

# ***BONE LIGHT***<sup>®</sup> ACM SPECIFICATIONS

## **MANUFACTURER'S CERTIFICATIONS**

ISO9001:2000 Quality Management System  
Accredited by International Management Systems (IMS), USA



ISO14001:1996 Environmental Management System  
Accredited by QS Zurich AG, Swiss



"Green Building Materials" Certificate  
Issued by Organization for the Promotion of Energy Technologies (OPET), EU



***Bone Light***<sup>®</sup> uses Kynar 500 PVDF, a paint manufactured out of polyfluorated resin, formulated with other metal micro-grains for color. Kynar 500 PVDF is weather resistant, chemical resistant, corrosive resistant and ultraviolet resistant to enable ***Bone Light***<sup>®</sup> to maintain its color and texture for up to 20 years.

## **WARRANTY**

10-Year Warranty Against Manufacturer's Defects

## ***Bone Light***<sup>®</sup> DIMENSION TOLERANCES

Thickness     ±0.12 mm

Bow             Maximum 1.0 mm/m

## **NCHRP 350 COMPLIANCE**

***Bone Light***<sup>®</sup> ACM is a generic equal to the 3MM and 4MM panels that have been tested and NCHRP-350 certified.

## PHYSICAL AND MECHANICAL PROPERTIES

Properties	Unit	Test Value (4mm)	Test Value (3mm)	Test Standard
Aluminum Thickness	mm	0.50	0.25	-
Weight	kg/m <sup>2</sup>	5.5	4.5	ASTM D-792
Tensile Strength	MPa	48	45	ASTM D-638
Yield Strength	MPa	44	43	ASTM D-638
Thermal Expansion (-20~60°C)	10 <sup>-6</sup> /°C	22.5	19.6	ASTM D-696
Temp. for Thermal Deformation	°C	113	106	ASTM D-648
Sound Transmission Coefficient	dB	26	24	ASTM E-413
Bending Strength	MPa	130	62	ASTM C-393
Bending Modules of Elasticity	10 <sup>4</sup> MPa	2.46	1.67	ASTM C-393
Penetrating Resistance	kN	10.5	5.24	ASTM D-732
Shearing Strength	MPa	32.5	23.1	ASTM D-732
180° Peel-off Strength	N/mm	12	7.5	ASTM D-903

## COATING PROPERTIES

Properties	Test Method	Result
Coating Thickness	ISO2360	30 ± 2um
Pencil Hardness	ASTM D-3363-92a	3H ~ 4H
Adhesion Dry Wet Boiling Water	ASTM D-3359 (Method 8) 37.8° C, 24 hrs 100° C, 20 min	No Change
Abrasion Resistance	ASTM D-968-63	No Change
Salt Spray Resistance (100% Salt Fog, 35° C, 3000 Hrs)	ASTM D-B117-90	No Change
Humidity Resistance (100% RH, 35° C, 3000 Hrs)	ASTM D-B2247-94	No Change
Chemical Resistance HCL H <sub>2</sub> SO <sub>4</sub> Mortar Detergent	ASTM D-1308-87 ASTM D-1308-87 AAMA 605.2-90 ASTM D-2248-93	No Change
Impact Resistance	ASTM D2794	No Change