

6061 Aluminum plate is a precipitation-hardened aluminum alloy containing magnesium and silicon as its major alloying elements. 6061 aluminum plate is one of the most versatile of the heat-treatable alloys. 6061 is popular for its medium to high strength requirements, good toughness and excellent corrosion resistance.

Features

- Good Machinability and weldability
- Most common alloy of aluminum for general purpose use

Applications

- Transportation Components
- Aircraft and marine fittings
- Machine processing equipment
- Recreation Products

Electrical Conductivity

- 40% of copper

Chemical Composition

Element	Maximum Unless Range is Specified
Silicon	.40 - .8
Iron	.7
Copper	.15 - .40
Manganese	.8 - 1.2
Magnesium	.8 - 1.2
Chromium	.04 - .35
Zinc	.25
Titanium	.15
Others Each	.05
Others Total	.15
Aluminum	Balance

Physical Properties

Density lb/in ³	0.0975
Thermal Conductivity, Btu-in/hr-ft ² -°F	1160
Electrical Resistivity, Ω-cm	3.99e-006
Specific Gravity	2.7
Melting Point (Deg F)	1090
Modules of Elasticity in Tension	10
Modules of elasticity in Torsion	3.8

Mechanical Properties

Ultimate Tensile Strength	45,000
Tensile Yield Strength	40,000
Elongation at Break	12%
Hardness, Rockwell B	60
Modules of Elasticity, ksi	10,000