

Aluminium - 6082 T6

Box Section Square

Properties

Stock		Chemical Properties	
Size (in)	Weight/m (Kg)	Element	Chemical composition %
1/2 x 1/2 x 16G	0.20	Manganese (Mn)	0.40 - 1.00
3/4 x 3/4 x 16G	0.31	Iron (Fe)	0.0 - 0.50
1 x 1 x 16G	0.42	Magnesium (Mg)	0.60 - 1.20
1 x 1 x 10G	0.78	Silicon (Si)	0.70 - 1.30
1 1/4 x 1 1/4 x 16G	0.53	Copper (Cu)	0.0 - 0.10
1 1/4 x 1 1/4 x 10G	1.00	Zinc (Zn)	0.0 - 0.20
1 1/2 x 1 1/2 x 16G	0.64	Titanium (Ti)	0.0 - 0.10
1 1/2 x 1 1/2 x 10G	1.23	Chromium (Cr)	0.0 - 0.25
1 3/4 x 1 3/4 x 10G	1.45	Aluminium (Al)	Balance
50 x 50 x 1.5mm	0.79	Mechanical Properties	
50 x 50 x 3.0mm	1.52		
75 x 75 x 1.5mm	1.19	Property	Value
2 x 2 x 16G	0.87	Proof Stress	170 MPa
2 x 2 x 10G	1.68	Tensile Strength	260 MPa
2 x 2 x 1/4	3.06	Elongation	19%
2 1/2 x 2 1/2 x 10G	2.12	Shear Strength	170 MPa
3 x 3 x 10G	2.57	Hardness Vickers	75 HV
4 x 4 x 10G	3.47	Physical Properties	
4 x 4 x 1/4	6.56		
100 x 100 x 1.5mm	1.60	Property	Value
150 x 150 x 3.0mm	4.76	Density	2.70 g/cm ³
		Melting Point	555°C
		Thermal Expansion	24 x 10 ⁻⁶ /K
		Modulus of Elasticity	70 GPa
		Thermal Conductivity	180 W/m.K
		Electrical Resistivity	0.038 x 10 ⁻⁶ Ω.m

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