

alloy characteristics

Rolled Products

Alloy	Typical application (✓)	Forms available				Characteristics					
		Plate	Flat Sheet	Coiled Sheet	Circle Blanks	Corrosion Resistance	Machining	Anodising	Forming	Welding	Heat Treatable
1050	Chemical, process plant and equipment	✓	✓	✓		aa	dc	bb	ad	aa	no
1150	Commercially pure aluminium that has been specially processed to give a reasonably streak free surface when mechanically polished and anodised. Suitable for chemical brightening before anodising. Typical uses saucepan lids, beakers and decorative trim and panels.		✓	✓	✓	aa	dc	aa	ad	bc	no
1200	Commercial pure aluminium. Uses include cooking utensils, packing containers, building components (not stressed) and domestic appliances. Deep drawing quality available.		✓	✓	✓	aa	dc	bb	ac	ba	no
3003	Chemical equipment, sheet metalwork, rigid foil containers, closures		✓	✓		aa	dc	bb	ac	ba	no
3004	Sheet metal work, car bodies, seam welded tubing, roofing sheet		✓	✓		aa	dc	bb	ac	ba	no
3105	Painted sheet products, sheet metal work, closure sheet, finstock.		✓			aa	dc	bb	ac	ba	no
5005	A stronger alloy than 1200. This is a general purpose alloy suitable to welding.	✓	✓	✓	✓	aa	dc	bb	ac	ba	no
5083	Used in high strength structural applications principally in the form of sheet and plate for welded marine applications and road transport vehicles.	✓	✓			ac	cb	cc	ac	ba	no
5251	A medium strength alloy with reasonable ductility-work hardens rapidly. Very suitable for welding with a high corrosion resistance, particularly in marine atmospheres. Uses include boats, panelling and pressing for transport, boxes and containers. Suitable for applications specifying 5052.	✓	✓	✓		aa	cb	cc	ac	ba	no
5052											
5454	Welded structures, pressure vessels for use at elevated temperatures, marine applications.	✓	✓	✓		aa	cb	cc	ac	ba	no
6061	Structural applications where corrosion resistance is required. Transport, marine, aircraft landing mats.	✓	✓			bb	bc	bb	ac	ba	yes
7075	High Strength and surface hardness, susceptible to stress corrosion cracking.	✓				cc	bb	dd	dd	bc	yes

Relative ratings in decreasing order of merit = a b c d (where a = most applicable) two ratings: e.g. ac are for annealed and hardest tempers.

Extruded Products

Alloy	Typical application (✓)	Forms Available						Characteristics					
		Forms Available				Drawn		Corrosion Resistance	Machining	Anodising	Forming	Welding	Heat Treatable
		Rod & Bar	Solid Shapes	Hollow Shapes	Tube	Rod & Bar	Tube						
2011	Commercial machining alloy.	✓	e			✓		d	aa	d	cd	d	✓
3003	Drawn tube for heat exchangers, chemical equipment and hardware.				e		✓	a	dc	b	ac	a	nr
6060 / 6063	Most commonly used extrusion alloy. Architectural and general purpose	✓	✓	✓	✓	✓	✓	a	cc	a	ac	a	✓
6061	Structural alloy with medium weld strength and good corrosion resistance.	✓	✓	✓	✓	✓	✓	b	bc	b	ac	a	✓
6101	Electrical conductors.	✓	✓	✓	✓	✓	✓	ab	bc	a	ac	a	✓
6106	General purpose and light structural.	✓	✓	✓	✓	✓	✓	a	cb	a	ac	a	✓
6261	Commercial machining alloy with good anodising.	✓	e	e	✓	✓		b	aa	b	ac	a	✓
6082	Heavy duty structures with good corrosion resistance and medium weld strength. Transport, marine etc.	✓	✓	✓	✓			ab	bc	b	ac	a	✓
6463A	Trims requiring decorative finishing.	e	e					a	c	a	a	a	✓

Relative ratings are in decreasing order of merit = a,b,c,d

e = Special enquiry needed to clarify application

Nr = Not recommended

Where applicable, ratings for both annealed and hardest temper are given, e.g. a,c

Ratings indicates suitability of alloy for decorative quality anodising; all aluminium alloys can be anodised for increased corrosion and wear resistance.