

NON-COMBUSTIBLE COMPOSITE PANEL / MANUFACTURED BY FAIRVIEW



PRODUCT INTRODUCTION



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ABOUT





PRODUCT DESCRIPTION

Vitracore G2 is Australia's leading 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, 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 BENEFITS

- DEEMED NON-COMBUSTIBLE BY THE BCA
- HIGHLY EFFECTIVE FOR INFRASTRUCTURE
- PROJECTS EG, HOSPITALS AND SCHOOLS
- COST EFFECTIVE, LARGE STOCK HOLDINGS & Short lead times
- TESTED TO AS1530.1 & AS1530.3
- COMPLIANT WITH CLAUSE C1.12 PART (F)
- WEATHERPROOFED TO BCA CLAUSE FP1.4
- VISUALLY THE SAME AS TRADITIONAL ACP
- IMITATIONS AVAILABLE SUCH AS CORTEN
- CORE TECHNOLOGY ALLOWS FOR CONTINUAL Production
- AVAILABLE IN A WIDE RANGE OF FINISHES INCLUDING: SOLID & METALLIC, NATURAL ZINC, SPECIAL EFFECTS COLOURS, AND IMITATION STONE, TIMBER, CORTEN & COPPER
- 15 YEAR WARRANTY

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 G2 is the proven choice for use where non-combustible cladding must be specified such as hospitals, schools and high-rise buildings.

Here are the test results of Vitracore G2.

VITRACORE G2					
TEST STANDARD	RESULT				
AS 1530.1	DEEMED NON-COMBUSTIBLE				
AS 1530.3	PASS	Ignitability Index	0		
	PASS	Heat Evolved	0		
	PASS	Spread of Flame	0		
	PASS	Smoke Developed	1		

INFRASTRUCTURE

Vitracore G2 has been widely used on infrastructure projects such as schools and hospitals due to it being 100% non-combustible. Other key benefits of using this product on infrastructure projects include:

- NON-COMBUSTIBLE
- RESISTANT TO CORROSION
- LIGHTWEIGHT
- EASY TO INSTALL AND REPLACE

- COST-EFFECTIVE
- UNLIMITED COLOUR RANGE, INCLUDING GRAPHICS
- DESIGN FLEXIBILITY







MANUFACTURING QUALITY

A dedication to the total fulfillment of our clients' and customers' 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	\pm 2% for 3 mm & 4 mm; 3% for 6 mm
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



PROPERTIES

04



SKIN & CORE

Aluminium Skins - 0.7mm face skin, 0.5mm rear skin. Core Material - Aluminium

DIMENSIONS

WEIGHT

THICKNESS	WEIGHT (kg/m2)
4mm	4.4

TYPICAL COMPOSITION

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

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

TECHNICAL DATA

CLASSIFICATION	TEST STANDARD	UNIT	VITRACORE G2
PANEL WEIGHT		[kg/m2]	4.4kg/m2
THICKNESS		[mm]	4
THICKNESS OF ALUMINIUM FACE		[mm]	0.7
WIDTH		[mm]	1220/1500
ALUMINIUM SKIN			
TENSILE STRENGTH			160MPa
ALLOY/TEMPER OF AUMINIUM 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 SO², DIN 50018		15 Cycles min. No objection- able 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	10 yrs. @ 45°, South Florida ASTM D2244ASTM D4214		Max. 5 fade Max. 8 chalk

FINISHES



STOVE LACQUERING

VitrVitracore 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 by our customers.

OTHER

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

FIXING SYSTEM



For more details, please refer to the Vitracore G2 Installation Manual





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FAIRVIEW PRODUCT RANGE:





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