

# 6061 Aluminium Plate

Smiths Advanced Metals

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## Versatile, medium strength plate

6061 aluminium plate represents one of the most popular heat-treatable alloys.

The alloy offers a combination of good corrosion resistance, hardness and workability with medium strength.

6061 aluminium plate is attractive because the material promotes an attractive range of performance characteristics while retaining the core benefits associated with aluminium alloys. Our product boasts excellent weldability and workability, and the material performs well at elevated temperatures.

The versatility of 6061 aluminium plates is substantiated by the diversity of industries that utilise the product as an engineering material. Applications range from aerospace components to bicycle frames.

We stock [6061 aluminium plates](#) in a wide range of sizes and tempers (including O, T42, T6 and T651 tempers).

### Grades / Specifications

- AMS4027
- AMSQA250/11
- ASTM B209
- BS EN 573, BS EN 485

### Cutting your plates

Our in-house processing service utilises vertical and CNC plate saws to cut your chosen aluminium plates to tight tolerances. Our service adds considerable value to our stockholding portfolio and makes us a [one-stop shop](#) for all your aluminium supply requirements.



### Key Applications

- Aerospace components
- Structural applications
- Military components

### Benefits

- Medium strength
- Good formability in 'O' temper
- Good corrosion resistance to atmospheric attack
- Good weldability

### Chemical Composition (weight %)

	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Others (ea)	Others (total)	Al
min.	0.40		0.15		0.80	0.04					Rem
max.	0.80	0.70	0.40	0.15	1.20	0.35	0.25	0.15	0.05	0.15	

### Mechanical Properties (min. values unless stated - >12.5mm thick)

Temper	MPa R <sub>m</sub>	MPa R <sub>p0.2</sub>	Elongation A (%)	Hardness HBW Typical
O	150*	85*	16	40
T42	205	95	15	57
T6	290	240	8	88
T651	290	240	8	88

\* Maximum value.

Properties as per BS EN 485-2

### Physical Properties

Temper	T6
Density g/cm <sup>3</sup>	2.70
Melting Range °C	580 - 650
Thermal Conductivity (% IACS)	39.6
Electrical Conductivity (% IACS)	40
Modulus of Elasticity x10 <sup>3</sup> N/mm <sup>2</sup>	70

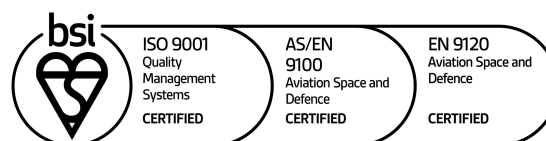
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