

# Aluminium - 6082 T6

## Square Bar

## Properties

Stock		Chemical Properties	
Size SQ (in)	Weight/m (Kg)	Element	Chemical composition %
1/4	0.11	Manganese (Mn)	0.40 - 1.00
5/16	0.17	Iron (Fe)	0.0 - 0.50
3/8	0.25	Magnesium (Mg)	0.60 - 1.20
1/2	0.44	Silicon (Si)	0.70 - 1.30
5/8	0.68	Copper (Cu)	0.0 - 0.10
3/4	0.99	Zinc (Zn)	0.0 - 0.20
7/8	1.34	Titanium (Ti)	0.0 - 0.10
1	1.76	Chromium (Cr)	0.0 - 0.25
1 1/4	2.73	Aluminium (Al)	Balance
1 1/2	3.85		
1 3/4	5.24		
2	6.86		
2 1/4	9.18		
2 1/2	10.70		
3	15.40		
4	28.10		
5	43.70		
6	62.94		
		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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