



NON-COMBUSTIBLE CASSETTE CLADDING / MANUFACTURED BY FAIRVIEW

#### ABOUT VITRADUAL

Manufactured by Fairview and distributed throughout New Zealand by Paneltec. Vitradual is a 3mm solid 100% non-combustible aluminium cassette cladding system.

According to the New Zealand Building Code Vitradual is a completely non-combustible aluminium cassette cladding system when tested to AS1530.1. Designed to complement our existing Vitracore G2; Vitradual forms part of Fairview's range of BCA compliant, Deemed to satisfy non-combustible aluminium composite panel solutions, as Fairveiw continue to lead the industry in addressing the issue of combustible facades.

Vitradual is a durable, high impact resistant, solid panel which can be curved, rolled and perforated. Vitradual features the same PVDF coating system as Vitrabond; well proven for its superior quality, extensive colour range and integrity; unlike traditional 3mm powder-coated aluminium.

Panels are prefinished; the flexibility of PVDF coatings means they do not require fabrication prior to coating like traditional powder-coated cassettes, which minimises lead-times, damage and costs.

#### KEY FEATURES



NON-COMBUSTIBLE Vitradual is AS1530.1 certified non-combustible panel.



HIGH DURABILITY

Vitradual panels are highly durable and impact resistant. They can be used effectively in high traffic areas.



LIGHTWEIGHT

Vitradual is incredibly rigid and lightweight and is therefore also easy to install.



PAINT SYSTEM

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



COST EFFECTIVE

By using Vitradual which is proven non-combustible you can eliminate any secondary non-combustible layer required to meet the building code and save around \$50-100/m<sup>2</sup>.



WARRANTY

Vitradual has up to a 15 year warranty when installed by a licensed installer.



VERSATILE

Vitradual can be custom designed into a wide range of shapes and dimensions as well as able to be perforated or curved in some applications making it a versatile design choice.





#### 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.

Vitradual is one of the few large format cladding panels that are non-combustible when tested to AS1530.1.

Visually, Vitradual is similar to traditional composite panel, however what makes it different is the fact that it is constructed from 100% aluminium, rather than combustible material such as polyethylene and fire rated mineral. This makes Vitradual an ideal product for all applications where non-combustible panels are required; such as high-rise buildings, schools or hospitals.

As with all building products, the use of Vitradual must be authorised by the regulatory body.

The Fire Resistance standards achieved with standard Vitradual are as follows

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

#### **INFRASTRUCTURE**

Vitradual is an ideal cladding solution for infrastructure projects such as schools and hospitals as it is high impact resistant as well as being NZCB compliant, 100% non-combustible. The PVDF coating system also adds a superior finish which provides optimum resistance to weather and industrial pollutants.





## 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% for 3 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	

## WARRANTY

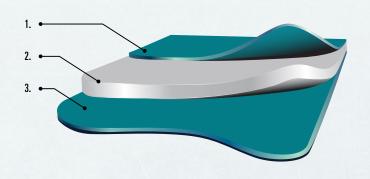
The standard warranty is 15 years, with longer warranties available on a project specific basis when installed by a licensed installer.



### TYPICAL COMPOSITION

- 1. PVDF-Kynar 500 coating system
- 2. 3mm Solid Alumnium
- 3. Polyester Anti-corrosion Coating

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



### **DIMENSIONS**

 WIDTH
 LENGTH
 THICKNESS

 2500
 2500

 3200
 3mm

 4000
 4000

CUSTOM SIZES ARE AVAILABLE, PLEASE SPEAK TO THE PANELTEC TEAM

## WEIGHT

THICKNESS	WEIGHT (KG/M²)	
3mm	7.9	

<sup>\*</sup> May not be available in all finishes.



# TECHNICAL DATA

CLASSIFICATION	TEST STANDARD	UNIT	VITRADUAL
PANEL WEIGHT		[kg/m²]	7.9
THICKNESS		[mm]	3
THICKNESS OF ALUMINIUM FACE		[mm]	3
WIDTH		[mm]	1250
ALUMINIUM SKIN			
ALLOY/TEMPER OF AUMINIUM LAYERS			Minimum 3000 series
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 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	10 yrs. @ 45°, South Florida ASTM D2244ASTM D4214		Max. 5 fade Max. 8 chalk





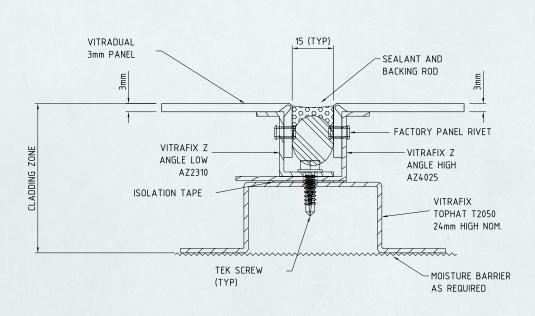


### **FINISH**

Vitradual 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 fluoropolymer coatings.

Vitradual has unlimited colour, we are able to match any finish, from any colour range.

### FIXING SYSTEM



For more details, please refer to the Paneltec Installation Manual

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