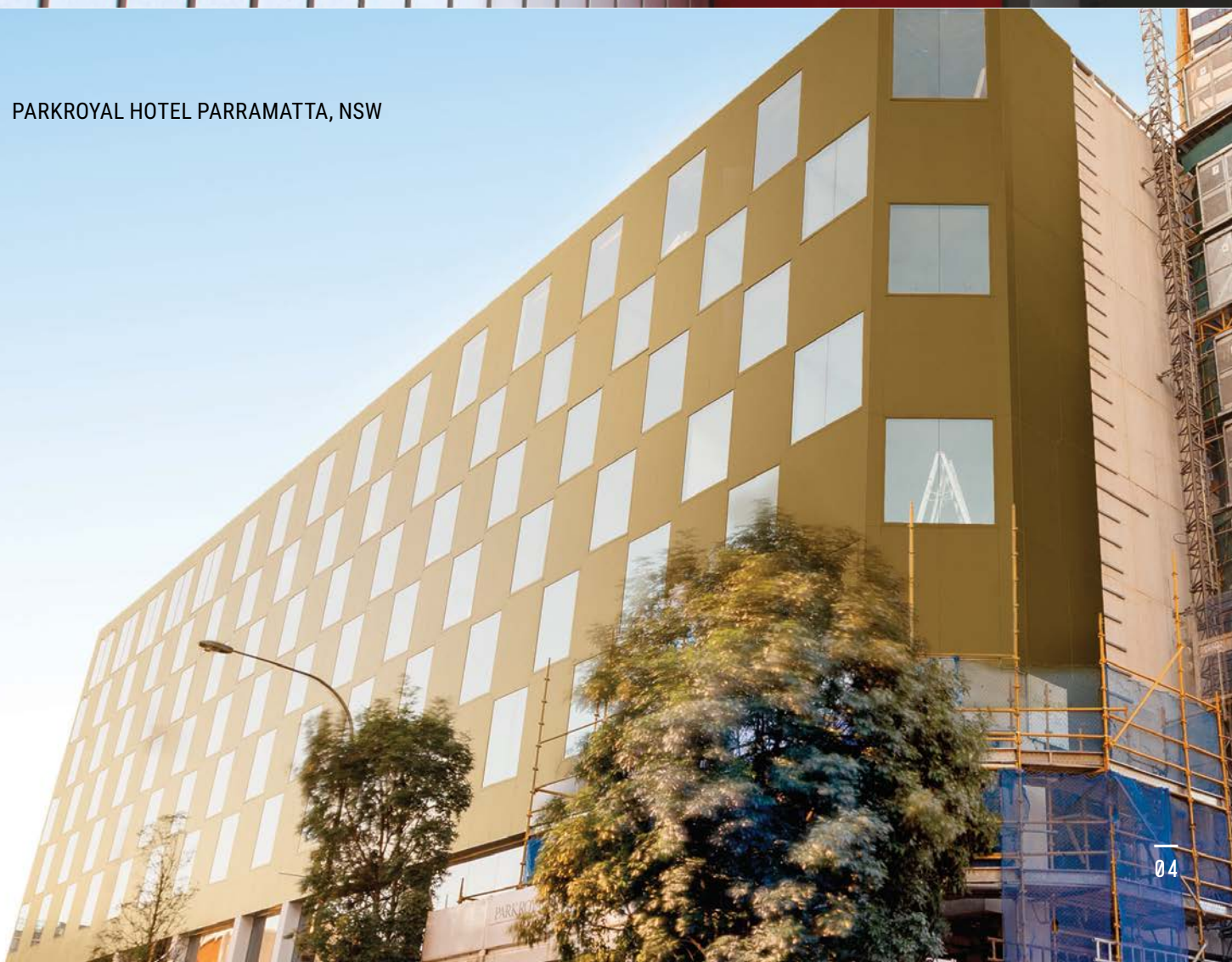
Vitracore G2 has been widely used in Australia on infrastructure projects such as schools and hospitals due to it being deemed non-combustible. Other key benefits of using this product on infrastructure projects include:

- A2 Fire rated
- Resistant to corrosion
- Lightweight
- Easy to install and replace
- Cost-effective
- Unlimited colour range, including graphics
- Design flexibility
- 15 year warranty

HMAS ALBATROSS HELICOPTER AIRCREW TRAINING SYSTEMS (HATS), NSW



PARKROYAL HOTEL PARRAMATTA, NSW



MANUFACTURING QUALITY

A dedication to the total fulfillment of our client's and customer's expectations is reflected by a complete quality control system, beginning at the point of specification and continuing through to delivery of the guaranteed products. All activities are carried out in a manner which;

- Uses the framework of ISO9000 Quality Standards to verify the quality of our systems
- Ensures that our products and services are of the highest standards
- Create continuous improvements to our product through the application of the best quality practices.

ACCEPTANCE VARIATION

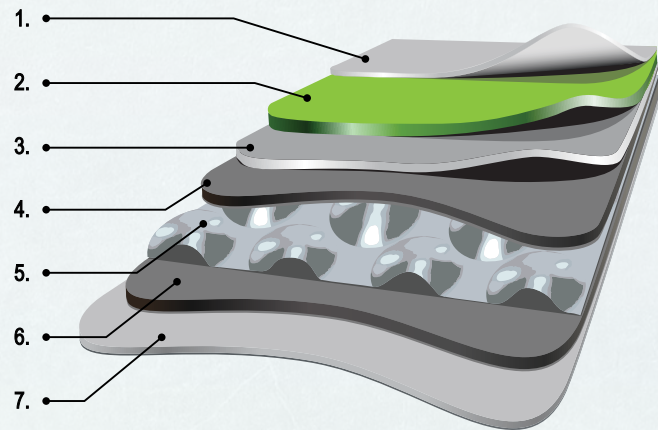
WIDTH	±2.0 mm
LENGTH	±4.0 mm
THICKNESS	±2%
BOW MAXIMUM	0.5% of the length and/or width
SQUARENESS MAXIMUM	5.0 mm
SURFACE DEFECTS	The surface shall not have any irregularities such as dents, scratches and other imperfections in accordance with our quality assurance

WARRANTY

A warranty of up to 15 years is offered, when installed by a licensed installer.

TYPICAL COMPOSITION

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



DIMENSIONS

WIDTH	LENGTH	THICKNESS
1250	3200	4mm
	4000	
1500	3200	
	4000	
CUSTOM SIZES ARE AVAILABLE, PLEASE SPEAK TO THE PANELTEC TEAM		

WEIGHT

THICKNESS	WEIGHT (KG/M²)
4mm	4.6

TECHNICAL DATA

CLASSIFICATION	TEST STANDARD	UNIT	VITRABOND
PANEL WEIGHT		[kg/m ²]	4.6
THICKNESS		[mm]	4
THICKNESS OF ALUMINIUM FACE		[mm]	0.7
WIDTH		[mm]	1250/1500
ALUMINIUM SKIN			
TENSILE STRENGTH			160MPa
ALLOY/TEMPER OF ALUMINIUM LAYERS			3003 H24
SURFACE PROPERTIES (PVDF COATINGS)			
DRY FILM THICKNESS (NOMINAL)	ASTM D1400		0.20-0.30 mil primer 0.70-0.80 mil topcoat
GLOSS	ASTM D523		Standard @ 60°: 25-35 Duranar LG @ 85°: <10
PENCIL HARDNESS	ASTM D3363		F-2H
FLEXIBILITY	T-Bend, ASTM D4145		0-2 T-Bend; No pick-off
ADHESION	ASTM D3359 Reverse Impact 1/16" crosshatch		No adhesion loss
REVERSE IMPACT	ASTM D2794		1.5 x Metal thickness (aluminium): No cracking or adhesion loss
ACID RESISTANCE	ASTM D1308		10% Muriatic acid - 24 hrs: No effect
ACID RAIN TEST	Kesternich SO ₂ , DIN 50018		15 Cycles min. No objectionable colour change
ALKALI RESISTANCE	ASTM D1308 10%, 25%, NaOH, 1 hr.		No effect
SALT SPRAY RESISTANCE	ASTM B117 5% salt fog @ 95°F		Passes 4000 hrs. Less than 1/1" avg. creepage from scribe; None or few #8 blisters
HUMIDITY RESISTANCE	ASTM D714 ASTM D2247 100% relative humidity @ 95°F		Passes 4000 hrs. No #8 blisters
EXTERIOR EXPOSURE	ASTM D2244 ASTM D4214 10 yrs. @ 45°, South Florida		Max. 5 fade Max. 8 chalk



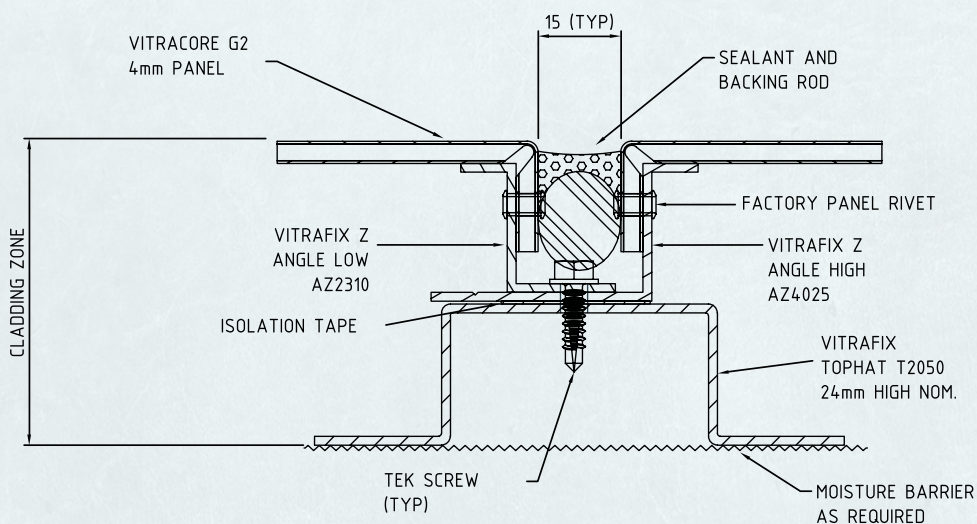
FINISH

Vitracore G2 uses only the highly recognised PVDF KYNAR 500 or FEVE paints known for their high durability. These premium paints provide an optimum resistance to weather and industrial pollution. More than 40 years of South Florida Exposure Testing is continuing to confirm the superior chemical and physical properties of fluoro polymer coatings.


Vitracore G2 has an unlimited colour range. We are able to match almost any finish and colour required.

Vitracore G2 panels alternatively comes in a range of anodised finishes, offering both standard and customised colours and textures as well as natural zinc finishes. It can also be used with our custom graphic cladding solution, VitraART, to create a truly individual façade that comes with a 10 year exterior warranty.

FIXING SYSTEM



Concept drawing only. For more details, please refer to the Paneltec Installation Manual

A photograph of a modern building with multiple levels. The building features a prominent balcony with a glass railing and a perforated metal screen. The facade is composed of large, rectangular panels in shades of orange and yellow. The building is set against a clear blue sky.

SOUTHERN CROSS UNIVERSITY, NSW

A photograph of a modern building with a distinctive, angular facade. The facade is composed of large, triangular panels in shades of green and yellow. The building is set against a cloudy sky.

CHERMSIDE NORTHERN REGIONAL
BUSINESS CENTRE & LIBRARY, QLD



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