

L97 Aluminium T351

Technical Datasheet



Service. Quality. Value.

Aluminium Plate

Typical Applications

- Aircraft components
- General engineering
- High strength fabricated and machine parts for aircraft
- Structural applications
- Rivets
- Military equipment
- Truck wheels

Product Description

L97 is a heat-treatable aluminium alloy which offers high strength, high fatigue strength and very good machining characteristics. Used in high strength fabrication or machined parts in the aerospace industry, the alloy is slightly higher in strength than 2014(A), 2017A and 2030. The most common temper for L97 aluminium alloy is T351.

Availability

Plate

Key features:

- High strength alloy
- High fatigue strength
- Very good machining characteristics
- Suitable for welding only by resistance welding

Alloy Designations

Aluminium alloy L97 - 2024 is covered by standard BS 2L97 (1971)

Corrosion Resistance

Corrosion protection only with cladding or other protection method.

Machinability

Very good

Chemical Composition (weight %)

	Mn	Mg	Ni	Pb	Ti+Zr	Fe	Si	Zn	Cr	Sn	Cu	Al	
Min.	0.30	1.20									3.80	Bal	
Max.	0.90	1.80	0.05	0.05	0.20	0.50	0.50	0.20	0.10	0.05	4.90	Bal	

Mechanical Properties

Thickness (mm)	Proof Strength (min)	Tensile Strength (min)	Elongation % (min)
Over 6 up to & incl. 12.5	280	430	10
Over 12.5 up to & incl. 25	280	430	10
Over 25 up to & incl. 40	280	420	9
Over 40 up to & incl. 63	270	410	9
Over 63 up to & incl. 90	270	410	8
Over 90 up to & incl. 115	270	400	8
Over 115 up to & incl. 140	260	390	7

Properties based on T351 temper shown in the long transverse direction.

Technical Assistance

Our knowledgeable staff backed up by our resident team of qualified metallurgists and engineers, will be pleased to assist further on any technical topic.

www.smithmetal.com

sales@smithmetal.com

Biggleswade 01767 604604	Birmingham 0121 7284940	Bristol 0117 9712800	Chelmsford 01245 466664	Gateshead 0191 4695428	Horsham 01403 261981	Leeds 0113 3075167
London 020 72412430	Manchester 0161 7948650	Nottingham 0115 9254801	Norwich 01603 789878	Redruth 01209 315512	Verwood 01202 824347	General 0845 5273331



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