

Aluminium Sheet

Applications

- Aircraft parts
- Offshore structures
- Silos
- Containers
- Boat construction
- Vehicle panels
- Containers

Product Description

Alloy L80/L81 is an aluminium sheet product which is recognised as a general sheet metal work grade. The material offers high marine corrosion resistance with good weldability and very good cold formability. The alloy is also known for rapid work hardening so care needs to be taken in the forming process. L80/L81 is used in the manufacture of aircraft parts and structural marine applications among many others.

Availability

Sheet

Key features:

- Medium strength alloy
- Good ductility & formability
- Readily weldable
- High resistance to marine corrosion
- Rapid work hardening
- Very good anodising properties
- Aesthetically pleasing

Weldability

Readily weldable

Corrosion Resistance

High resistance to marine corrosion

Tempers

Alloy L80 - 'O' Temper
Alloy L81 - H16 & H26

Chemical Composition (weight %)

	Mn	Fe	Cu	Mg	Si	Zn	Cr	Ti	Al
min	0.10			1.70					Bal
max.	0.50	0.50	0.15	2.40	0.40	0.15	0.15	0.15	Bal

Mechanical Properties

Proof Stress 0.2% 175 MPa min
Tensile Strength 225-275 MPa
Elongation A50 mm 3%

Physical Properties

Density 2.69 g/cm³
Melting Point 625°C
Thermal Expansion 25 x10⁻⁶ /K
Modulus of Elasticity 70 GPa
Thermal Conductivity 134 W/m.K
Electricity Resistivity 0.044 x10⁻⁶ Ω .m

The properties above are for material in the H16 condition

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
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Smiths Nottingham 0115 925 4801
Smiths Redruth 01209 315 512
Smiths Verwood 01202 824 347
Main Office 0845 527 3331

Quality & Testing:



www.smithmetal.com info@smithmetal.com