



ACP 6000

The main advantages of the precision surface aluminum cast plate ACP 6000 are low inherent internal stress and excellent machining characteristics, in combination with uniform consistency throughout the material. Due to the superior cast structure and extended thermal treatment during production, ACP 6000 offers high dimensional stability during extreme machining. Each plate is covered with protective foil on both sides to ensure surface integrity during shipment.

„One use of moulds made from ACP 6000 is the manufacture of food packaging.“



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Chemical Composition

Al-alloy type 7xxx

Material Properties

Machinability	very good
Weldability (TIG, MIG)	adequate (with S Al 4043A)
Anodising Properties	good
Polishing	good
Corrosion Resistance	adequate
Eroding Properties	good
Dimensional Strength	very good

Typical Mechanical Properties

Tensile Strength R_m	min. 165 MPa (N/mm ²)
0.2 % Yield Strength $R_p 0.2$	min. 105 MPa (N/mm ²)
Elongation A 5 %	3
Brinell Hardness HB	65

Typical Physical Properties

Density	.072 lb/in ³
Thermal Conductivity	82 Btu/(ft* h°F)
Electrical Conductivity	~36% IACS
Modulus of Elasticity	10.3* 10 ³ ksi
Coefficient of Thermal Expansion	13.6* 10 ⁻⁶ /°F

Thickness Range & Sizes

Plates and pre-cut sizes up to 3.94" thickness are available in the following dimensions:

Thickness	max. Width*	max. Length*
≥ 0.2362" x	61.81" x	144.49"

Tolerances

Surface Finish R_a	≤ 0.3 μm
Tolerance in Thickness	+/- 0.0039"
Flatness	0.2362"-0.4724" thickness ≤ 0.0157"*** > 0.4724"-3.94" thickness ≤ 0.0051"***
Tolerance in Width for Plates	0/+0.3937"
Tolerance in Length for Plates	0/+0.5906"
Tolerance (L/W) for Sized Cuts	DIN ISO 2768-m (closer on request)

* Further dimensions on request. Subject to technical change.

** Linear measured section 39.37"