

# 6013 Aluminium Sheet

Smiths Advanced Metals

## Improved corrosion resistance

### Aerospace grade aluminium sheet

6013 aluminium is a relatively new product developed specifically for aerospace applications. We stock and supply 6013 in sheet form.

Our product is a aluminium-magnesium-silicon-copper alloy which benefits from low density, improved corrosion resistance and good compressive strength.

6013 aluminium sheet finds use in aerostructures due to the alloys medium-strength combined with superior corrosion resistance. Formability is also good, and the alloy is virtually immune to stress corrosion cracking (SSC) and exfoliation. We supply 6013 in the T4 temper, which offers improved stretch forming characteristics compared to similar aerospace grade material.

The yield strength of **6013 aluminium alloys** is 12% higher than Alclad 2024.



### Grades / Specifications

- AMS4347
- ASTM B209

### Key Applications

- Engine cowlings
- Primary aircraft structures
- Fuselage panels
- Highly stressed parts

### Chemical Composition (weight %)

	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Others (ea)	Others (total)	Al
min.	0.60		0.60	0.20	0.80						Rem
max.	1.00	0.50	1.10	0.80	1.20	0.10	0.25	0.10	0.05	0.15	

### Use in Aerospace

6013 aluminium sheet is used extensively in the aerospace sector for both commercial and military aircraft applications.

The T4 condition of the alloy allows the material to be formed with superior stretch forming characteristics. The resulting part may then be aged to the T6 condition without further annealing or heat treating, which could prove to be an expensive and unnecessary cost.

Due to the materials performance characteristics, 6013 aluminium alloy finds widespread use in applications, including fuselage panels and engine cowlings.

