2124 Aluminium Plate

Smiths Advanced Metals

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Optimised Strength & Toughness

2124 provides similar properties to 2024 but with closer iron and silicon content controls.

Our 2124 aluminium alloy plates offer high fracture toughness and stress corrosion resistance.

Regarded as a high purity form of 2024 aluminium, 2124 combines good strength with creep resistance at elevated temperatures. Fracture toughness levels are also significantly higher when compared to 2024. With excellent exfoliation resistance, the alloy is highly suitable in applications where improved short-transverse ductility is a requirement.

We stock 2124 aluminium alloy plates in the T851 temper and a wide range of incremental sizes.

Grades / Specifications

- AMS4101
- AMSQQA250/29
- ASTM B209

Benefits

- Good fracture toughness
- **High strength**
- Good machinability



Key Applications

- Structural aircraft parts
- Wing skins
- Fuselage bulkheads

Chemical Composition (weight %)											
	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Each	Other	Al
min.			3.80	0.30	1.20						Rem
max.	0.20	0.30	4.90	0.90	1.80	0.10	0.25	0.15	0.05	0.15	

Mechanical Properties (T851 temper, long traverse direction)								
Thickness (inch)	Tensile Strength	Yield Strength	Elongation (%)					
1.001-2.00	66 ksi	57 ksi	5					
5.001-6.00	63 ksi	54 ksi	4					

Physical Properties						
Temper	T851					
Density (g/cc)	2.78					
Melting Range (°C)	502 - 638					
Electrical Resistivity (ohm-cm)	4.49e-006					
Thermal Conductivity (W/m-K)	151					
Modulus of Elasticity (GPa)	73.1					

Properties as per ASTM B209

www.smithsadvanced.com



Stratton Business Park, London Road, Biggleswade, Bedfordshire SG18 8QB

Tel: +44 (0) 1767 604710





info@smithsadvanced.com

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