Aluminium Alloy
AMS 4029 (L93) Plate

GOULD ALLOYS
THE LEADING EDGE IN METALS

SPECIFICATIONS

Aerospace	AMS 4029 (L93)
Commercial	2014A

Applications:
High strength structural components for aircraft , military vehicles and bridges, weapons manufacture, structural applications.

Characteristics:
Heat treatable alloy. High mechanical strength slightly higher than 2011 and 2017A.

CHEMICAL COMPOSITION

SAE AMS 4029
Alloy 4029

Element	% Present
Copper (Cu)	3.9 - 5
Manganese (Mn)	0.4 - 1.2
Silicon (Si)	0.5 - 1.2
Magnesium (Mg)	0.2 - 0.8
Iron (Fe)	0.7 max
Zinc (Zn)	0.25 max
Others (Total)	0.15 max
Titanium (Ti)	0.15 max
Chromium (Cr)	0.1 max
Lead (Pb)	0.05 max
Other (Each)	0.05 max
Aluminium (Al)	Balance

ALLOY DESIGNATIONS

Aluminium alloy L93 - 2014A is covered by Standard BS EN 2100 and has similarities to the following standard designations and specifications **but may not be a direct equivalent:**

2014 / 2014A AMS 4029

TEMPER TYPES

The most common tempers for L93 - 2014A aluminium are:

- T4 - Solution heat treated and naturally aged to a substantially stable condition
- T6 - Solution heat treated and artificially aged
- T651 - Solution heat treated, stress relieved by stretching then artificially aged

SUPPLIED FORMS

L93-2014A aluminium is supplied in Plate

- Plate

GENERIC PHYSICAL PROPERTIES

Property	Value
Density	2800 g/cm³
Melting Point	640 °C
Thermal Expansion	22.8 x10^{-6} /K
Modulus of Elasticity	73000 GPa
Thermal Conductivity	134 - 135 W/m.K

MECHANICAL PROPERTIES

These Mechanical Properties apply to plate in the T651 temper

Thickness (mm)	Proof strength (Min)	Tensile Strength (Min)	Elongation % (Min)
Over 6 up to & incl. 12.5	410	460	7
Over 12.5 up to & incl. 25	410	460	6
Over 25 up to & incl. 40	400	450	5
Over 40up to & incl. 63	390	430	5
Over 63 up to & incl. 90	390	430	4
Over 90 up to & incl. 115	370	420	4
Over 115 up to & incl.140	350	410	4

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REVISION HISTORY

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