

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The standard specifying this grade has been superseded by BSEN 2127.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

CONTACT

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REVISION HISTORY

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