



Aluminum Coil Anodizing Corporation
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Product Specification Document

ACAD-470OE/BF Rev 2

Product ID: 470OE/BF Concave Hammertone 95

Application: Enhanced Lighting Reflectors, primarily HID

Material Specification:

Alloy: 1090 base - 99.99% Aluminum PVD

Temper: H19

Mechanical Properties (typical):

Tensile Strength:	180 N/mm ²	(26,000 psi)
Yield Strength:	165 N/mm ²	(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 (optical properties are measured prior to embossing):

Total Reflectance (TR%) ¹ :	95% minimum	¹ (Technidyne TR-2 (ASTM 1651-94))
Distinctness of Image (DI) ² :	n/a	² (Hunter Labs D47 Dorigon (ASTM E430-83))
Specular Reflectance (RS) ² :	n/a	³ (DIN 67530)
15° Diffuseness (15°) ² :	n/a	⁴ (Byk Gardner Micro Gloss Meter)
Dr. Lange 60° ³ :	w/g n/a a/g n/a	⁵ (ASTM B137-89)
Gardner 60° Gloss ⁴ :	w/g n/a a/g n/a	⁶ (Hunter Lab mini-Scan XE Plus)
Anodize Film Thickness ⁵ :	n/a to n/a microns (n/a to n/a inch)	
Iridescence Rating:	Premium Low Iridescence	
Color ⁶ :	L* n/a a* n/a b* n/a	

Availability: Sheet and Coil

Gage:	0.25 to 0.80 mm	(0.010 to 0.032 inch)
Width:	12.7 to 1000 mm	(0.5 to 39.37 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)