



Aluminum Coil Anodizing Corporation  
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# Product Specification Document

ACAD-980MX/JA Rev 3

**Product ID: 980MX/JA Mill Finish Undyed/Unsealed-Light Film**

**Application: Nameplates-Decorative**

**Material Specification:**  
 Alloy: 5005  
 Temper: H14  
 Mechanical Properties (typical):  
 Tensile Strength: 165 N/mm<sup>2</sup> (24,000 psi)  
 Yield Strength: 145 N/mm<sup>2</sup> (21,000 psi)  
 Elongation: 5%

**Optical / Anodized Properties:**  
 Total Reflectance (TR%)<sup>1</sup>: n/a% minimum <sup>1</sup>(Technidyne TR-2 (ASTM 1651-94))  
 Distinctness of Image (DI)<sup>2</sup>: n/a <sup>2</sup>(Hunter Labs D47 Dorigon (ASTM E430-83))  
 Specular Reflectance (RS)<sup>2</sup>: n/a <sup>3</sup>(DIN 67530)  
 15° Diffuseness (15°)<sup>2</sup>: n/a <sup>4</sup>(Byk Gardner Micro Gloss Meter)  
 Dr. Lange 60°<sup>3</sup>: w/g n/a a/g n/a <sup>5</sup>(ASTM B137-89)  
 Gardner 60° Gloss<sup>4</sup>: w/g n/a a/g n/a <sup>6</sup>(Hunter Lab mini-Scan XE Plus)  
 Anodize Film Thickness<sup>5</sup>: 3.7 to 4.9 microns (0.00015 to 0.00019 inch)  
 Iridescence Rating: Not Controlled  
 Color<sup>6</sup>: L\* n/a a\* n/a b\* n/a

**Availability:** Sheet and Coil  
 Gage: 0.30 to 1.60 mm (0.012 to 0.063 inch)  
 Width: 12.7 to 1250 mm (0.50 to 49.213 inch)  
 Length: up to 3660 mm (up to 144 inch)

**Tolerances (standard):** (Tighter tolerance may be possible. Contact your sales representative.)  
 Gage: From: 0.25 to 0.40 mm +/- 0.025 mm (0.010 to 0.016 inch, +/- 0.001 inch)  
 0.41 to 0.80 mm +/- 0.040 mm (0.017 to 0.032 inch, +/- 0.0015 inch)  
 0.81 to 1.00 mm +/- 0.050 mm (0.033 to 0.040 inch, +/- 0.002 inch)  
 Slit Width: From: 12.5 to 305 mm +/- 0.125 mm (0.5 to 12 inch, +/- 0.005 inch)  
 306 to 610 mm +/- 0.38 mm (12.1 to 24 inch, +/- 0.015 inch)  
 611 to 1250 mm +/- 0.50 mm (24.1 to 50 inch, +/- 0.020 inch)  
 Sheet: Length: Up to 1524 mm +/- 1.0 mm (Up to 60 inch, +/- 0.040 inch)  
 1525 to 3050 mm +/- 1.5 mm (60 to 120 inch, +/- 0.060 inch)  
 3051 to 3660 mm +/- 2.0 mm (120 to 144 inch, +/- 0.080 inch)  
 Squareness:<sup>1</sup> Up to 1200 mm +/- 0.5 mm (Up to 48 inch, +/- 0.020 inch)  
 1201 to 2400 mm +/- 1.0 mm (49 to 95 inch, +/- 0.040 inch)  
 2401 to 3660 mm +/- 1.5 mm (96 to 144 inch, +/- 0.060 inch)  
<sup>1</sup> Difference in diagonals  
 Lateral Bow (in one meter): Width Under 300 mm: 2.5 mm max. (Width Under 12 inch: 0.100 inch)  
 Width Over 300 mm: 1.25 mm max. (Width Over 12 inch: 0.050 inch)  
 Flatness: Height between waves: 1% of wave length, 8mm (0.32 inch) maximum.  
 Burr: 10% of gage Not to exceed .08 mm (.003 inch)