

SPECIFICATIONS

Commercial	1050A
EN	1050A

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 1050A	
Element	% Present
Iron (Fe)	0.4 max
Silicon (Si)	0.25 max
Zinc (Zn)	0.07 max
Manganese (Mn)	0.05 max
Copper (Cu)	0.05 max
Magnesium (Mg)	0.05 max
Titanium (Ti)	0.05 max
Other (Each)	0.03 max
Aluminium (Al)	Balance

ALLOY DESIGNATIONS

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

- AA1050
- S1B
- A91050

TEMPER TYPES

The most common tempers for 1050 aluminium are:

- H14 - Work hardened by rolling to half hard, not annealed after rolling

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/cm ³
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	85 Min MPa
Tensile Strength	105 - 145 MPa
Hardness Brinell	34 HB
Elongation A	12 Min %

Properties above are for material in the H14 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

CONTACT

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REVISION HISTORY

Datasheet Updated	18 July 2019
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