Aluminium Alloy
QQ-A-250/5 '0' Sheet

Aero Metals Alliance

SPECIFICATIONS

Commercial	2024 Clad

A medium to high strength alloy with, dependent upon temper, minimum Proof Stress up to 56 ksi / 385 Mpa and minimum Tensile Strength up to 64 ksi / 440 MPa

CHEMICAL COMPOSITION

SAE AMS QQ A 250/5
Alloy QQ a 250/5

Element	% Present
Copper (Cu)	3.8 - 4.9
Magnesium (Mg)	1.2 - 1.8
Manganese (Mn)	0.3 - 0.9
Silicon (Si)	0.5 max
Iron (Fe)	0.5 max
Zinc (Zn)	0.25 max
Titanium + Zirconium (Ti+Zr)	0.2 max
Titanium (Ti)	0.15 max
Others (Total)	0.15 max
Chromium (Cr)	0.1 max
Other (Each)	0.05 max
Aluminium (Al)	Balance

ALLOY DESIGNATIONS

Aluminium alloy QQ-A-250/5 has similarities to the following standard designations and specifications **but may not be a direct comparison:**
Alloy 2024, UNS A92024, AMS 4040, AMS 4041, AMS 4194, AMS 4195, AMS 4274

TEMPER TYPES

Alloy QQ-A-250/5 is supplied in a wide range of tempers:

- O - Soft
- T3 - Solution heat treated, cold worked and naturally aged
- T361 - Solution heat treated then stress relieved by stretching.
- T4 - Solution heat treated and naturally aged to a substantially stable condition
- T42 - Solution heat treated and naturaly aged to a substantially stable condition
- T81 - Solution heat treated, cold worked then artificially aged
- T851 - Solution heat treated then stress relieved by stretching then artificially aged.
- T861

SUPPLIED FORMS

Alloy QQ-A-250/5 is supplied in CLAD plate and sheet

- Plate
- Sheet

GENERIC PHYSICAL PROPERTIES

Property	Value
Density	2.74 g/cm³
Melting Point	640 °C
Thermal Expansion	23.1 x10^{-6} /K
Modulus of Elasticity	73 GPa
Thermal Conductivity	193 W/m.K
Electrical Resistivity	50.5 % IACS

MECHANICAL PROPERTIES

Mechanical Properties shown are for '0' temper

Thickness (mm)	Proof Strength (Min)	Tensile Strength (Min)	Elongation % (Min)
Over 0.2 up to & incl. 1.5	97	207	12
Over 1.6 up to & incl. 12.6	97	221	12

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CONTACT

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REVISION HISTORY

Datasheet Updated	18 December 2013

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This Data is indicative only and as such is not to be relied upon in place of the full specification. In particular, mechanical property requirements vary widely with temper, product and product dimensions. All information is based on our present knowledge and is given in good faith. No liability will be accepted by the Company in respect of any action taken by any third party in reliance thereon.

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