

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 ³
Melting Point	640 °C
Thermal Expansion	23.10 x10 ⁻⁶ /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 ²
0.2% Proof Stress	235 Min N/mm ²

CONTACT

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REVISION HISTORY

Datasheet Updated	09 January 2014
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DISCLAIMER

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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