

6063 Aluminium

Technical Datasheet



Commercial Aluminium Alloy

Service. Quality. Value.

Applications

- Architectural
- Extrusions
- Doors
- Window frames
- Shop fittings
- Balustrading

Product Description

6063 aluminium alloy is often referred to as an architectural alloy and is used in the production of intricate extrusions. With an aesthetically pleasing finish and high corrosion resistance the alloy is readily suited to welding and can be easily anodised. 6063 aluminium is most commonly supplied as T6 temper. If supplied in the T4 condition the alloy has good formability.

Key features:

- Medium strength alloy
- Used in intricate extrusions
- Aesthetically pleasing finish
- High corrosion resistance
- T6 temper most common, T4 has good formability

Corrosion Resistance

High

Availability

Extrusions, tube

Chemical Composition (weight %)

	Mn	Fe	Mg	Si	Zn	Ti	Cr	Cu	Al			
min.			0.45	0.20					Bal			
max.	0.10	0.35	0.90	0.60	0.10	0.10	0.10	0.10	Bal			

Mechanical Properties

Tensile Strength	100 MPa
Proof Stress	50 MPa
Shear Strength	70 MPa
Elongation A50 mm	27%
Brinell Vickers	25 HV

Physical Properties

Density	2.70 g/cm ³
Melting Point	600 °C
Thermal Expansion	23.5 x10 ⁻⁶ /K
Modulus of Elasticity	69.5 GPa
Thermal Conductivity	200 W/m.K

Technical Assistance

Our knowledgeable staff backed up by our resident team of qualified metallurgists and engineers, will be pleased to assist further on any technical topic.

UK Service Centres:

Smiths Belfast	02895 908 897
Smiths Biggleswade	01767 604 704
Smiths Birmingham	0121 728 4940
Smiths Bristol	0117 971 2800
Smiths Chelmsford	01245 466 664
Smiths Gateshead	0191 469 5428
Smiths Horsham	01403 261 981

Smiths Leeds	0113 307 5167
Smiths Manchester	0161 794 8650
Smiths Norwich	01603 789 878
Smiths Nottingham	0115 925 4801
Smiths Redruth	01209 315 512
Smiths Verwood	01202 824 347
Main Office	0845 527 3331

Quality & Testing:



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