

SPECIFICATIONS

Aerospace	L160 T3511
Commercial	7075

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

The standard specifying this grade has been superseded by BSEN 2127.

CHEMICAL COMPOSITION

BS L160(1976) Alloy L160	
Element	% Present
Zinc (Zn)	5.1 - 6.1
Magnesium (Mg)	2.1 - 2.9
Copper (Cu)	1.2 - 2
Iron (Fe)	0.5 max
Silicon (Si)	0.4 max
Manganese (Mn)	0.3 max
Chromium (Cr)	0.18 - 0.28
Titanium + Zirconium (Ti+Zr)	0.25 max
Titanium (Ti)	0.2 max
Others (Total)	0.15 max
Other (Each)	0.05 max
Aluminium (Al)	Balance

ALLOY DESIGNATIONS

Aluminium alloy L160 has similarities to the following standard designations and specifications **but may not be a direct equivalent:**

7075

TEMPER TYPES

The most common temper for L160 – 7075 aluminium is:

- T7351 - Solution heat treatment then specially artificially aged for resistance to stress corrosion.

SUPPLIED FORMS

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

- Bar
- Extrusions

GENERIC PHYSICAL PROPERTIES

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

MECHANICAL PROPERTIES

These Mechanical properties are for Bar in the T73511 temper

Diameter (mm)	Proof Strength (Min)	Tensile Strength (Min)	Elongation % (Min)
Up to & incl. 10	400	470	7
Over 10 up to & incl. 20	420	485	8
Over 20 up to & incl. 50	415	485	8
Over 50 up to & incl. 75	410	475	8
Over 75 up to & incl. 100	380	450	7
Over 100 up to & incl. 150	365	425	7

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REVISION HISTORY

Datasheet Updated	14 January 2019
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This Data is indicative only and as such is not to be relied upon in place of the full specification. In particular, mechanical property requirements vary widely with temper, product and product dimensions. All information is based on our present knowledge and is given in good faith. No liability will be accepted by the Company in respect of any action taken by any third party in reliance thereon.

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