

Alubond U.S.A is the brand name for the new technology Aluminum Composite Building Panel from American Building Technologies, Illinois, U.S.A. The panel is a composite consisting of two layers of aluminum skin sandwiching a fire rated core in a continuous co-extrusion process. This new generation technology of mechanical and chemical bonding gives Alubond Panels an exceptional bond integrity. The outer aluminum skin for exterior grade Alubond U.S.A Panels is coated with PVDF Kynar 500 fluorocarbon coatings. The lower aluminum skin is chromate treated and polyester coated.

PROPERTIES	STANDARD	UNITS	RESULT		
			Standard core (FR-B2)	FR-B	FR-A2
Coefficient of linear Thermal Expansion	ASTM D 696	mm/mm/100° c	2.4°10 ⁻⁶ min	2.4°10 ⁻⁶ min	2.4°10 ⁻⁶ min
Impact resistance	ASTM D 732	psi	4092 psi (28.2 Mpa)	4092 psi (28.2 Mpa)	4092 psi (28.2 Mpa)
Toxicity	TCLP	with in Acceptable limits	TCLP	TCLP	TCLP
Color Change at -20°C	ATI,YORK USA	No visible change	PASSED	PASSED	PASSED
Color Change at 80°C	ATI,YORK USA	No visible change	PASSED	PASSED	PASSED
Delaminting at -20°C	ATI,YORK USA	No Delamination	PASSED	PASSED	PASSED
Delaminting at 80°C	ATI,YORK USA	No Delamination	PASSED	PASSED	PASSED
Weight	ASTM D 792	kg/m ²	5.5	7.5	8
Deflection Temperature	ASTM D 648	°C	116 min	117 min	119 min
Color Retention	ASTM D 2244-89	Max Rating 5 Units after 4000 Hours	PASSED	PASSED	PASSED
Gloss Retention	ASTM D 523-89	80% after 4000 Hours	PASSED	PASSED	PASSED
Chalk Resistance	ASTM D 4214 -89	Max Rating 8 Units after 4000 Hours	PASSED	PASSED	PASSED
Pencil Hardness	ASTM D 3363-92	HB min	PASSED	PASSED	PASSED
Flexural Elasticity of the aluminum skin	ASTM C 393	kg/mm ²	7000	7000	7000
Sound Transmission class	ASTM E 413	db	26	26	26
Fire Rating	EN-13501-1 & DIN 4102-98	class 0	Fire rated mineral filled core DIN 4102 - B2 class 0	Fire rated mineral filled core EN-13501-1 B class 0	Fire rated mineral filled core EN-13501-1 A2 class 0
Adhesive Dry	ASTM D 3359	No change	PASSED	PASSED	PASSED
Adhesive wet	ASTM D 3359	No change 37.8°C 24 hrs	PASSED	PASSED	PASSED
Boiling Water (method 8)	ASTM D 3359	No change 100 °C 60 min	PASSED	PASSED	PASSED
Abrasive Resistance	ASTM D 968-81	> 50 Ltr/mils	PASSED	PASSED	PASSED
salt spray Resistance	ASTM B 117-85	UPTO 3000 HOURS	PASSED	PASSED	PASSED
Flexibility	ASTM D 4145	T	2T	2T	2T