

# Aluminium - 6082 T651

## Plate

Stock	Weight/Sheet (Kg)
2500 x 1250 x 8.0	67.81
2500 x 1250 x 10.0	84.68
2500 x 1250 x 12.0	101.56

## Properties

Chemical Properties	
Element	Chemical composition %
Manganese (Mn)	0.40 - 1.00
Iron (Fe)	0.0 - 0.50
Magnesium (Mg)	0.60 - 1.20
Silicon (Si)	0.70 - 1.30
Copper (Cu)	0.0 - 0.10
Zinc (Zn)	0.0 - 0.20
Titanium (Ti)	0.0 - 0.10
Chromium (Cr)	0.0 - 0.25
Aluminium (Al)	Balance

Mechanical Properties	
Property	Value
Proof stress	290 Typical MPa
Tensile strength	340 Typical MPa
Elongation	6% Min %
Hardness Vickers	95 Typical 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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