

Aluminium Bare Sheet & Plate

Typical Applications

- Aerospace Components
- Fuselage applications
- Aircraft structures
- Wing skins
- Scientific instruments
- Truck wheels

Product Description

AMS QQA 250/4 is supplied in bare sheet and plate form. Due to the alloys good fatigue resistance, especially in thick plate form, the material is specified for use in the aerospace and military sector in fuselage applications in such areas as structures and wing tension members. With improved fracture toughness and fatigue crack growth, AMS QQA 250/4 continues to maintain strength characteristics. The alloy is available in a variety of tempers and cladding should be considered if corrosion resistance is required.

Key Features

- High yield strength
- Good fatigue resistance
- Excellent toughness
- Resistant to corrosive attack when cladded
- Very good resistance to stress corrosion cracking in T851 temper

Corrosion Resistance

Susceptible to the effects of atmospheric corrosion

Availability

Plate and sheet

Machinability

Good

Chemical Composition (weight %)

Weight (%)	Al	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Other
min.	Bal			3.8	0.3	1.2				
max.	Bal	0.50	0.50	4.9	0.9	1.8	0.10	0.25	0.15	0.05

Mechanical Properties

Temper	Thickness (mm)	Tensile Strength ksi (MPa)	Yield Strength ksi (MPa)	Elongation %
0-Sheet & plate	0.010-0.499 (0.25-12.44)	32.0 (max) (220)	14.0 (max) (96)	12
T3-Flat Sheet	0.008-0.249 (0.203-6.32)	63-64 (434-441)	42 (289)	10-15
T351-Plate*	0.250-4.000 (6.35-101.60)	64-57 (441-393)	42-41 (289-282)	12-4
T4-Coiled Sheet	0.010-0.125 (0.254-3.16)	62 (427)	40 (276)	12-15
T81-Flat Sheet	0.010-0.249 (0.254-6.32)	67 (462)	58 (400)	5
T851-Plate	0.250-1.499 (6.35-38.07)	67-66 (462-455)	58-57 (400-393)	5

* Strength decreases as thickness increases

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.

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