



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-004OB-AB-BF Rev 3

Product ID: 004OB/AB-BF Bright Black					
Application: Architectural and Decorative					
Material Specification:					
Alloy: 1090					
Temper: H19					
Mechanical Properties (typical):					
Tensile Strength:	180 N/mm ²		(26,000 psi)	For White Paint:	
Yield Strength:	165 N/mm ²		(24,000 psi)	1T bend:	n/a
Elongation:	4%			1T bend – dry heat:	n/a
Minimum Bend Radii:	1t			0T bend:	n/a
Optical / Anodized Properties:					
Total Reflectance (TR%) ¹ :	n/a				¹ (Technidyne TR-2 (ASTM 1651-94))
Distinctness of Image (DI) ² :	80 minimum				² (Hunter Labs D47 Dorigon (ASTM E430-83))
Specular Reflectance (RS) ² :	n/a				³ (DIN 67530)
15° Diffuseness (15°) ² :	.05 maximum				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 :	6.4 to 8.9 microns		(0.00025 to 0.00035 inch)		
Iridescence Rating:	Not Controlled				
Color ⁶ :	L*	18 to 28	a*	-2.00 to 2.00	b* -1.5 to 0
Availability: Sheet and Coil					
Gage:	0.30 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: 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)			