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Product Specification Document

ACAD-418RE/BF Rev 4

Product ID:		418RE/BF Enhanced Textured Bright			
Application:		Lighting Reflectors			
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 :	94% minimum		¹ (Technidyne TR-2 (ASTM 1651-94))		
Distinctness of Image (DI) ² :	19-23		² (Hunter Labs D47 Dorigon (ASTM E430-83))		
Specular Reflectance (RS) ² :	23-29		³ (DIN 67530) – Std = 93		
Diffuse Reflectance (TR-RS) ² :	65-71		⁴ (Byk Gardner Micro Gloss Meter)		
Dr. Lange 60° ³ :	w/g	75 - 95	a/g	65 - 85	
Gardner 60° Gloss ⁴ :	w/g	n/a	a/g	n/a	
Anodize Film Thickness ⁵ :	Enhanced PVD				
Iridescence Rating:	Premium Low Iridescence				
Color ⁶ :	L*	n/a	a*	n/a	b* n/a
⁵ (ASTM B137-89)					
⁶ (Hunter Lab mini-Scan XE Plus)					
Availability:		Sheet and Coil			
Gage:	0.40 to 0.80 mm		(0.016 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)			