# Product Information



Indurabond

Version 1.1 - July 2020



### About Indurabond.

Indurabond Aluminium Composite Panel (ACP), is Paneltec's highly versatile façade cladding panel, offering excellent durability and extreme weather resistance. It is ideal for façades, fascia, soffits, awnings and many more applications such as standing seam cladding and balustrades.

The 4mm thick composite panel is comprised of a fire rated core, sandwiched between either two aluminium or other natural metal cover sheets. This results in an outstanding surface flatness and high workability, coupled with an excellent strength to weight ratio.

Indurabond can be easily and accurately installed by being fabricated into pre-made cassettes and then secret- fixed to a top hat

sub-structure or packers with hidden mechanical fittings.

Indurabond requires minimal maintenance and has an up to 15 year warranty when installed by a licensed installer. With a long track record of consistency, reliability and quality, in addition to our large stock levels, unlimited colour range and continual product development; Indurabond is well-equipped to meet the requirements for every project.

#### Key Features.



#### FIRE RATED

Indurabond has been tested to the NFPA 285 test and has passed.

Indurabond has unrestricted use below 10m.



#### FULL COMPLIANCE

Please contact the Paneltec team to recieve files that prove full compliance and for ease of council consenting.



#### COST EFFECTIVE

Indurabond has enjoyed consistent growth not only due to the desire for a clean and modern look, but also as a product offering rapid cost-effective installation.



#### LOW MAINTENANCE

The Indurabond finish has undergone 40+ years of exposure testing which is continuing to confirm the superior durability and low maintenance of fluorpolymer coatings.



#### PAINT SYSTEM

Indurabond only uses the highly recognised PVDF KYNAR 500 or FEVE paints known for their durability, providing the optimum weather and UV resistance.



#### WEATHERPROOFED

Indurabond is weatherproofed to E2 requirements and tested according to AS/NZS 4284 and passed to a high level.



#### CONCEALED FIX SYSTEM

Indurabond can be installed by routing and folding panels into the concealed fix z-angle cassette system.

#### WARRANTY

Indurabond has a long track record of consistency, reliability and quality allowing us to offer up to a 15 year 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 core contains a high percentage of non-combustible mineral leading to a high level of fire resistance. The panel does not contribute to the spread of flame and has minimal smoke development.

INDURABOND					
TEST STANDARD	RESULT				
ASTM E 84	Class 1 or A	Flame Spread Index	10		
		Smoke Development	20		
ISO 9705	Group 2				
NFPA 285	PASS				

Given the lack of flame propagation in extensive large scale testing, Indurabond FR can generally be used on a performance basis to meet fire resistance requirements and has unrestricted use below 10 metres.

However, for peace or mind and safety for compliance in the future use where non-combustible material is required and high-rise projects, see Paneltec's Induracore G2.

### Weatherproofing.

Indurabond is a faced system that can provide a primary seal for the purpose of weatherproofing. Indurabond has been tested to strenuous AS/NZS 4284 test and has passed.

This means that, where compliant, Indurabond can be used as the primary sealing layer therefore minimising wall build up and maximising efficiencies.

It is highly recommended that fixings be made in accordance with Paneltec's instructions and procedures to ensure that the surface is watertight and able to resist thermal or wind movements of the façade.







### Manufacturing Quality.

A dedication to the total fulfilment 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 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.

WIDTH	±2.0 mm	
LENGTH	±4.0 mm	
THICKNESS	±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	

#### Acceptance Variation.

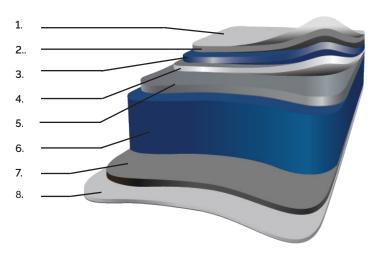
#### Warranty.

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



### Typical Composition

- 1. Peel-off Protective Film
- 2. Clear/Nano Coating
- 3. PVDF Coloured Coating
- 4. Primer Coating
- 5. 0.5mm Aluminium Skin
- 6. 3mm FR Core
- 7. 0.5mm Aluminium Skin
- 8. Polyester Anti-corrosion Coating



#### Dimensions

Width	Length	Thickness		
1250	2500	4mm		
	3200			
	4000			
1500	2500			
	3200			
	4000			
Custom sizes are available, please speak to the Paneltec team.				

### Weight

Thickness	Weight [Kg/M²]	
4mm	7.3	



### Technical Data.

Classification	Test Standard	Unit	Indurabond
Panel Weight		[kg/m2]	7.3
Thickness		[mm]	4
Thickness of Aluminium face		[mm]	0.5
Maximum Width		[mm]	2000
Aluminium Skin		l	ł
Tensile Strength			160MPa
Alloy/Temper of Aluminum layers			3003 H24
Surface Properties (PVDF C	Coatings)		1
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 (alumini- um): No cracking or adhesion loss
Acid Resistance	ASTM D1308		10% Muriatic acid - 24 hrs: No effect
Acid rain Test	Kesternich SO <sup>2</sup> , 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	ASTM D2244 ASTM D4214 10 yrs. @ 45°, South Florida		Max. 5 fade Max. 8 chalk





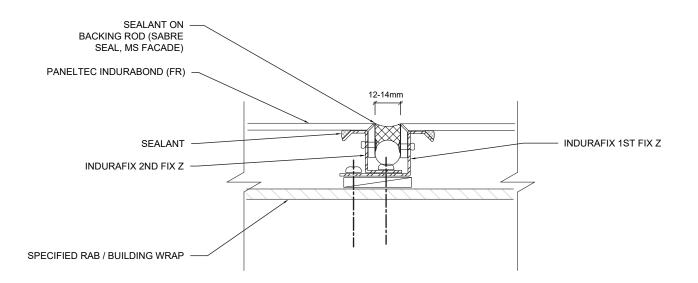
### Finish

Indurabond 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.

We are able to match almost any finish and colour required. Refer to the Paneltec colour chart for standard New Zealand stock colours.

Indurabond panels also come in a range of anodised finishes, offering both standard and customised colours and textures as well as natural zinc, stainless steel, copper and other natural metal finishes.

### Fixing System



#### Concept Drawing Only.

For more details, please refer to the Indurabond Installation Manual

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