Aluminium Alloy 1050 '0' Sheet

Dalsteel Metals Pty Limited

SPECIFICATIONS

Commercial	1050
EN	1050

Aluminium alloy 1050 is a popular grade of aluminium for general sheet metal work where moderate strength is required.
Alloy 1050 is known for its excellent corrosion resistance, high ductility and highly reflective finish.

Applications - Alloy 1050 is typically used for:

Chemical process plant equipment
Food industry containers
Pyrotechnic powder
Architectural flashings
Lamp reflectors
Cable sheathing

CHEMICAL COMPOSITION

BS EN 573-3:2009
Alloy 1050

Element	% Present
Iron (Fe)	0.0 - 0.40
Silicon (Si)	0.0 - 0.25
Zinc (Zn)	0.0 - 0.07
Titanium (Ti)	0.0 - 0.05
Manganese (Mn)	0.0 - 0.05
Copper (Cu)	0.0 - 0.05
Magnesium (Mg)	0.0 - 0.05
Other (Each)	0.0 - 0.03
Aluminium (Al)	Balance

ALLOY DESIGNATIONS

Aluminium alloy 1050 also corresponds to the following standard designations and specifications ***but may not be a direct equivalent***:
AA1050A
S1B
A91050

TEMPER TYPES

The most common tempers for 1050 aluminium are:

- O - Soft

SUPPLIED FORMS

Plain sheet
Plain sheet with a PVC coating on one side
Stucco sheet
Stucco sheet with a PVC coating on one side
Shate

- Sheet

GENERIC PHYSICAL PROPERTIES

Property	Value
Density	2.71 g/cm³
Melting Point	650 °C
Thermal Expansion	24 x10^{-6} /K
Modulus of Elasticity	71 GPa
Thermal Conductivity	222 W/m.K
Electrical Resistivity	0.0282 x10^{-6} Ω .m

MECHANICAL PROPERTIES

BS EN 485-2:2008
Sheet
0.2mm to 6.00mm

Property	Value
Proof Stress	20 Min MPa
Tensile Strength	65 -95 MPa
Hardness Brinell	20 HB

Popperties above are for materials in the soft 'O' condition

WELDABILITY

When welding 1050 to itself or an alloy from the same subgroup the recommended filler wire is 1100. For welding to alloys 5083 and 5086 or alloys from the 7XXX series, the recommend wire is 5356. For other alloys use 4043 filler wire.

FABRICATION

Workability – Cold: Excellent
Machinability: Poor
Weldability – Gas: Excellent
Weldability – Arc: Excellent
Weldability – Resistance: Excellent
Brazability: Excellent
Solderability: Excellent

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CONTACT

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REVISION HISTORY

Datasheet Updated 13 January 2020

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