

# 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.

#### UK Service Centres:

Smiths Belfast **02895 908 897**  
Smiths Biggleswade **01767 604 704**  
Smiths Birmingham **0121 728 4940**  
Smiths Bristol **0117 971 2800**  
Smiths Chelmsford **01245 466 664**  
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Smiths Redruth **01209 315 512**  
Smiths Verwood **01202 824 347**  
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#### Quality & Testing:



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