



# Alumanate

## Aluminum Composite Material

### Signage Product Specification Sheet



1-888-CURBELL

[www.curbellplastics.com](http://www.curbellplastics.com)

Curbell Plastics is a proud supplier of Alumanate materials.

#### Product Description

Alumanate aluminum composite material uses a polyethylene core with aluminum facers on each side. Alumanate is an ultra-smooth, maintenance-free and long-lasting product that is excellent for all types of printing, painting, die-cutting, mounting and vinyl wrapping.

#### Tolerances

Thickness	± 0.2 mm
Width	± 2 mm
Length	- 0 / + 4 mm
Diagonal	± 5 mm
Aluminum Thickness	± 0.02 mm
Thermal Expansion	2.4 mm/m @ 100°C Temp Difference

#### Panel Dimensions

Panel Thickness	2mm, 3mm, 4mm, 6mm
Aluminum Thickness	.005", .006", .008", .010", .012"
Standard Sizes	48"x96", 48"x120", 60"x120", 60"x144"
Weight - lbs/ft <sup>2</sup>	<u>2mm</u> <u>3mm</u> <u>4mm</u> <u>6mm</u> 0.56 0.84 1.12 1.68

#### Technical Properties

	<u>2mm</u>	<u>3mm</u>	<u>4mm</u>	<u>6mm</u>
Rigidity - kNcm <sup>2</sup> /m	345	865	1620	3840
Sound Insulation - dB	23	24	25	
Heat Coefficient - W/m <sup>2</sup> K	5.72	5.61	5.50	5.30
Aluminum Alloy	1100			
E-module - N/mm <sup>2</sup>	70.000			
Tensile Strength - N/mm <sup>2</sup>	145-185 RM			
Core, Black PE - g/cm <sup>3</sup>	0.92			
Flammability BS476	Part 6: Class 0, Part 7: Class 1			

#### Surface Properties

Paint Thickness	20µm - Enhanced Digital Polyester
Acid Resistance	Immerse surface in 2% HCl for 48h no change
Alkali Resistance	Immersed surface in 2% NaOH for 24hrs without change
Oil Resistance	Immersed surface in 20# engine oil for 24hrs without change
Solvent Resistance	Cleaned 100 times with Dimethylbenzene without change
Gloss Value	35% Matte / 95% Gloss (Tolerance ± 5%)
Pencil Hardness	>HB
Temperature Resistance	- 50°C to + 90°C
Color Variation	5 year ΔE 3
Chalking	5 year index 8
Outdoor Durability	5 year warranty
Indoor Durability	10 year warranty



We believe the information on this product to be accurate. However, since we cannot anticipate or control the conditions under which this information or our products may be used, we cannot guarantee results obtained through their use. Tests of our products should be made by users to determine the suitability of these products for a specific purpose.