



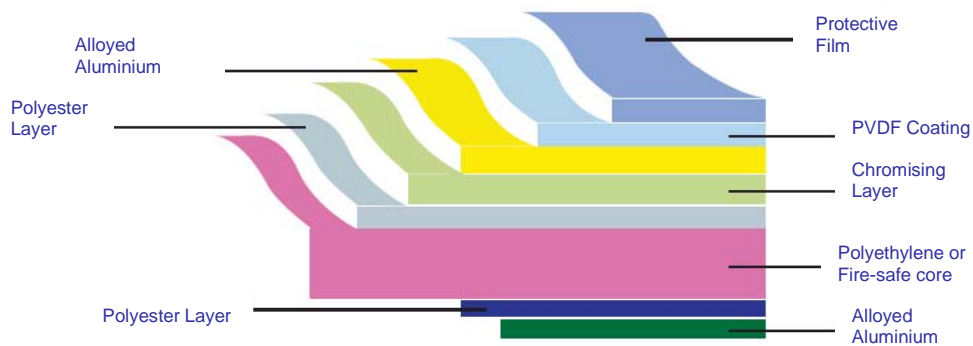
Architectural Solutions

Datasheet

Product description

Alumiclad[®] is an Aluminium Composite Material consisting of low-density polyethylene core or a fire resistant core sandwiched in between aluminium outer layers. Alumiclad is widely used in building and signage industries due to its versatility and the ease of use. It is becoming the material of choice; its modern appearance and longevity, combined with a vast colour range make it a perfect building material for numerous applications.

Alumiclad[®] typical composition structure



Panel Physical Properties

Property	Measurement
Panel Thickness	3mm 4mm 6mm
	0.21mm 0.50mm
Standard Panel Size	
Width	1220mm 1500mm
Length	2440mm 3200mm
Custom Panel Sizes	Subject to minimum quantities.
Width	900 - 1500mm
Length	Up to 5800mm
Panel Weight	5.5kg/m ² (4mm / 0.5mm PE panel) 7.5kg/m ² (4mm / 0.5mm FS panel) 7.6kg/ m ² (6mm / 0.5mm PE panel)
Panel Tolerances	
Width	+/- 3mm
Length	+/- 3mm
Thickness	+/- 0.2mm
Panel Bow	Max 0.8%
Flatness	Max 0.2%

Mechanical Properties

Property	3mm	4mm PE	4mm FS	6mm PE
Surface Density	3.49kg/m ²	5.5kg/m ²	7.5kg/m ²	7.6 kg/m ²
Bending Strength	75.8Mpa	128Mpa	128Mpa	158Mpa
Bending Elasticity Module	1.74x10 ⁴ Mpa	2.8x10 ⁴ Mpa	2.8x10 ⁴ Mpa	4.8x10 ⁴ Mpa
Penetrating Resistance	5.12kN	9.3kN	11.3kN	11.3kN
Shear Strength	22.1Mpa	29.6Mpa	29.6Mpa	29.6Mpa
180 Peeling Strength	6.5N/mm	9.8N/mm	9.8N/mm	9.8N/mm
Thermal Expansion Coefficient	2.45x10 ⁻⁵ °C	2.01x10 ⁻⁵ °C	2.01x10 ⁻⁵ °C	2.01x10 ⁻⁵ °C
Temperature resistance	97 °C	106 °C	106 °C	108 °C

Acc to GB/T 17748-1999

Acoustic Properties

Property	Result
Transmission Loss (100hz to 5KHz)	22dB
The Sound Transmission Class	STC26
The Outdoor Indoor Transmission Class	OITC20
Acc to AS1191-1985 (4mm)	

Coating Properties

Property	PVDF
Coating Thickness	min 25um
Pencil Hardness	3H
Coating Flexibility	2T
Adhesion	Grade 1 Circling Grade 0 by Checking
Impact Resistance	50kg/cm No paint removal/ fracture
Washing and Brushing resistance	>10000 no change
Acid / Alkaline / Oil Resistance	No Change
Chromatic Aberration (<3.0)	1.2
Chalkiness Grade (< Grade2)	Grade 1
Other Aging properties (Grade 0)	Grade 0
Acc to GB/T 17748-1999	

Fire Behavior

Property	Result
Ignitability	Index 0
Heat evolved	Index 0
Spread of flame	Index 0
Smoke developed	Index 1
Acc to AS1530, Part 3 – (4mm PE)	

Property	Result
Material Group Number	Group 3
Average specific extinction area	302.6m ² /kg
Acc to AS3837 (4mm FS)	

Quality Assurance

Alumiclad[®] composite panels are manufactured in accordance with ISO9001 quality system.