

# 2014A Aluminium Sheet

Smiths Advanced Metals

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## Excellent Fatigue Resistance

2014A is an aluminium alloy with high strength containing 4 to 5 % copper.

Natural corrosion resistance is poor and therefore a protective coating (cladding) in sheet form is often required to prevent corrosion.

This cladding is part of the mill production process for Clad aerospace sheets grades. [Smiths Advanced Metals](#) stocks 2014A aluminium sheets in the T4 and T6 temper. Sheets from grade 2014A are available in various thicknesses.

## Grades / Specifications

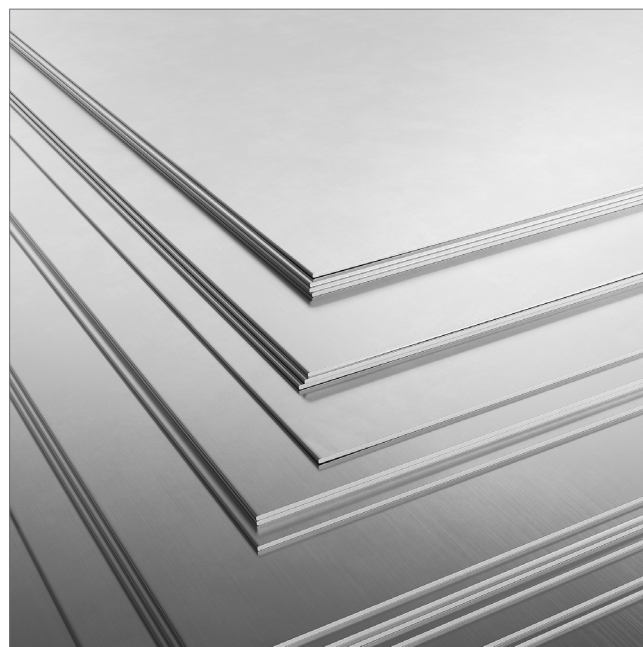
- BS L156, BS L157 - Bare
- BS L163, BS L164, BS L165, BS L166, BS L167 - Clad
- BS L100
- BS EN 573, BS EN 485

## Cut to bespoke shape service:

We offer a complete sheet cutting service using a range of equipment including guillotining. Sheets are cut to tight tolerances to match our clients' needs, and in many cases, negates the need for additional cutting.

## Technical sales support:

To find out more about the 2014A aluminium sheet and for other technical advice, contact Smiths Advanced Metals today. Our team of qualified metallurgists and engineers will be pleased to assist further on any technical topic.



## Key Applications

- Aircraft structures
- Military vehicles
- Structural applications

## Benefits

- High mechanical strength
- Excellent resistance to fatigue
- Excellent machinability

### Chemical Composition (weight %)

	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Zr+Ti	Each	Other	Al
min.	0.50		3.90	0.40	0.20								Rem
max.	0.90	0.50	5.00	1.20	0.80	0.10	0.10	0.25	0.15	0.20	0.05	0.15	

### Mechanical Properties (minimum values unless stated)

Temper	MPa $R_m$	MPa $R_{p0.2}$	Elongation A50 mm (%)	Hardness HBW Typical
*T4	400	225	14	110
*T6	440	380	7-8	150

\* Values based on thickness range from 1.5mm to 6mm

Properties as per BS EN 485-2

### Physical Properties

Temper	T4	T6
Density (g/cm <sup>3</sup> )	2.80	2.80
Melting Range (°C)	505-640	505-640
Electrical Conductivity (20°C, % IACS)	34	40
Thermal Conductivity (% IACS)	36.1	39.8
Modulus of Elasticity (x10 <sup>3</sup> , N/mm <sup>2</sup> )	73	73

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