Alubondu.s.A Specifications

The approved Aluminum Composite Panels shall meet the following specifications.

STRUCTURE:

Panels shall be exterior grade, 4mm thick composed of a low density Polyethylene Core sandwiched between two sheets of Aluminum of 0.5mm thickness. The outer top skin shall be coated with PVDF KYNAR 500(more than 70% PVDF resin) Fluorocarbon coating from P.P.G, U.S.A. There shall be a protective coating on the back skin.

PRODUCT WARRANTY AND TESTS:

Panels shall be installed as per the fixing details and accessories recommended by the Manufacturer and shall carry a 10 years Warranty on weather durability, UV color fading, corrosion, chalking, fading, weather damage and manufacturing defects. Panels shall be extensively tested in compliance to ASTM, BS standards and AAMA 605.2 requirements. Copies of Test Certificates for Fire rating from recognized International Laboratories like Warrington Fire Research Center U.K and Architectural Testing Incorporation U.S.A shall be submitted along with the material submittal.

Approved Supplier:

Alubond u.s.a from American Building Technologies Inc, U.S.A, Denver Colorado

Tel: + 720 904 - 9180 Fax: + 720 596 - 5070 Email: info@alubond.com

Local Supplier:

Eurocon Building Industries Tel: 06 7441450, Fax: 067425196 Email: eurocon@mulkgroup.com

Deviation Tolerances:

Thickness: 0.2mm Width: 2.0mm Length: 3.0mm

Diagonal < 3.0mm (length 2500mm)

< 5.0mm (length 2500mm)

Side straightness: <0.5% of the length

Fixing Details and Accessories:

Typical fixing details and accessories shall be as per the Manufacturer's recommendation as per the enclosed drawings. All shop drawings will need to be endorsed for submission by the Local Supplier before submittal.



Alubondu.s.a Specifications

Performance:

Panels shall comply with the following performance standards.

Properties	Result	Test
Thermal Conductance	5.79 Btu/hrft ^{2.0} F (32.9 W/m ^{2.0} K)	ASTM C 518
Tensile Strength Yield Strength Elongation	5,408 psi (37.3 MPa) 3,737 psi (25.8 Mpa) 6.1%	ASTM D 638
Deflection Temperature Under Load	211° C (411.8°F)	ASTM D 648
Coefficient of Linear Thermal Expansion	2.02 x 10 ⁻⁵ mm/mm ⁰ C (1.12 x 10 ⁻⁵ in. /in ⁰ F)	ASTM D 696
Impact Resistance	4092 psi (28.2 MPa)	ASTM D 732
Toxicity	Within Acceptable Limits	TCLP
Color Change at -20 °C	No Visible Change	ATI, York U.S.A
Color Change at 80 °C	No Visible Change	ATI, York U.S.A
Delaminating at -20 °C	No Delamination	ATI, York U.S.A
Delaminating at 80 °C	No Delamination	ATI, York U.S.A

Method for Classification of the surface spread of Flame of Products	Classified As Class 1	BS 476 Part 7 1997
Method of Test for Fire Propagation for Products	Fire propagation index, 1 = 2.6	BS 476 Part 6 1989

Surface coating:

ALUBOND COATING PROPERTIES

Item	Result	Testing Standard
Gloss @ 60	20-40	ASTM D523-89
Pencil hardness	H-2H	ASTM D3363-92
Color retention	Accelerated test 4000 hours, maximum 8 units	ASTM D2244-89
Gloss retention	Accelerated test 4000 hours, 90%	ASTM D2244-89
Chalk	Accelerated test 4000 hours, maximum 8 unit	ASTM D659-88
Flexibility (T Shape bending)	No cracking or breakage	ASTM D4145-83
Adhesion	1mm x 1mm cross, no peeled off	ASTM D3359-87
Impact	No breakage, no loss of paint	ASTM D2784-82
Falling sand, sand blast	Passed	ASTM D968-81
Salt spray	For 3000 hours (5% NACL, 35°C)	ASTM B117-85
Humidity	For 3000 hours (100% RH, 35°C)	ASTM D714-87
Mortar resistance	No change	AAMA 605.2
Acidity and alkalinity	Passed	ASTM D1308-79
Mek test	100 times, passed	ASTM D2248-73

Color choice:

Color shall be as per the selection of the Client /Architect.

Product Warranty:

All panels supplied on the project shall be warranted for a period of 10 years by the parent company American Building Technologies Inc, Denver U.S.A as per their standard Product Warranty. Material submittals shall carry a letter from ABTI confirming their willingness to provide the above warranty. The warranty shall be provided direct in the name of The Client from the Manufacturers and endorsed by the local supplier / Installer.

