

ACP 5080P

INDUSTRY LEADING FLATNESS AND TOLERANCES COMBINED
WITH EXCELLENT DIMENSIONAL STABILITY

Chemical Composition

EN AW-5083 (AlMg4.5Mn0.7), acc. to DIN EN 573-3/3.3547

Material Properties

Machinability	very good (HSC/HPC excellent)
Weldability (TIG, MIG)	good (with S Al 5183)
Anodizing Properties	good, not decorative
Polishing	very good
Corrosion Resistance	very good
Eroding Properties	good

Typical Mechanical Properties for standard sizes

Tensile Strength R_m	34 - 42 ksi (~265 Mpa)
0.2 % Yield Strength $R_p 0.2$	16 - 19 ksi (~120 Mpa)
Elongation A	15 (+/- 5) %
Brinell Hardness	74 (+/- 5) HB

Typical Physical Properties

Density	0.096 lbs / in ³
Thermal Conductivity	63-81 Btu / (ft* h °F)
Electrical Conductivity	~35% IACS
Modulus of Elasticity	10* 10 ³ ksi
Coefficient of Thermal Expansion	13.5* 10 ⁻⁶ / °F

Standard Sizes

Thickness	0.250" - 5.00"
Width	48.50" - 85.04"
Length	96.50" - 157.48"

Wider or longer material may be available upon request.

Tolerances for standard sizes

Surface Finish R_a	≤ 13 RMS
Tolerance in Thickness	+/- 0.004"
Flatness	≤ 0.008"
	0.315" - 0.473" thickness ≤ 0.0060"
	> 0.473" - 8.66" thickness ≤ 0.0050"
	(Linear measured section 39.37")
Tolerance in Width for Plates	-0/+0.375"
Tolerance in Length for Plates	-0/+0.375"

Other tolerances on request.

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ACP 5080P

Industry leading flatness and tolerances combined with excellent dimensional stability.

High precision low stress aluminum cast plate, ACP 5080P, is precision surface machined on both sides to industry leading precise tolerance standards. Fine grain structure, low porosity and excellent machining characteristics all define the cost saving and value-added attributes of ACP 5080P. Superb industry leading material dimensional stability is inherent in every plate of ACP 5080P; thanks to proprietary processes and manufacturing control, our flatness and tolerances are industry leading, predictable, and precise. Each plate is inspected and protected on both sides finally.

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