



**alfrex**<sup>®</sup>  
**SOLID** | PRE-FINISHED  
ALUMINIUM

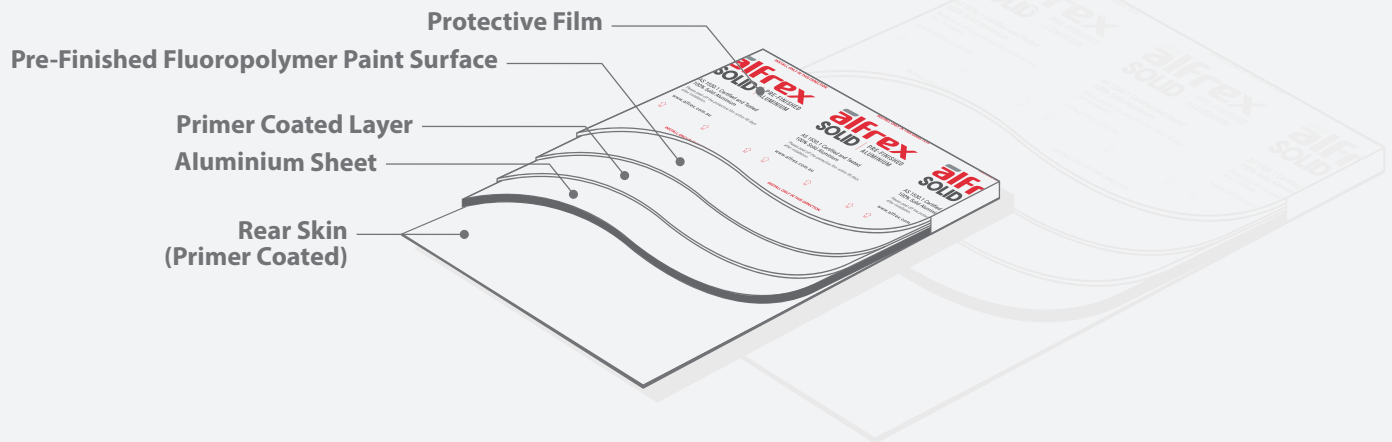
PRODUCT INTRODUCTION

# AS 1530.1 CERTIFIED AND TESTED 100% SOLID ALUMINIUM

**ALFRED SOLID** is a Pre-Finished Solid Aluminium Panel manufactured by high quality coil coating (roll-to-roll) continuous method. It features a Fluoropolymer based paint system that allows for high flexibility (2T / 2H) for ease of fabrication and is available in a wide range of colours and finishes. The rear surface of the panel is primer coated to minimize oxidization while the top surface is protected with an adhesive film to prevent damage during fabrication and installation.

Alfred Solid is a 100% aluminium product and has no core material giving the product superior non-combustibility as per BCA C1.9 as a deemed-to-satisfy (DTS) product.

Alfred Solid is exclusively manufactured at a state-of-the-art pre-finished coil coating facility in South Korea.



## APPLICATIONS



Exterior façade for new buildings and renovations



Re-cladding



Commercial buildings, high-rise apartments, factories, shopping centres



Signage



Subway stations and column cladding



Office and interior partition



Tunnel inner wall lining



Soffit and interior wall lining



PROJECT : MERCEDES-BENZ AUTOHAUS    LOCATION : BRISBANE (QLD)



**PROJECT** : SECONDARY SCHOOL BUILDING **LOCATION** : MELBOURNE (VIC)

## AS 1530.1 CERTIFIED AND TESTED 100% SOLID ALUMINIUM

### DIMENSIONS

Total Thickness : 3mm  
(2mm / 2.5mm available upon request)  
Width : 1250mm / 1575mm  
(custom widths available from 800mm upon request)  
Length : 1800 - 4200mm  
(Min. 30 panels per length)

### TOLERANCE

Width : +/- 2mm  
Length : +/- 2mm  
Thickness : +/- 0.1mm  
Bow : 0.5% of the length and / or width

### FEATURES

Non-Combustible AS 1530.1 Certified  
Continuous Roll-to-Roll Coating System  
Uniform Coating Appearance  
Excellent Machinability  
Wide Range of Colours  
Pre-Finished with Fluoropolymer paint system  
Superior 3003 Series H14 Aluminium

\* For any inquires outside of these dimensions, please contact your local Alfred Solid representative.

## TECHNICAL PROPERTIES

Property (Alloy 3003 H14)		Test Standard	Unit	Result
Physical Properties	Specific gravity	-	g/cc	2.72
	Weight	-	kg/sqm	8.1
Mechanical Properties	Tensile strength	ASTM E8	MPa	148
	Yield strength	ASTM E8	MPa	135
	Elongation	ASTM E8	%	28

## FIRE RESISTANCE

Alfrex Solid is made from 100% aluminium and is BCA C1.9 compliant as a deemed-to-satisfy (DTS) non-combustible solution suitable for both new buildings and re-cladding applications.

This product has been certified by a NATA accredited test facility in Australia.

Test Standard	Result		
AS 1530.1	Non-Combustible		
AS 1530.3	Pass	Ignitability Index	0
	Pass	Spread of Flame Index	0
	Pass	Heat Evolved Index	0
	Pass	Smoke Developed Index	0 - 1

## WEATHERPROOF TESTING

Alfrex Solid passed the AS/NZS 4284:2008 weatherproof and seismic testing with the following results.

Test Standard	Test	Result
AS/NZS 4284:2008	Preliminary Tests	- Pass: Air pressure loading to +/- 2.25 kPa. - Water to 675 static, and 675 – 1350 cyclic test pressure.
	Serviceability Deflection Test	- Studs met the deflection limit (+/- 2.25 kPa). - Panels at +/- 2.25 kPa showed deflections of up to 7.5mm on the stiffener, and 11.4 mm off the stiffener.
	Air Infiltration	- Air infiltration of the booth plus the sample met the requirement of <1.6 l/s.m2 (Gross leakage 20 l/s) at 150 kPa.
	Static Water Penetration Test	- Pass at 675 kPa.
	Cyclic Water Penetration Test	- Pass at 675 – 1350 kPa.
	Seismic SLS Test	- Pass at displacements of +/- 15mm.
	Seismic ULS Test	- Pass at displacements of +/- 60mm.
	Ultimate Limit State Pressure Test	- Pass at +/- 3.2 kPa.



## COATING SYSTEM

Alfred Solid is a Pre-Finished Solid Aluminium Panel manufactured by high quality coil coating (roll-to-roll) continuous method. It features a Fluoropolymer based paint system that allows for high flexibility (2T / 2H) for ease of fabrication and is available in a wide range of colours and finishes. The rear surface of the panel is primer coated to minimize oxidization while the top surface is protected with an adhesive film to prevent damage during fabrication and installation.

Please consult the Alfred Solid colour chart for a list of our standard colour range including Solid, Standard Metallic and Metallic Pearl finishes. For more information on available colours and warranty details please contact your nearest Alfred Solid sales representative.

## COATING DATA

Property	Test Standard	2 Coat & 3 Coat
Gloss	ASTM D523	Standard@60° : 25-35
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	No cracking or adhesion loss
Acid Resistance	ASTM D1308	No effect
Alkali Resistance	ASTM D1308 10%, 25%, NaOH, 1hr	No effect
Salt Spray Resistance	ASTM B117	Passes 4000 hrs. Less than 1/16" avg creepage from scribe.
Humidity Resistance	ASTM D714 ASTM D2247 100% Relative Humidity@95°F	Passes 4000 hrs. No #8 blisters



PROJECT : BMW CAR SHOWROOM    LOCATION : MELBOURNE (VIC)



PROJECT : CALVARY HOSPITAL    LOCATION : ADELAIDE (SA)



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