



Aluminum Coil Anodizing Corporation
 501 E Lake Street • Streamwood IL 60107
 Phone: 630-837-4000 • Fax: 630-837-0814
 www.acacorp.com

Product Specification Document

ACAD-909AB/BF Rev 1

Product ID: 909AB/BF Premium LI Specular

Application: Lighting Reflectors

Material Specification:

Alloy: 1090

Temper: H19

Mechanical Properties (typical):

Tensile Strength: 180 N/mm² (26,000 psi)

Yield Strength: 165 N/mm² (24,000 psi)

Elongation: 4%

Minimum Bend Radii: 1T

For White Paint:

1T bend: n/a

1T bend – dry heat: n/a

0T bend: n/a

Optical / Anodized Properties:

Total Reflectance (TR%)¹: 86% minimum

Distinctness of Image (DI)²: 93 minimum

Specular Reflectance (RS)²: 65 minimum

15° Diffuseness (15°)²: .01 maximum

Dr. Lange 60°³: w/g n/a a/g n/a

Gardner 60° Gloss⁴: w/g n/a a/g n/a

Anodize Film Thickness⁵: 1.3 to 1.8 microns (0.00005 to 0.00007 inch)

Iridescence Rating: Premium Low Iridescence

Color⁶: L* n/a a* n/a b* n/a

¹(Technidyne TR-2 (ASTM 1651-94))

²(Hunter Labs D47 Dorigon (ASTM E430-83))

³(DIN 67530)

⁴(Byk Gardner Micro Gloss Meter)

⁵(ASTM B137-89)

⁶(Hunter Lab mini-Scan XE Plus)

Availability: Sheet and Coil

Gage: 0.3 to 1.0 mm (0.012 to 0.040 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:¹ 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)

¹ 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)