

# Aluminium Alloy AA 5052 – H32 Data Sheet



## DESCRIPTION

Aluminium alloy **AA-5052-H32** has very good corrosion resistance properties to seawater, marine and industrial atmosphere. With very good weldability and good cold formability, it has a slightly higher strength than AA5251 and a medium to high fatigue strength

## APPLICATIONS

**AA-5052** is typically used in:

- Sheet Metal Works
- Architectural Paneling
- Desalination unit
- Name plate and Road sign
- Pressure vessels
- Fuel Tank
- Welded tubes

Please note that the Mechanical Properties shown are for **H32** temper\*

\***H32** – Most common temper for 5052, is work hardened by rolling and then stabilized by low temperature heat treatment to quarter hard.

## CHEMICAL COMPOSITION

Element	Composition %
Magnesium (Mg)	2.20 – 2.80
Chromium (Cr)	0.15 - 0.35
Iron (Fe)	0.00 - 0.40
Silicon (Si)	0.00 - 0.25
Others (Total)	0.00 - 0.15
Copper (Cu)	0.00 - 0.15
Zinc (Zn)	0.00 - 0.15
Manganese (Mn)	0.00 – 0.10
Other (Each)	0.00 - 0.15
Aluminium (Al)	Balance

## SUPPLIED FORMS

At Dinco Trading LLC we stock/offer Aluminium Alloy **AA 5052-H32** in the form of - Flat sheets/plates.

## MECHANICAL PROPERTIES

Property	Value
Proof Stress	130 Min Mpa
Tensile Strength	210 - 260 Mpa
Elongation at 50 mm	12 Min %
Hardness Brinell	61 HB

## WELDABILITY

Weldability - Gas: Good

Weldability - Arc: Very Good

Brazability: Acceptable

Weldability - Resistance: Very Good

## FABRICATION

Machinability: Acceptable

Workability – Cold: Good

## GENERIC PHYSICAL PROPERTIES

Property	Value
Density	2.68 g/cm <sup>3</sup>
Melting Point	605 °C
Thermal Expansion	23.7 x 10 <sup>-6</sup> /K
Modulus of Elasticity	70.0 GPa
Thermal Conductivity	138 W/m.K
Electrical Resistivity	0.0495 x 10 <sup>-6</sup> Ω .m

## SIZES RANGE FOR AA 5052-H32

We stock Aluminium Alloy **AA-5052** at our warehouses in Dubai & Sharjah. Please contact us on [sales@dinco.ae](mailto:sales@dinco.ae) with your inquiries or call: [04-3312182](tel:04-3312182) or visit [www.dinco.ae](http://www.dinco.ae)