

## SPECIFICATIONS

Commercial	5083
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G.AL C250 Precision Milled Plate, Alloy 5083 is supplied homogenised and stress relieved in thicknesses from 5mm to 100mm

It is precision milled to a roughness Ra of 0.4 microns and supplied folied on both sides.

## CHEMICAL COMPOSITION

G.AL C250 Alloy 5083 Precision Milled Plate	
Element	% Present
Magnesium (Mg)	4.00 - 4.90
Manganese (Mn)	0.40 - 1.00
Iron (Fe)	0.40 max
Silicon (Si)	0.0 - 0.40
Titanium (Ti)	0.05 - 0.25
Chromium (Cr)	0.05 - 0.25
Copper (Cu)	0.10 max
Others (Total)	0.0 - 0.15
Zinc (Zn)	0.0 - 0.10
Other (Each)	0.0 - 0.05
Aluminium (Al)	Balance

## MECHANICAL PROPERTIES

G.AL C250 Alloy 5083 G.AL C250 Alloy 5083	
Property	Value
Proof Stress	110-130 MPa
Tensile Strength	230-260 MPa
Hardness Brinell	68-73 HB
Elongation A	10-15 %

## TOLERANCES

Thickess (mm)	Flatness Tol (mm)	Thickness Tol (mm)	Width & Length Tol (mm)
5	0.80	+/- 0.1	-0 / +20
6-12.7	0.40	+/- 0.1	-0 / +20
Over 12.7	0.13	+/- 0.1	-0 / +20

## SUPPLIED FORMS

- Plate

## GENERIC PHYSICAL PROPERTIES

Property	Value
Density	2.66 g/cm <sup>3</sup>
Melting Point	570 °C
Thermal Expansion	23.3 x10 <sup>-6</sup> /K
Modulus of Elasticity	70 GPa
Thermal Conductivity	110-130 W/m.K
Electrical Resistivity	29-32 % IACS
Heat Capacity	900 J/kgK

## CONTACT

Web: [www.dalsteel.com.au](http://www.dalsteel.com.au)

## REVISION HISTORY

Datasheet Updated 16 February 2023

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