

DESCRIPTION

Aluminium Alloy 3003 is a medium strength alloy with a very good resistance to atmospheric corrosion, very good Weldability and good cold formability. It has better mechanical properties, especially at elevated temperatures in comparison to 1000 series alloys. It is most suitable for the wide range of architectural applications.

APPLICATIONS

AA-3003 is typically used in:

- ▶ General sheet metal works requiring greater strength
- ▶ Architectural signage and canopy panels
- ▶ Insulation panels
- ▶ Profiled building sheets and panels
- ▶ Metal facades
- ▶ Industrial applications

CHEMICAL COMPOSITION

Element	Composition %
Manganese (Mn)	1.10 - 1.50
Iron (Fe)	0.00 - 0.70
Copper (Cu)	0.05 - 0.20
Magnesium (Mg)	0.0 - 0.05
Silicon (Si)	0.0 - 0.60
Zinc (Zn)	0.0 - 0.10
Others (Total)	0.0 - 0.15
Other (Each)	0.0 - 0.05
Aluminium (Al)	Balance

SUPPLIED FORMS

At **Almaxco** we stock Aluminium Alloy 3003 in the form of coils and sheets.

MECHANICAL PROPERTIES

Property	Value
Proof Stress	50 Min MPa
Tensile Strength	140 - 180 MPa
Elongation at 50 mm	5 Min %
Hardness Brinell	28 HB

WELDABILITY

Weldability - Gas:	Very good
Weldability - Arc:	Very good
Brazeability:	Excellent
Weldability - Resistance:	Good

WELDABILITY

Machinability:	Very good
Workability - Cold:	Very good

GENERIC PHYSICAL PROPERTIES

Property	Value
Density	2.73 g/cm ³
Melting Point	655 °C
Thermal Expansion	23.1 x 10 ⁻⁶ /K
Modulus of Elasticity	69.5 GPa
Thermal Conductivity	180 W/m.K
Electrical Resistivity	0.034 x 10 ⁻⁶ Ω.m