

Aluminium Alloy

L160 – 7075

AMARI AEROSPACE

Aluminium alloy L160 – 7075 is a very high strength alloy.

The standard specifying this grade has been superseded by BSEN 2127.

Chemical Composition

Element	% Present
Si	0.4 Max
Fe	0.5 Max
Cu	1.2 - 2.0
Mn	0.3 Max
Cr	0.18 - 0.28
Mg	2.1 - 2.9
Zn	5.1 - 6.1
Ti	0.2 Max
Zr & Ti	0.25 Max
Others - Each	0.05 Max
Others total	0.15 Max
Al	Balance

Specification

This alloy is covered by BS EN 2127

Physical Properties

Property	Value
Density	2.81 g/cm ³
Melting Point	635 °C
Modulus of Elasticity	72 GPa
Electrical Resistivity	40 % IACS
Thermal Conductivity	134-160 W/m.K
Thermal Expansion	23.5 x10 ⁻⁶ /K

Mechanical Properties

Temper	Min
Proof Stress 0.2% (MPa)	400
Tensile Strength (MPa)	470
Shear Strength (MPa)	
Elongation A5 (%)	7
Hardness Vickers (HV)	

Temper

The most common temper for L160 – 7075 aluminium is:

- ◆ T7351

Supplied Forms

L160 – 7075 aluminium is supplied in Bar and Extruded Sections. ■

This Data is indicative only and must not be seen as a substitute for the full specification from which it is drawn.

In particular, the mechanical property requirements vary widely with temper, product and product dimensions.

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