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## by Matthews

## **PRODUCT SPECIFICATIONS**

**Alumicolor™** is a patent-pending exclusive technology that opens the pores of anodized aluminum, then 'roughens the walls' of these pores to enable highly stable dyes to be printed into, not onto, the anodic layer. A special thermochemical sealing process then 'locks in' the dyes and the final image possesses remarkable clarity and durability. Images created by the **Alumicolor™** process can be spot color or four-color photographic reproductions from photographs, artwork, or any other sources of illustration.

The **Alumicolor**<sup>™</sup> technology has applications limited only by the imagination. From interpretive and way-finding signage for museums, parks and recreation, historic locations, hospitals, schools, golf courses, amusement parks and hotels, to public art pieces, permanent barcodes and OEM equipment, **Alumicolor**<sup>™</sup> is simply brilliant.



## **Basic Specifications**

**Maximum Print Area** — including crop and registration marks per single panel – 48" x 36" – larger sizes available by "tiling" panels together and laminating to full size backing plates. There is not a minimum size.

**Film** — Film positives are used to achieve the accurate reproduction required to produce our exceptional clarity. Matthews' in-house film production uses the best technology available – but results depend on the quality of the files provided — Please read the following Art Requirements — Note: Maximum film size is 48" x 36".

Art Requirements — Preferred: High resolution Illustrator .PDF files with embedded fonts and crop marks – all blacks 100% black not CMYK. The same applies to spot colors, though virtually all graphic program files on both Mac and PC platforms are supported on our systems. Picture images should be a minimum 300 dpi CMYK at finish size, .tiff files are preferred. Matthews' graphics department is available for art creation and alteration upon request.

**Thickness** — 0.3mm, 0.5mm, 1.0mm and 1.5mm. Thicknesses greater than 1.5mm are achieved by laminating to desired backing plates in aluminum, acrylic, glass, stainless steel or any rigid substrate.

**Colors** — All halftone graphics down to approximately 8% is achieved. In most instances, spot colors can be matched to the PMS® Solid Coated Matching System. Note: Pantone® Color Matching is available.

Corner Radius - From 1/16 inch - 2 inches or larger on request

Holes — Mounting holes suitable for all applications



**Waterjet-Cut Shapes** — High-speed, computer controlled waterjet is used to create cut outs for face plates, control panels and shapes other than those with straight edges.

**Backing Adhesive** (optional) — High-bond, double-sided lamination film can be applied to the rear of your plates for easy installation to clean rigid surfaces.

UV Resistance — Only high-density solid colors are recommended for full sun exposure when printed on an exterior grade sheet (1.00mm thickness only). Photos, tone or pastel graphics require at least 30% shade cover to perform well outdoors. This can be achieved in most locations by adjusting the viewing aspect of the panel to suit the sun's path. Matthews conducted UV testing on Alumicolor™ products. Good results are 1,000 hours. Alumicolor™ had little or no fading after 1,500 hours.

**Anodized Printed Layer** — The anodic layer is more than twice the recommended depth for type II anodizing. Due to a 1-2 micron variation in the anodized layer from sheet to sheet, a slight variation in color will occur making each panel unique.

Salt Spray — Matthews' conducted CCT-4 salt spray testing, which is a Society of Automotive Engineers testing procedure, that exposed Alumicolor™ samples to repeated cycles of salt fog (5% sodium chloride solution), 95% relative humidity and dry off at 60 degrees Celsius (140 F). Good results are 1,000+ hours. Alumicolor™ was not affected after 1,000 hours.

**U.S.A.** — U.S.A. Military Specifications A8625 type 11-P4514C-P514D. Federal Standards P455B type 11.

Chemical Resistance — Solvent Immersion – The image cannot be affected by any solvent. Caustic soda, which can be found in some detergents such as wax strippers and lye soap, is corrosive to aluminum and should be avoided in any form. All multi-colored images have been tested by 700 hours immersion in each of the following: kerosene, gasoline, methyl ethyl ketone, ethyl acetate, ethyl alcohol, oil and grease – with no effect.

Warranty — Matthews warrants Alumicolor™ products for a period of 10 years from the date of manufacture. The warranty does not cover abuse or vandalism to the product. Our warranty is extended only to purchasers acquiring the product directly from Matthews or its authorized dealers. Matthews' obligation is limited to repair or replacement, at our option, F.O.B. Matthews plant. No other warranty expressed or implied is granted. Matthews is not liable for any incidental or consequential damages associated with use, removal or reinstallation.

