

## SPECIFICATIONS

Commercial	2024 CLAD 1050A
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### Applications:

High strength fabricated or machined items in aircraft industries, general engineering, machinery, military equipment, truck wheels. Screw machine products. Structural applications. Rivets.

### Characteristic Properties:

Heat treatable alloy. Very good machining characteristics. High strength alloy with a strength slightly higher than 2014(A) and 2017A and 2030. High fatigue strength. Suitable for welding only by resistance welding. Corrosion resistance only with cladding or other protection.

## CHEMICAL COMPOSITION

BS L110(1971)  
Alloy L110

Element	% Present
Copper (Cu)	3.8 - 4.9
Magnesium (Mg)	1.2 - 1.8
Manganese (Mn)	0.3 - 0.9
Iron (Fe)	0.5 max
Silicon (Si)	0.5 max
Titanium + Zirconium (Ti+Zr)	0.2 max
Zinc (Zn)	0.2 max
Chromium (Cr)	0.1 max
Lead (Pb)	0.05 max
Nickel (Ni)	0.05 max
Tin (Sn)	0.05 max
Aluminium (Al)	Balance

## ALLOY DESIGNATIONS

Aluminium alloy L110 - 2024 clad 1050A is covered by standard BS L110 (1971)

## TEMPER TYPES

The most common temper for L110 - 2024 clad 1050A aluminium is:

- T42 - Solution heat treated and naturally aged to a substantially stable condition

## SUPPLIED FORMS

L110 - 2024 clad 1050A aluminium is supplied as sheet and strip

- Sheet
- Strip

## GENERIC PHYSICAL PROPERTIES

Property	Value
Density	2.79 g/cm <sup>3</sup>
Melting Point	640 °C
Thermal Expansion	23.10 x10 <sup>-6</sup> /K
Modulus of Elasticity	73 GPa
Thermal Conductivity	121-193 W/m.K

## MECHANICAL PROPERTIES

BS L110(1971)  
Sheet  
0.4mm to 0.8mm

Property	Value
Elongation A50 mm	12 Min %
Tensile Strength	390 Min N/mm <sup>2</sup>
0.2% Proof Stress	235 Min N/mm <sup>2</sup>

## CONTACT

Address: (incorporated in the USA)  
Tel: +44 (0)1371 811 642  
Email: info@aerometalsalliance.com

## REVISION HISTORY

Datasheet Updated 09 January 2014

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