



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-987AB/BF Rev 3

**Product ID: 987AB/BF Premium LI Specular 87**

**Application: Lighting Reflectors**

**Material Specification:**

Alloy: 1090

Temper: H19

**Mechanical Properties (typical):**

Tensile Strength: 180 N/mm<sup>2</sup> (26,000 psi)

Yield Strength: 165 N/mm<sup>2</sup> (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%)<sup>1</sup>: 87% minimum

<sup>1</sup>(Technidyne TR-2 (ASTM 1651-94))

Distinctness of Image (DI)<sup>2</sup>: 93 minimum

<sup>2</sup>(Hunter Labs D47 Dorigon (ASTM E430-83))

Specular Reflectance (RS)<sup>2</sup>: 65 minimum

<sup>3</sup>(DIN 67530)

15° Diffuseness (15°)<sup>2</sup>: .01 maximum

<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>: 0.8 to 1.0 microns (0.00003 to 0.00004 inch)

Iridescence Rating: Premium Low Iridescence

Color<sup>6</sup>: L\* n/a a\* n/a b\* n/a

**Availability:** Sheet and Coil

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

Width: 12.7 to 1250 mm (0.5 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)