



# Aodeli Australia Aluminium Composite Panels

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**Aodeli Australia is focussed on the direct supply of a wide range Aluminium composite Panels to the construction industry Australia wide.**

**We offer a range of innovative panels, meeting and exceeding building code standards as well as a vast range of colour and finish options guaranteed to retain their colour for decades.**

We have the ultimate solution to fire and flammability concerns with our non-combustible Alumcanbond panels which meet the AS1530.1 Certification. These panels are ideal for replacing current panels identified as a fire risk on current buildings and used exclusively or in combination with other ACP panels on new buildings.

Aodeli Australia is committed to both a high level of customer service, quality products and competitive prices.

Aodeli Australia is a direct supplier of Aluminium Architectural Solutions including Aluminium Composite Panels (ACP), Aluminium Core Panel (AlumcanBond), Aluminium Honeycomb Panels, Perforated Aluminium Panels and Composite Wood Products.

Our engineers design a finished product to meet your most creative design solutions, including unique colours and finishes, pre-cut sheets to all sizes and shapes, perforations, holes, folds, bends and curves. All delivered to your site ready to install.

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# ALUM CAN BOND

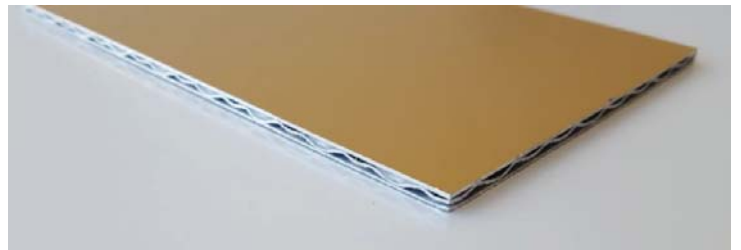
**AS1530.1**  
NON COMBUSTIBLE

## Aluminium Core Panel

Eliminate fire concerns and potential liability for fire hazards by specifying non-combustible ALUMCANBOND. 100% aluminium construction with Aluminium skins and corrugated aluminium core, it cannot catch fire or sustain any flame and can be used to replace potentially dangerous Poly Ethylene core panels or used in situations where some fire risks can be identified.

AODELI Australia can provide non-combustible ALUMCANBOND in any colour specified, is the same thickness and structural strength as other ACP panels and is around 30% lighter.

Our extensive selection of surface treatments and coil painted or natural metals enable you to create designs and effects that no other panel system can achieve. Whether you're looking for traditional muted colours, new, brighter and cleaner colours, faux finishes, metallic, mica, or natural metal surfaces, ALUMCANBOND Aluminium Core Panel, with our combination of unique coating and paint technology, can create the look you want.



- **30% Lighter than traditional Composite panels**
- **Environmentally Friendly 100% Recyclable**
- **Flexible and Long Lasting**
- **15 Year Warranty on PVDF Coating**

## Technical Data Sheet

### Profile

Trade Name	<b>Aodeli Australia Alumcanbond Aluminium Core Panel</b>
Manufacturer	Guangdong Sunwit New Materials Co. Ltd

### Raw Material

Aluminium Skins	0.7mm Aluminium Alloy 3003
Cores	Aluminium Core
Paint Finish	3 Coat / Bake / Min 25 Microns PVDF

### Standards and Compliances

	Aodeli Alumcanbond Complies with:
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Australia Fire Classification	AS/NZS 1530.1:1994
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International	BS476 Part 6. And BS476 Part 7
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### Warranty

Warranty Period	15 years standard
Warranty Envelope	Entire panel including paint, core and cover sheet integrity.
Warranty Underwriter	Guangdong Sunwit New Materials Co. Ltd serviced by Aodeli Australia

### Applications

Façade	Alumcanbond Aluminium Core Panel
Signage/Cladding	Alumcanbond Aluminium Core Panel

### Finishes

Range of standard solid colours
Metallic Colours
Shining Colours
Stone Series
Wood Grain Series

### Fixing Systems

Standard Cassette	Industry standard
Flat Stick	Installed in accordance with Aodeli installation and preparation guidelines.





ALUMINIUM  
HONEYCOMB  
PANEL

# AHP

AS1530.1  
NON-COMBUSTIBLE

## Aluminium Honeycomb Panel

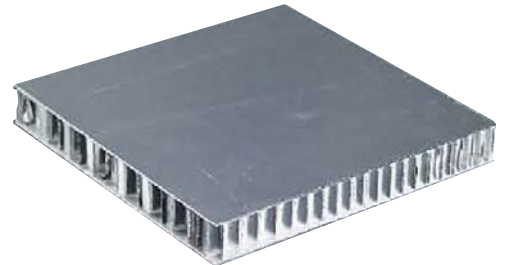
**Honeycomb Panels are designed to provide heat, cold and sound insulation.**

**The thick 100% Aluminium construction and the honeycomb internal spacing between the 1mm Aluminium skins prevents the transmission of sound, heat and cold between one panel wall and the other.**

Manufactured from high grade aluminium, they have a surface finish which uses the advanced technique of fluorocarbon lacquer pre-coil coating. This means that buildings using AODELI Honeycomb Panels retain their colour quality for at least 15 years.

AODELI Honeycomb Panels are manufactured in our factory using a fully automated process which binds the components under high temperature and pressure in a completely closed and dust-free operation. This means the honeycomb panel's interior is firmly joined to the external aluminium skins providing exceptional bending resistance and the consistent flat, straight surfaces needed for quality finishes.

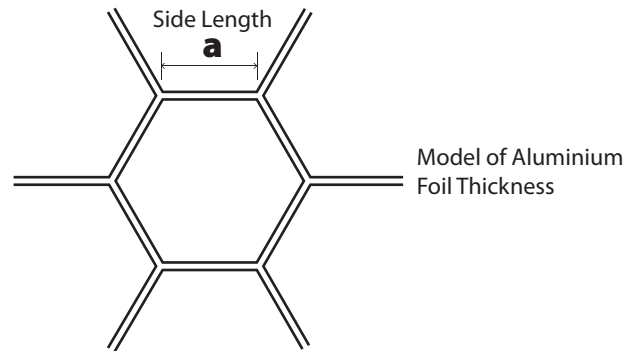
AODELI Honeycomb Panels can be used to fabricate a wide range of shapes, including curved panels, folded panels and trapezoidal panels according to the requirements of the architectural design. These shapes are produced by one-step forming using dies



### USES OF AODELI HONEYCOMB PANELS

- **Decorative and insulating high rise building panels**
- **Billboards**
- **Ceiling panels – static current resistant**
- **Dividing walls and partitions**
- **Floorings**
- **Cars and caravan panels**
- **Screens**
- **Doors**
- **Packaging**





## Aluminium Honeycomb Core Performance & Quality Index

Density	Aluminium Foil Specification Side Length (mm)	Greenhouse Mechanical Properties		
		Surface Compress Strength	Vertical Shear Strength	Transverse Shear Strength
27	0.03/5	0.53	0.44	0.24
31	0.04/5	0.66	0.53	0.30
33	0.03/4	0.73	0.58	0.33
39	0.04/4	0.98	0.75	1.43
41	0.05/5	1.07	0.80	0.47
44	0.03/3	1.18	0.89	0.52
49	0.06/5	1.43	1.03	0.60
52	0.04/3	1.60	1.15	0.67
53	0.05/4	1.65	1.18	0.69
61	0.06/4	2.07	1.48	0.86
66	0.03/2	2.39	1.70	1.0
67	0.08/5	2.45	1.74	1.02
68	0.05/3	2.50	1.78	1.04
77	0.04/2	3.10	2.18	1.25

Choice of Aluminium Foil Material: A1100, A3003, A5052, A3104

Side Length a (mm) : 1	Aluminium Foil Thickness : 0.03
1.5	0.04
2	0.05
2.5	0.06
3	0.07
4	0.08
5	0.1
6	0.15
7	0.17
8	
9	
10	
12	
15	
20	

## Normal Aluminium Core

Cell of Side Length	a=2	a=3	a=4	a=5	a=6	a=7.5	a=10	a=12	a=15	a=20	a=30
Expansion Size (W x L)	2200 x 3100	2200 x 3100	2200 x 3100	2200 x 4000	2200 x 4600	2200 x 6000	2200 x 7500	2200 x 9000	2200 x 12000	2200 x 15000	2200 x 20000
Aluminium Foil Thickness	0.04-0.06	0.04-0.07	0.04-0.07	0.04-0.07	0.04-0.07	0.04-0.07	0.04-0.17	0.04-0.17	0.04-0.17	0.04-0.17	0.04-0.17

## Specification Performance of 3003 Aluminium Honeycomb Series

Specification (mm) Thickness and side length of Aluminium Foil	(kg/m2) Thickness of Core Material	Planar Compressive Strength						Planar Compressive Modular		(MPa) Tensile Strength		(MPa) Bending Strength	
		Room Temperature				Pure Core Material		Pure Core Material		Pure Core Material		Pure Core Material	
		Room Temperature		150° C		Typical Value Under Room Temperature		Typical Value Under Honeycomb Structure		Room Temperature		Horizontal	
		Index	Typical Value	Index	Typical Value	Index	Typical Value	Index	Typical Value	Index	Typical Value	Index	Typical Value
0.03/5	27	0.51	1.26	0.31	0.45	0.75	0.43	311	203	2.77	2.09	0.59	0.9
0.04/5	31	0.66	1.48	0.43	0.64	0.8	0.51	465	236	2.95	2.38	0.64	1.06
0.03/4	33	0.74	1.66	0.46	0.65	0.93	0.64	550	308	3.23	2.68	0.78	1.12
0.04/4	39	1	2	0.64	0.94	1.19	0.85	698	355	4.41	2.92	0.83	1.38
0.03/3	44	1.2	2.04	0.78	1.22	1.39	0.98	809	484	4.64	3.71	1.13	1.46
0.04/3	52	1.6	2.42	1.05	1.76	2.39	1.01	857	647	5.07	3.98	1.51	2.04
0.05/4	53	1.65	2.83	1.09	2.11	2.58	1.24	883	638	6.32	4.07	1.6	2.12
0.05/3	88	2.55	3.35	1.59	2.71	3.11	2.03	1060	858	6.68	4.54	2.27	2.81



# AHP

AS1530.1  
NON-COMBUSTIBLE

ALUMINIUM HONEYCOMB PANEL





ALUMINIUM  
COMPOSITE  
PANEL

# ACP

**AS1530.3**  
FIRE RETARDANT

**AS ISO**  
**9705-2003**  
GROUP 2

## Aluminium Composite Panel

AODELI Australia supplies a range of mineralised fire retardant core panels (ACP-FR) for external cladding of buildings. Aodeli ACP panels are light weight offering superior flatness and durability while being easy to maintain and install. They can be cut, bent and curved to suit almost any architectural form and provide a cost effective exterior or interior panel to enhance the aesthetics of new projects or the refurbishment of existing structures and signage.

Manufactured from high grade aluminium, with a surface finish which uses the advanced technique of fluorocarbon lacquer pre-coil coating the Aodeli ACP(FR) panel consists of a mineralised fire retardant core sandwiched between two 0.5mm aluminium sheets. Aodeli aluminium composite panels come with a 15 year warranty that the PVDF paint finish will not peel, fade, flake, blister or crack under normal climatic conditions and that they will not delaminate, separate or lose adhesion on either side.



Aodeli ACP(FR) panel consists of a mineralised fire retardant core sandwiched between two 0.5mm aluminium sheets.

The panels are:

- **Environmentally friendly**
- **Weather, corrosion & chemical resistant**
- **Fire resistant (Certified with Australian Standards AS/NZS 1530.3 and AS/ISO 9705-2003 Group 2)**
- **Available in a wide selection of colours and finishes.**

## Technical Data Sheet

### Profile

Trade Name	Aodeli Australia Aluminium Composite Panel
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### Raw Material

Aluminium Skins	Aluminium Alloy 3003 H19
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Cores	
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Paint Finish	3 Coat / Bake / Min 25 Microns PVDF
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### Standards and Compliances

Aodeli/FR Complies with:
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AS/NZS 1530.3:1999
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AS ISO 9705-2003 Group 2
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Australia Fire Classification	1. Ignitability index = 0, Speed of flame index = 0 Heat evolved index = 0, Smoke developed index = 1
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International	BS476 Part 6. And BS476 Part 7
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### Warranty

Warranty Period	15 years standard
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Warranty Envelope	Entire panel including paint, core and cover sheet integrity.
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Warranty Underwriter	Sunwit New Materials Co.Ltd, serviced by Aodeli Australia
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### Applications

Façade	Aluminium Composite Panel
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Signage/Cladding	Aluminium Composite Panel
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### Finishes

Range of standard solid colours
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Metallic Colours
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Shining Colours
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Stone Series
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Wood Grain Series
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### Fixing Systems

Standard Cassette	Industry standard
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Flat Stick	Installed in accordance with Aodeli installation and preparation guidelines.
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# Production Line



AODELI has two series of production lines; roll coating production line, and composite production line.

In the roll coating production line, continuous application of paint to the aluminium coil, which will keep the uniformity of the coating's quality. We use PPG paint and base material of high performance PVDF on the surface coating. It will guarantee the durability of coating and ensure the stability of coating quality. We use high strength aluminum 3003 & 5052.

In the composite production line, we put the colour coated aluminum coil with aluminium core material together for lamination to make a very straight composite panel. Advanced technology ensures the production of the highest grade ALUMCANBOND aluminium core panel.



CUTTING



SHEARING



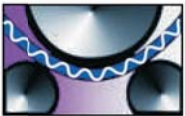
PUNCHING



CONTOUR CUTTING



BENDING



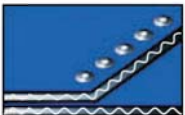
ROLL BENDING



ROUTING & FOLDING



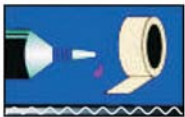
DRILLING



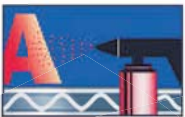
RIVETING



SCREWING



BONDING



LACQUERING



WELDING





# Coating Process

## 1. Colour Change

The PPG of the high performance PVDF is the base material with high elasticity. A host of colour options and finishes are available.



Custom colours are available

## 2. Coating Property

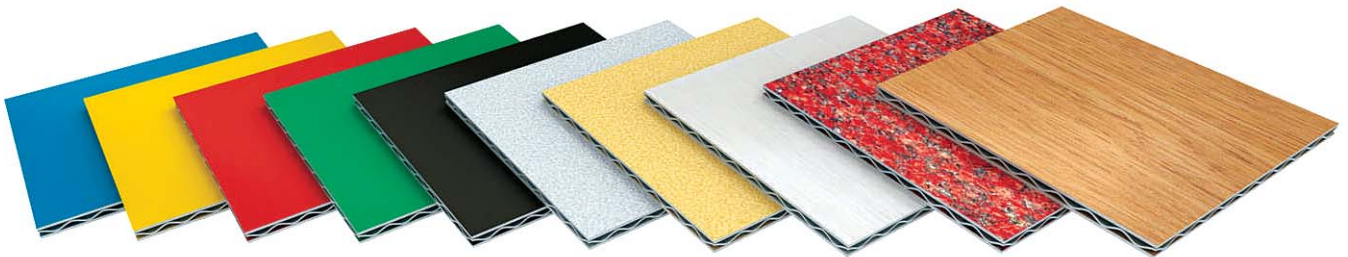
Use of the PPG as the base material of fluorocarbon coating which is used for its high durability. This coating can be used for continuous coil coating during all surface painting and its property accords with ECCA (European Coil Coating Association) and AAMA (American Aluminum Manufacturers Association) "The Coil Coating Specification for Building Exterior Wall".

## 3. Coating Property Comparison

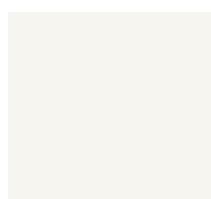
Compared with the traditional coating such as polyester, acrylic acid and polyurethane coating, under normal weather conditions, ALUMCANBOND has higher durability and less cleaning frequency.

## 4. Coating Warranty

The warranty of Nano PVDF is 15 years.



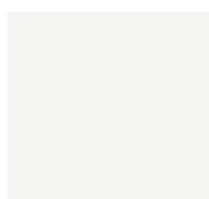
## SOLID COLOURS



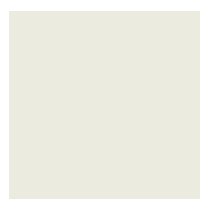
Off White



White



Flat White



Pearl White



Cream



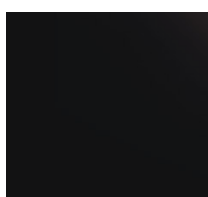
Beige



Khaki Grey



Mouse Grey



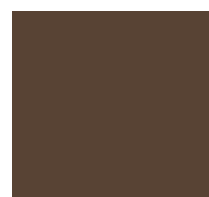
Black



Tank Grey



Charcoal Grey



Espresso



Green Apple



Green Shamrock



Emerald



Autumn Green



Lime Green



Seaweed Green



Harbour



Ocean Bay



Alaska Blue



Steel Blue



Marine Blue



Smurf Blue



Red



Ruby



Fire



Orange



Peach



Tiger



Violet



Mulberry



Plum



Butter



Lemon



Pineapple

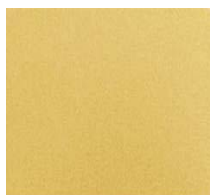
## METALICS



Shining Silver



Dark Grey Metallic



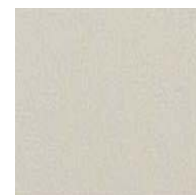
Red Gold



Jade



Indiana Copper



Champagne

## NATURAL METALS



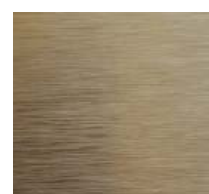
Silver Mirror



Golden Mirror



Brushed Aluminium



Platinum



Natural Zinc



Bronze Zinc

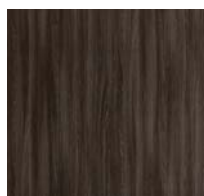
## WOODS



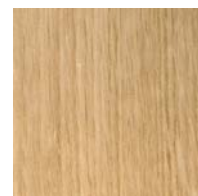
Teak



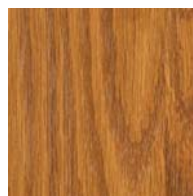
Walnut



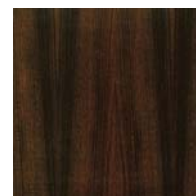
Ashwood



Beechwood



Golden Oak

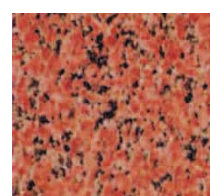


Bitterwood

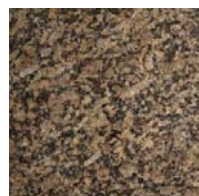
## STONES



Black Granite



Red Granite



Brown Granite



Pink Granite



Marble Jade



Marble

## ANODISED



Anodised  
Satin Brown



Anodised  
Black



Anodised  
Cream



Anodised  
Bronze



Anodised  
Gold



Anodised  
Blue

## SPECTRA



Ocean



Purple



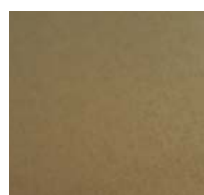
Tiger



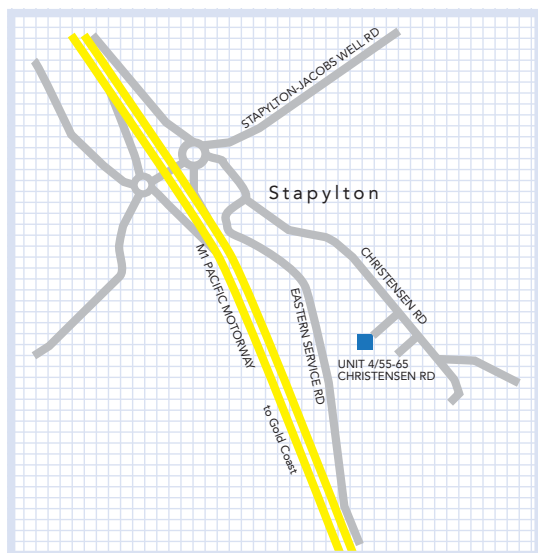
Metallic



Black



Antique



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