

FACADE SOLUTIONS ACOUSTIC

Alubond u.s.A is the brand name for the new technology aluminum composite building Panel from American building technologies, Illinois, USA. The product is also manufactured under license from ABTI in Belgrade by Alubond Europe and in U.A.E by Mulk Holdings FZC. The panel is a composite consisting of two layers of aluminum skin sandwiching a Acoustic core in a continuous co-extrusion process. This new generation technology of mechanical and chemical bonding gives Alubond u.s.A Acoustic panels an exceptional bond integrity.

The outer aluminum skin for exterior grade Alubond U.S.A Acoustic panels is coated with PVDF Kynar 500 fluorocarbon, Polyester, UDP Coatings. The lower aluminum skin is chromate treated for anti-corrosion.

APPLICATIONS

Alubond's array of colors and finishes combined with the inherit capability of forming in to different shapes and contours with durability and weather resistance makes Alubond preferred brand for acoustic and thermal application major corporation and multinational companies have a definitive desire to make their structure an expansion of personal designer statement Alubond becomes a natural choice to achieve this objective. Some of the commonly used Alubond applications are:



Genset Enclosure



Panel Boards



Air Compressor Enclosure



Chiller Cover & HVAC Ducts



Portacabins



Acoustic & Thermal Doors



Machine & Turbine Covers



Refrigeration Enclosure





PRODUCTADVANTAGES

- LIGHT WEIGHT: extreme rigidity and flatness resulting in an economical option for high quality enclosure
- WEATHER RESISTANCE: combined with high acoustics, thermal and fire rated values.
- CHOICE OF SOLID: Metallic, Granite, Veneer and Chameleon colors makes Alubond Preferred choice for adding aesthetic look as per costumer requirement
- EASY MACHINE ABILITY: gives the flexibility of shapes making it a versatile panel to achieve complex designer solutions.

ACOUSTIC CORE



Alubond U.S.A Acoustic core was developed to achieve optimum acoustical and thermal resistance properties and these properties relate to the physical composition of the LDPE produced at Alubond. The sound energy that absorbed is either reflected, dissipated or transmitted. The sound absorbing coefficient of a material describes its sound absorbing properties. Alubond uses specially processed porous polymers which are prepared by copolymerizing styrene and de vinyl benzene and contain micro-scaled pores that help in sound dampening.

PRODUCT COMPOSITION



TECHNICAL PROPERTIES

Mechanical Properties		
Description	Alubond Acoustic Panel	Test Standard
Tensile Strength (PSI)	26000	ASTM D 638-03
Elongation %	4%	ASTM D 638-03
Minimum T Bend Radii	1 T	ASTM D 638-03
Yield Strength (PSI)	24000	ASTM D 638-03
Weather Resistance Properties		
Description	Alubond Acoustic Panel	Test Standard
UV Resistance Change in 3000h	<0.5% Reflectance	ASTM GC 154-06
Natural Salt spray loss after 3000h	<1.5% Reflectance	ISO 9227
Coefficient of thermal expansion	±0.1mm per m²	ASTM D696-03
Temperature resistance	Minus 50 to plus 80c	ASTM D976
Exterior & Coating Warranty	5 to 15 years	
Acoustic Thermal Properties		
Description	Alubond Acoustic Panel	Test Standard
Sound Transmission Loss (3mm)	25 dB	ASTM E 413
Thermal Conductance	5.79 Btu/hr.ft² °F (32.9 W/m² °K)	ASTM C 518
Deflection Temperature Under Load	211°C (411.8°F)	ASTM D 648