

## DATA SHEET

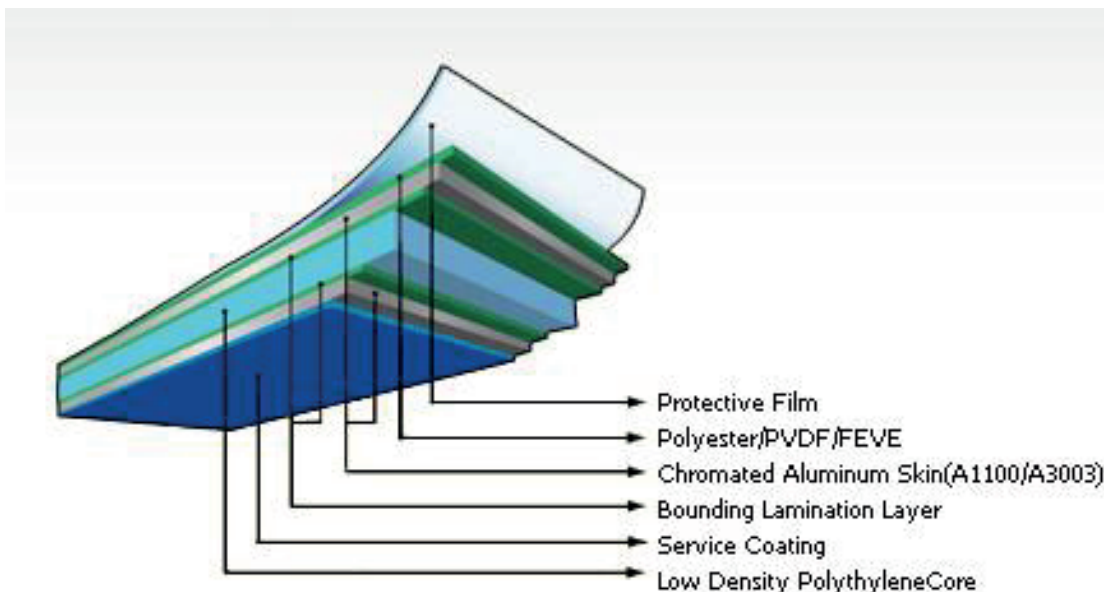
### Production Description

ALUCOPLAST Aluminium Composite Panel is a new decorative material used ever increasingly by developers, designers and architects world wide for various applications. The advantages of using this material over conventional material like Stone, Tiles and Paint are far too many.

ALUCOPLAST Aluminium Composite Panel also known to many as sandwich panel consists of a Polyethylene core sandwiched between two aluminum sheets. These Panels are very versatile and can be used in many applications. The entire panel consists of 3 main layers.

The Top Aluminium Sheet is coated with either Polyester or PVDF Paint. The Core is either Normal Polyethylene Based or a FR (Fire-Resistant) Core which is specially treated for fire resistance. The Bottom Aluminium Sheet comes in either Mill Finish or if customers require we can provide a thin layer of Polyester Paint coat with (6~8um) backside paint

### Alucoplast Typical Composite Structure



## Coating:

**PVDF 70% Kynar 500 :**

*PVDF is the most durable of all paint finishes available on aluminum composite panel.*

*It is manufactured from fluorine carbon resin with 2-3 layers applied during production and then baked at high temperatures.*

*ALUCOPLAST facade comes with a 10 to 20 years limited guarantee.\**

*(\*Period of the guarantee depends on colors, project location and type of coating.*

*Contact our sales representative to obtain more info about the guarantee.)*

**Two layers :**

*Primer coat 10 µm thickness and 15~18µm of color coat(70%Kynar 500). Total 25~28µm.*

## Coating Peoperties

Property	PVDF/FEVE
Coating Thickness	Min 25 um
Pencil Hardness	≥H
Coating Flexibility	≤2T
Adhesion	Grade 1 Circling Grade 0 by Cross Cutting
Impact Resistace	50kg/cm, no coating remove No aluminium crack
Washing and Brushing	> 10000 no change
Coating Standard	AAMA2605

## Aluminum

Properties	Units	Values
Alloy		1100
Temper		H16
Standard thickness	mm	0.30

## ACP Physical Properties

Property	Measurement
Panel Thickness	4mm/0.30mm
Panel Weight	5.40kg/m2
Standard Panel Size	1220*2440mm, 1250*2500mm, 1500*5000mm
Customs Panel Size	Maxi Width: 2000mm, Maxi Length: 5800mm

## Size Tolerance:

Panel Tolerances	Values
Width	+/-2mm
Length	+/-3mm
Thickness	+/-0.2mm
Diagonals	Less than 3mm
Edge Wave	Less than 1mm/m
Warpage	Less than 3mm/m

## Mechanical Properties

Property	4mm/0.30
Bending Strength	86MPa
Bending Elasticity Module	$2.2 \times 10^4$ MPa
Penetrating Resistance	5.5KN
Shear Strength	22Mpa
180 Peel Strength	7N/mm
Thermal Expansion	$1.60 \times 10^{-5}$ °C
Temperature Resistance	105°C

## Acoustic Properties

Property	Result
Transmission Loss (100HZ TO 5KHZ)	28dB

## Fire Behavior

Property	Result
ASTM E84	FSI:25, SDI:70
GB 17748	B2
EN13501	B2

## Quality Assurance

Alucoplast Aluminium Composite Panels are manufactured in accordance with Management systems: ISO9001, ISO14001, ISO18001; Alucoplast offer 10 years limited warranty.