PRODUCT INTRODUCTION

vitracore G2®

DEEMED NON-COMBUSTIBLE ALUMINIUM PANEL / MANUFACTURED BY FAIRVIEW

vitracore G2®

DEEMED NON-COMBUSTIBLE ALUMINIUM PANEL / MANUFACTURED BY FAIRVIEW

ABOUT VITRACORE G2

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

100% developed and manufactured by Fairview Australia and distributed throughout New Zealand by Paneltec, Vitracore G2 is exactly the same as traditional aluminium composite panel (ACP), however the advanced technology of the core is constructed from a complete aluminium structure rather than from a combustible material. With no composite material present, Vitracore G2 is renamed as a Aluminium Laminated Panel (ALP).

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

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

Vitracore G2 can be easily and accurately installed by a pre-made cassette system, requires minimal maintenance and comes with excellent long-term performance.

Vitracore G2 is one of the few aluminium panels globally this is deemed non-combustible under the Building Code of Australia (BCA) when tested to AS1530.1 & AS1530.3 under clause C1.9e part(vi). Vitracore G2 has also completed the full scale BS8414 test with a full pass to the BR135 standard. Vitracore G2 has been tested to the strongent AS5113 standard in which it passed all the testing criteria except the debris clause.

KEY FEATURES

FULL SCALE FIRE TESTED
Vitracore G2 is one of the few aluminium panels in NZ that has been tested to BS8414 test and fully passed the BR135 criteria.
Vitracore G2 has passed the AS1513 test apart from the debris criteria.

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 pollution.

CODEMARK
Vitracore G2 is in the process of obtaining a codemark. Individual files are available to prove full compliance.

WEATHERPROOFED
Vitracore G2 is weatherproofed to E2 Standards when using Paneltec's AS/NZS 4284 tested system.

COST EFFECTIVE
Vitracore G2 is a more cost effective solution than other products on the market due to the panel make up.

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.

INFRASTRUCTURE
Being full scale fire tested and offering simple and lightweight fabrication make Vitracore G2 a suitable product for large infrastructure projects.

WARRANTY
Vitracore G2 has up to 15 year's warranty when correctly installed and maintained.

vitracore G2®

DEEMED NON-COMBUSTIBLE ALUMINIUM PANEL / MANUFACTURED BY FAIRVIEW

FIRE RESISTANCE

In today's architecture, not only is it the appearance that counts but equally important is the technical details, such as sustainability, moisture control, and fire protection. The specification and use of intense full scale fire test on façade panels has now become an industry norm amongst architects and industry professionals.

To provide peace of mind and demonstrate full scale performance, Vitracore G2 has been large scale fire tested to the requirements of BS8414 with a full pass to BR135 standard and did not propagate flame. Vitracore has also been tested to the stringent AS5113 standard in which it passed all the testing criteria except the debris clause.

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(vi) and is tested to AS1530.1 and AS1530.3. Vitracore G2 is the proven choice for use where full scale tested facade cladding must be specified such as hospitals, schools and high-rise buildings.
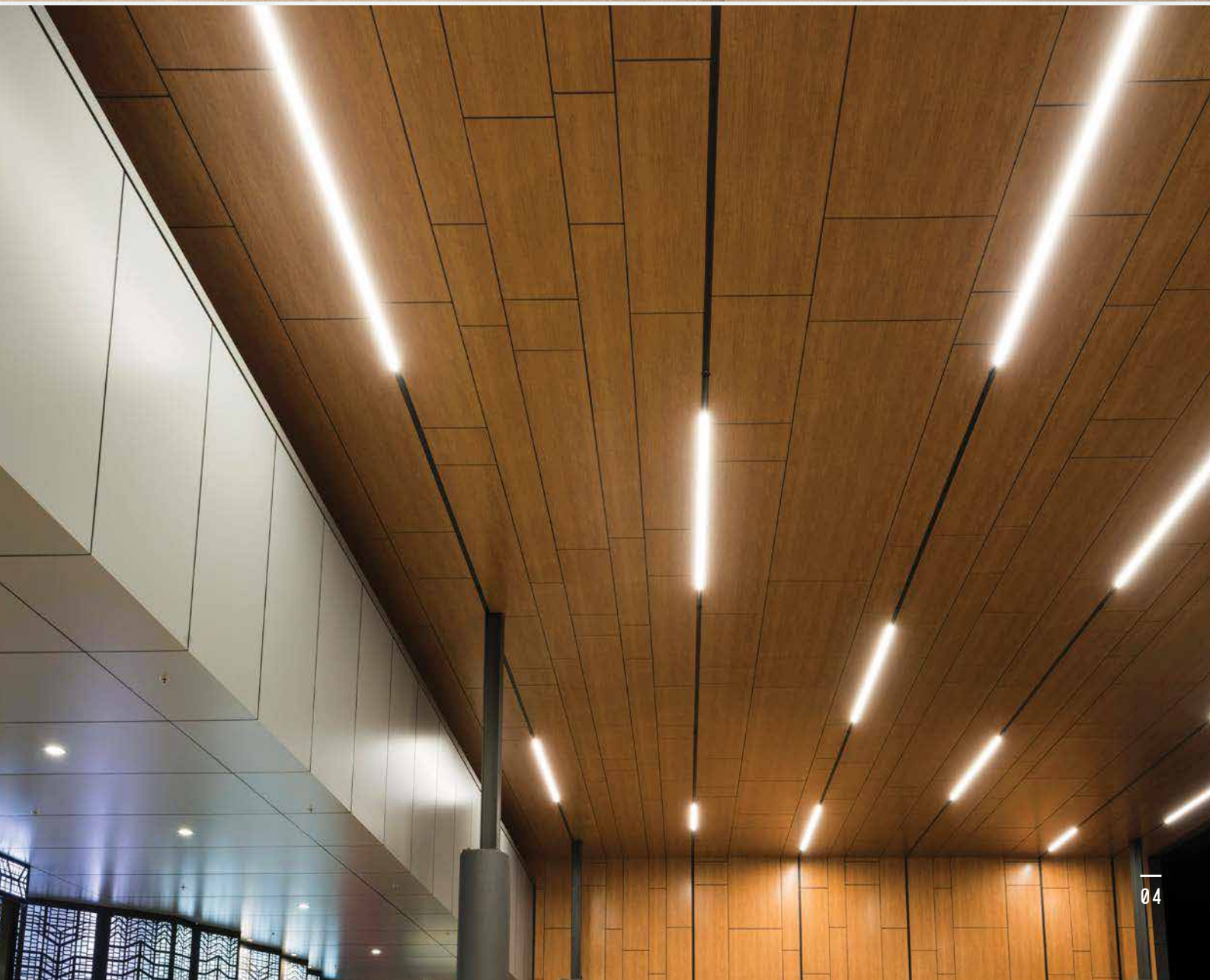
VITRACORE G2			
TEST STANDARD	**RESULT**		
AS1530.1	LAMINATE LAYERS NON-COMBUSTIBLE		
AS1530.3	PASS	Ignitability Index	0
	PASS	Heat Evolved	0
	PASS	Spread of Flame	0
	PASS	Smoke Developed	1
Compliance with C1.9E(vi)	DEEMED NON-COMBUSTIBLE		
BR135 & BS8414	PASS		
AS5113	Flame spread and temperatures well below AS5113 requirements, however as expected for aluminium panels, the debris criteria was not met.		

INFRASTRUCTURE

Vitracore G2 has been widely used on infrastructure projects such as schools and hospitals due to it being a highly tested facade product. Other key benefits of using this product on infrastructure projects include:

- Full scale fire tested
- Resistant to corrosion
- Lightweight
- Easy to install and replace
- Cost-effective
- Unlimited colour range, including graphics
- Design flexibility
- Long term durability

vitracore G2®

DEEMED NON-COMBUSTIBLE ALUMINIUM PANEL / MANUFACTURED BY FAIRVIEW

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;
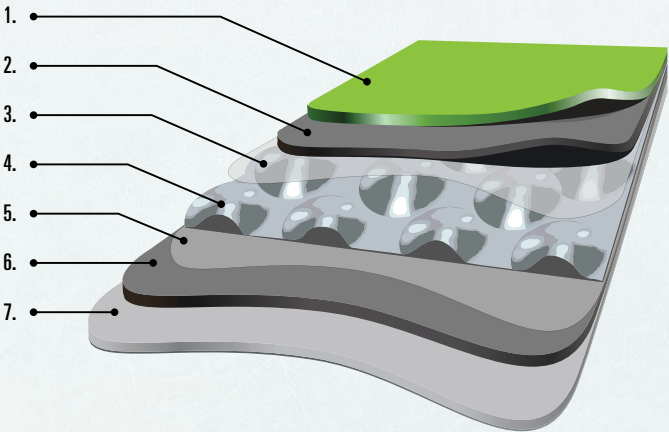
• Uses the framework of ISO9001 Quality Standard to verify the quality of our systems.
• Ensures that our products and services are of the highest standards.
• Creates continuous improvements to our product through the application of the best quality practices.

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.

TYPICAL COMPOSITION

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

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

WEIGHT

THICKNESS	WEIGHT (KG/M²)
4mm	4.6

TECHNICAL DATA

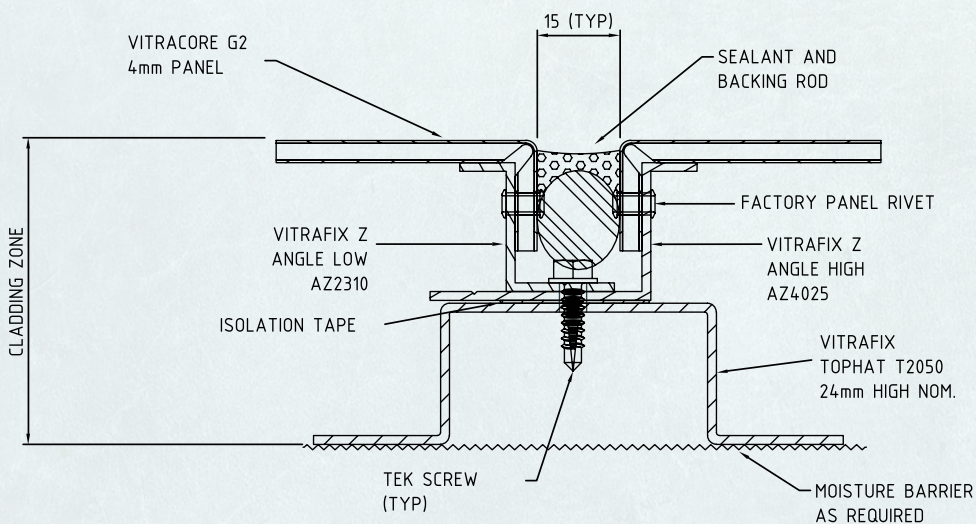| CLASSIFICATION	TEST STANDARD	UNIT	VITRACORE G2
PANEL WEIGHT		[kg/m2]	4.6
THICKNESS		[mm]	4
THICKNESS OF ALUMINIUM FACE		[mm]	0.7
WIDTH		[mm]	1250/1500
ALUMINIUM SKIN			
TENSILE STRENGTH			160MPa
ALLOY/TEMPER OF AUMINIUM LAYERS			3003 H24
SURFACE PROPERTIES (PVDF COATINGS)			
DRY FILM THICKNESS (NOMINAL)	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 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

vitracore G2 ®

FINISH

Vitracore G2 uses only the highly recognised PVDF KYNAR 500 or FEVE paints known for their excellent 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 as we are able to 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 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 subject to conditions, comes with a 10 year exterior warranty.

FIXING SYSTEM

Concept drawing only. For more details, please refer to the Paneltec Vitracore G2 Installation Manual.

MOORE THEOLOGICAL COLLEGE, NEWTOWN NSW

KUBIX APARTMENTS, WANTIRNA SOUTH, VIC

VERSION 3.3

FAIRVIEW™
DEFINING ARCHITECTURE SINCE 1963

Paneltec
INDUSTRIES

NEW ZEALAND | AUSTRALIA | UNITED KINGDOM
SALES ENQUIRIES 0508 726 358, SALES@PANELTEC.CO.NZ

WWW.PANELTEC.CO.NZ