

# Aluminium - 6082 T6

## Box Section Rectangular

## Properties

Stock		Chemical Properties	
Size (in)	Weight/m (Kg)	Element	Chemical composition %
1 1/2 x 3/4 x 3/16	0.48	Manganese (Mn)	0.40 - 1.00
1 1/2 x 1 x 16G	0.53	Iron (Fe)	0.0 - 0.50
50 x 25 x 3mm	1.12	Magnesium (Mg)	0.60 - 1.20
1 1/2 x 1 x 10G	1.00	Silicon (Si)	0.70 - 1.30
2 x 1 x 10G	1.22	Copper (Cu)	0.0 - 0.10
2 x 1 1/2 x 10G	1.45	Zinc (Zn)	0.0 - 0.20
3 x 1 x 10G	1.67	Titanium (Ti)	0.0 - 0.10
3 x 1 1/2 x 10G	1.90	Chromium (Cr)	0.0 - 0.25
3 x 2 x 10G	2.11	Aluminium (Al)	Balance
4 x 1 x 10G	2.12		
4 x 1 3/4 x 10G	2.45		
4 x 2 x 10G	2.56		
6 x 2 x 10G	3.40		
6 x 3 x 3/8	10.80		

  

Mechanical Properties	
Property	Value
Proof Stress	170 MPa
Tensile Strength	260 MPa
Elongation	19%
Shear Strength	170 MPa
Hardness Vickers	75 HV

  

Physical Properties	
Property	Value
Density	2.70 g/cm <sup>3</sup>
Melting Point	555°C
Thermal Expansion	24 x 10 <sup>-6</sup> /K
Modulus of Elasticity	70 GPa
Thermal Conductivity	180 W/m.K
Electrical Resistivity	0.038 x 10 <sup>-6</sup> Ω.m

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