

# Aluminium - 5083 H111

## Plate

## Properties

Stock		Chemical Properties	
Size (mm)	Weight/Sheet (Kg)	Element	Chemical Composition %
2000 x 1000 x 3.0	16.26	Manganese (Mn)	0.40 - 1.00
2500 x 1250 x 3.0	25.41	Iron (Fe)	0.40 max
3000 x 1500 x 3.0	36.59	Copper (Cu)	0.10 max
2000 x 1000 x 4.0	21.68	Magnesium (Mg)	4.0 - 4.90
2500 x 1250 x 4.0	33.88	Silicon (Si)	0.40 max
3000 x 1500 x 4.0	48.78	Zinc (Zn)	0.25 max
2000 x 1000 x 5.0	27.10	Chromium (Cr)	0.05 - 0.25
2500 x 1250 x 5.0	42.34	Titanium (Ti)	0.15 max
3000 x 1500 x 5.0	60.98	Aluminium (Al)	Balance
2000 x 1000 x 6.0	35.52	<b>Mechanical Properties</b>	
2500 x 1250 x 6.0	50.81		
3000 x 1500 x 6.0	73.17	<b>Property</b>	<b>Value</b>
2000 x 1000 x 8.0	43.36	Proof Stress	145 MPa
2500 x 1250 x 8.0	67.75	Tensile Strength	300 MPa
3000 x 1500 x 8.0	97.56	Elongation	23%
2000 x 1000 x 10.0	54.20	Shear Strength	175 MPa
2500 x 1250 x 10.0	84.69	Hardness Vickers	75 HV
3000 x 1500 x 10.0	121.95	<b>Physical Properties</b>	
2000 x 1000 x 12.0	65.04		
2500 x 1250 x 12.0	101.63	<b>Property</b>	<b>Value</b>
3000 x 1500 x 12.0	146.34	Density	2.65 g/cm <sup>3</sup>
2000 x 1000 x 15.0	81.30	Melting Point	570°C
2500 x 1250 x 15.0	127.03	Thermal Expansion	25 x 10 <sup>-6</sup> /K
3000 x 1500 x 15.0	182.93	Modulus of Elasticity	72 GPa
2000 x 1000 x 20.0	108.40	Thermal Conductivity	121 W/m.k
2500 x 1250 x 20.0	169.38	Electrical Resistivity	0.058 x 10 <sup>-6</sup> Ω.m
3000 x 1500 x 20.0	243.90		
2000 x 1000 x 25.0	135.50		
2500 x 1250 x 25.0	211.72		
3000 x 1500 x 25.0	304.88		
2000 x 1000 x 30.0	162.60		
2500 x 1250 x 30.0	254.06		
3000 x 1500 x 30.0	365.85		
2500 x 1250 x 40.0	338.75		

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