

Aluminium Alloy AA 3105-F Data Sheet



DESCRIPTION

Aluminum Alloy **AA-3105** is an essentially 98% pure Aluminium alloy with minor additions for strength. It is used in general sheet metal works requiring greater strength than is provided by 1000 series alloys. Most commonly this is stocked in Chequered/Tread plates. Corrosion resistance, formability and welding characteristics are excellent.

APPLICATIONS

AA-3105 is typically used in:

- Treadplate
- Shipbuilding and Ship platforms
- Vehicle bodies
- Ambulances
- Cold Rooms
- Anti-skid flooring
- Stair treads

Please note that Mechanical Properties shown are for F temper*

*As fabricated – Applies to products of a forming process in which no special control over thermal or strain hardening conditions is employed.

CHEMICAL COMPOSITION

Element	Composition %
Silicon (Si)	1.10 – 1.50
Iron (Fe)	0.10 – 0.70
Copper	0.00 – 0.30
Manganese (Mn)	0.30 – 0.80
Magnesium (Mg)	0.20 – 0.80
Chromium (Cr)	0.05 – 0.20
Zinc (Zn)	0.00 – 0.40
Titanium (Ti)	0.05 – 0.10
Others (Total)	0.00 – 0.15
Other (Each)	0.00 – 0.05
Aluminium (Al)	Balance

SUPPLIED FORMS

At **Dinco Trading LLC** we stock/offer Aluminium Alloy **AA-3105** in the form of Tread/Chequered plates of 5 Bars pattern.

MECHANICAL PROPERTIES

Property	Value
Proof Stress	115 Min Mpa
Tensile Strength	110-145 Mpa
Elongation at 50 mm	20 Min %
Hardness Brinell	35 HB

WELDABILITY

Weldability - Gas: Very Good
Weldability - Arc: Very Good
Brazability: Very Good
Weldability - Resistance: Excellent

FABRICATION

Machinability: Average
Workability – Cold: Very Good

GENERIC PHYSICAL PROPERTIES

Property	Value
Density	2.66 g/cm ³
Melting Point	655 °C
Thermal Expansion	23.1 x 10 ⁻⁶ /K
Modulus of Elasticity	69.5 GPa
Thermal Conductivity	160 W/m.K
Electrical Resistivity	0.034 x 10 ⁻⁶ Ω .m

SIZES RANGE FOR AA 3105-F

We stock Aluminium Alloy **AA-3105-F** at our warehouses in Dubai & Sharjah. Please contact us on sales@dinco.ae with your inquiries or call: [04-3312182](tel:04-3312182) or visit www.dinco.ae