

## SPECIFICATIONS

Commercial 7075 Bare

A high strength aerospace aluminium alloy with, depending upon temper, Yield Strength of up to 54ksi (370 MPa) and Tensile Strength of up to 67 ksi (460 MPa)

## CHEMICAL COMPOSITION

SAE AMS QQ-A-250/12  
Alloy QQ A 250/12

Element	% Present
Zinc (Zn)	5.1 - 6.1
Magnesium (Mg)	2.1 - 2.9
Copper (Cu)	1.2 - 2
Iron (Fe)	0.5 max
Silicon (Si)	0.4 max
Manganese (Mn)	0.3 max
Chromium (Cr)	0.18 - 0.28
Titanium (Ti)	0.2 max
Others (Total)	0.15 max
Other (Each)	0.05 max
Aluminium (Al)	Balance

## ALLOY DESIGNATIONS

Aluminium alloy QQ-A-250/12 has similarities to the following standard designations and specifications **but may not be a direct equivalent:**  
AMS 4044, Alloy 7075, UNS A97075

## TEMPER TYPES

Alloy QQ-A-250/12 is supplied in a wide range of tempers:

- O - Soft
- T351 - Solution heat treated then stress relieved by stretching. Equivalent to T4 condition.
- T6 - Solution heat treated and artificially aged
- T62 - Solution heat treated then artificially aged by the user
- T651 - Solution heat treated, stress relieved by stretching then artificially aged
- T6510 - Solution heat treated and stress-relieved by stretching then artificially aged with no straightening after aging
- T73 - Solution heat treated then specially artificially aged for resistance to stress corrosion

## SUPPLIED FORMS

Alloy QQ-A-250/12 is supplied in sheet and plate

- Sheet
- Plate

## GENERIC PHYSICAL PROPERTIES

Property	Value
Density	2.71 g/cm <sup>3</sup>
Melting Point	635 °C
Thermal Expansion	23.5 x10 <sup>-6</sup> /K
Modulus of Elasticity	72 GPa
Thermal Conductivity	134 W/m.K
Electrical Resistivity	33 % IACS

## MECHANICAL PROPERTIES

Mechanical Properties shown are for T6 temper sheet

Thickness (mm)	Proof Strength (Min)	Tensile Strength (Min)	Elongation % (Min)
Over 0.3 up to & incl. 0.9	462	524	7
1.0 up to & incl. 3.17	469	538	8
3.2 up to & incl. 6.3	476	538	8

## CONTACT

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## REVISION HISTORY

Datasheet Updated 03 January 2014

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