



McKechnie[®]
Transforming Aluminium

Alloy 6106

PROPERTIES AND SPECIFICATIONS:

CHEMICAL COMPOSITION % (1)											
Alloy	Al	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Others	
										Each	Total
6106	Rem.	0.3 -0.6	0.35	0.25	0.05 -0.20	0.40 -0.8	0.20	0.10	-	0.05	0.15

Temper	Size or Thickness (3)		Mechanical Property Compliance or Rating (2)			Typical Mechanical Properties, Characteristics and Applications					
			Tensile Strength (Mpa)		(5) Elong .% (min)	Tensile Strength (MPa)		Elong .%	Shear (MPa)	Hardness (Hv)	
	Over mm	Up to mm	UTS (Min)	Yield (Min) (4)		UTS	Yield				
T4		150	130	70	12	140	75	20	...	55	
T6		10	235	210	8	255	255	10	180	90	
		10	25	205	170	8	225	185	10	180	85
		25	150	185	160	10	200	175	12	180	85

Modulus of Elasticity (Gpa): [All Tempers]		
• Tension		68.5
• Compression		69.7
• Shear		~ 26
Resistance to Corrosion: (6)		
• General	A	Can be used in industrial and seacoast atmospheres without protection.
• Stress Corrosion Cracking	A	
Workability (Cold)	C	Average
Machinability	C	Average
Weldability		
• Gas	A	Generally weldable by all commercial procedures and methods.
• Arc	A	
• Resistance, Spot & Seam	A	
Brazeability	A	Generally weldable by all commercial procedures and methods.
Typical Applications		General purpose extrusions, light structural applications.

Notes:

- 1) Chemical compositions are referenced in AS/NZS 1866. Single figures are maximums.
- 2) Mechanical properties and ratings:
T4 & T6 tempers specified in AS/NZS 1866: Aluminium Alloys - Extruded rod, bar, solid & hollow shapes.
- 3) Thickness is defined as the diameter of solid rod or the wall thickness or the equivalent major solid cross section.
- 4) Yield is based on 0.2% Proof Stress.
- 5) Elongation is based on 50mm test parameter.
- 6) Ratings A through E are relative ratings in order of merit for the hardest temper (A = Excellent E = Poor).

Consult McKechnie[®] Aluminium Technical Services Department if further information is required.