3103 Aluminium Sheet

Smiths Advanced Metals

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Excellent Corrosion Resistance

Low to medium strength aluminium sheet

3103 is a low to medium strength aluminium alloy that combines excellent resistance to corrosion with good formability.

3103 is commonly supplied in the H14 temper and offers similar properties when compared to 3003. The material displays improved mechanical properties when compared to 1xxx series aluminium alloys, particularly at elevated temperatures. Welding of 3103 aluminium sheet is also very good, as is corrosion resistance to atmospheric attack.

We stock 3103 aluminium sheets in a broad range of thicknesses with tempers, including H14, H16, H26 and O, with H14 being the most common.



Chemical Composition (weight %)											
	Si	Fe	Cu	Mn	Mg	Cr	Zn	Zr+Ti	Others (ea)	Others (total)	Al
min.				0.90							Rem
max.	0.50	0.70	0.10	1.50	0.30	0.10	0.20	0.10	0.05	0.15	

*Mechanical Properties (minimum values unless stated)									
Temper	MPa _{Rm}	$MPa R_{p0,2}$	Elongation A50 mm (%)	Hardness HBW Typical					
0	90 - 130	35	21	27					
H14	140 - 180	120	3	45					
H16	160 - 200	145	2	51					
H26	160 - 200	135	3	50					

*Based on sheet thickness: O & H14 - 1.5 - 3mm. H16, H26 - 1.5 - 4mm. Properties as per BS EN 485-2

Grades / Specifications



Technical Support

Our experienced sales team and UKAS Accredited Testing Laboratory provide unrivalled levels of after-sales and technical support, including a range of tests such as charpy, tensile and physical properties testing.

www.smithsadvanced.com



Physical Properties Temper 0 Density (g/cm³) 2.73 640 - 655 Melting Range (°C) Electrical Conductivity (20°C, % IACS) 50.5 Thermal Conductivity (% IACS) 43.7 69.5 Modulus of Elasticity (x10³, N/mm²)

Key Applications

- Aerospace components
- Heat exchangers
- **Kitchen components**
- Heating & cooling systems

Benefits

- Good resistance to atmospheric corrosion
- Very good weldability
- Better mechanical properties than 1xxx series

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