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# Product Specification Document

ACAD-983RB-BF Rev 3

**Product ID: 983RB-BF Textured HighBrite**

**Application: Lighting Reflectors and Decorative**

<b>Material Specification:</b>			
Alloy:	1090		
Temper:	H19		
Mechanical Properties (typical):			
Tensile Strength:	180 N/mm <sup>2</sup>	(26,000 psi)	For White Paint: 1T bend: n/a 1T bend – dry heat: n/a 0T bend: n/a
Yield Strength:	165 N/mm <sup>2</sup>	(24,000 psi)	
Elongation:	4%		
Minimum Bend Radii:	1T		

<b>Optical / Anodized Properties:</b>			
Total Reflectance (TR%) <sup>1</sup> :	86% minimum		<sup>1</sup> (Technidyne TR-2 (ASTM 1651-94))
Distinctness of Image (DI) <sup>2</sup> :	6-12		<sup>2</sup> (Hunter Labs D47 Dorigon (ASTM E430-83))
Specular Reflectance (RS) <sup>2</sup> :	11-17		<sup>3</sup> (DIN 67530)
Diffuse Reflectance(100-RS):	69-75		<sup>4</sup> (Byk Gardner Micro Gloss Meter)
Dr. Lange 60° <sup>3</sup> :	w/g 70-80	a/g 65-75	<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> :	1.5 to 2.0 microns (0.00006 to 0.00008 inch)		
Iridescence Rating:	Controlled Low Iridescence		
Color <sup>6</sup> :	L* n/a	a* n/a	b* n/a

<b>Availability:</b>	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)	

<b>Tolerances (standard):</b> (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)	