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Product Specification Document

ACAD-417ME-JA Rev 4

Product ID: 417ME/JA UltraMatte - Enhanced Mill Finish

Application: Lighting Reflectors

Material Specification:

Alloy:	5005		
Temper:	H14		
Mechanical Properties (typical):			
Tensile Strength:	165 N/mm ²	(24,000 psi)	For White Paint: 1T bend: n/a 1T bend – dry heat: n/a 0T bend: n/a
Yield Strength:	145 N/mm ²	(21,000 psi)	
Elongation:	2%		
Minimum Bend Radii:	0T		

Optical / Anodized Properties:

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) – Std = 93
15° Diffuseness (15°) ² :	n/a					⁴ (Byk Gardner Micro Gloss Meter)
Dr. Lange 60° ³ :	w/g 55 - 75	a/g 20 - 40				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:	0.30 to 0.80 mm	(0.012 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)		