

## Aluminium Alloy AA 3105-F Tread/Chequered Plates



### 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)	0.20 - 0.60
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)	0.0 - 0.15
Other (Each)	0.0 - 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  
Brazeability: Very Good  
Weldability Resistance: Excellent

### FABRICATION

Machinability: Average  
Workability – Cold: Very good

### GENERIC PHYSICAL PROPERTIES

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

### SIZES RANGE FOR AA 3105-F Tread/Chequered plates

We stock Aluminium Alloy **AA-3105-F** at our warehouses in Dubai and Sharjah.

Please contact us on [sales@dinco.ae](mailto:sales@dinco.ae) with your inquiries or call **04-3312182**, or visit: [www.dinco.ae](http://www.dinco.ae)