

Aluminium Alloy

Typical Applications

- High strength structural components
- Weapons & ordnance
- Military vehicles
- Bridge building
- Structural applications
- Truck forgings
- Wheels
- Structural fittings

Product Description

L102 aluminium alloy is a structural alloy used in high strength applications. L102 is heat treatable and available in T4 condition or T4511:

- T4 - Solution heat treated and naturally aged to a substantially stable condition
- T4511 - Equivalent to T4 condition.

L102 is used in a wide variety of high strength applications across numerous industries including defence and construction.

Key features

- High mechanical strength
- Heat treatable
- Slightly higher strength than 2011 & 2017A
- Available in T6, T4 & T4511 tempers

Availability

Bar

Heat Treatable

Yes

Related material specifications

Aluminium alloy BS L102 - 2014A is covered by standard BS EN 2L102 (1971)

Chemical Composition (weight %)

	Al	Mn	Fe	Mg	Cr	Si	Cu	Ti+Zr	Zn	Others	Ni	Pb
min	Bal	0.4		0.2		0.5	3.9					
max	Bal	1.2	0.5	0.8	0.1	0.9	5.0	0.2	0.2	0.15	0.2	0.05

Mechanical Properties

Thickness (mm)	Proof Strength	Tensile Strength	Elongation
Up to & incl. 10	235 Min	370 Min	11% Min
Over 10 up to & incl. 20	260 Min	400 Min	11% Min
Over 20 up to & incl. 75	270 Min	410 Min	14% Min
Over 75 up to & incl. 150	260 Min	400 Min	12% Min
Over 150 up to & incl. 200	230 Min	370 Min	8% Min

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:

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 Smiths Biggleswade **01767 604 704**
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Quality & Testing:



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