



Aluminium Alloy 1050A H14 Sheet

SPECIFICATIONS

Commercial	1050A
EN /ASTM	1050A / AA1050

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

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)	0.0 - 0.40
Silicon (Si)	0.0 - 0.25
Zinc (Zn)	0.0 - 0.07
Magnesium (Mg)	0.0 - 0.05
Titanium (Ti)	0.0 - 0.05
Manganese (Mn)	0.0 - 0.05
Copper (Cu)	0.0 - 0.05
Other (Each)	0.0 - 0.03
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
Coil

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 755-2:2008

Extrusions

Up to 200mm Dia. & A/F, 5mm WT for Tube and Prof

Property	Value
Proof Stress	85 Min MPa
Tensile Strength	85 Min 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