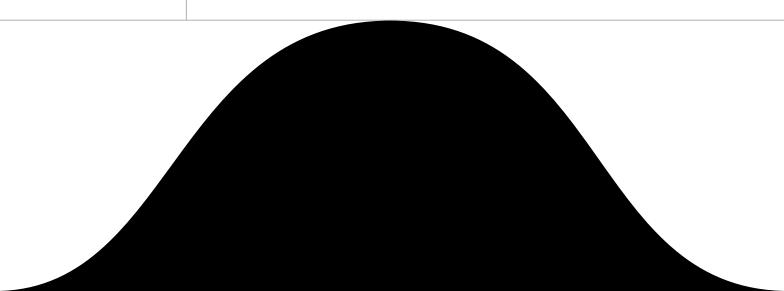


## DECORSLAT ALUMINIUM MATERIAL SAFETY DATA SHEET



### IDENTIFICATION OF MATERIAL AND SUPPLIER

PRODUCT NAME: DecorSlat Aluminium

SUPPLIER NAME: Decor Systems Australia

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Alloy 6063 is a heat-treatable 0.7% magnesium, 0.4% silicon alloy offering good mechanical properties commonly available in a wide range of extruded sections. Its ready extrudability enables thin walled and intricate hollow shapes to be produced: flats, angles, channels and hollow circular and square sections are all standard profiles. 6063 responds well to polishing, chemical brightening, anodising and dyeing.

### CORROSION RESISTANCE

Excellent in a wide range of atmospheric environments and it is also acceptable in many marine environments. This alloy is particularly suitable for anodising for architectural applications. The magnesium content is low enough that it does not suffer from the stress corrosion cracking that can affect alloys with more than about 36% Mg, such as 5083.

### **HEAT TREATMENT**

Alloy 6063 can be hardened by solution treating (522°C followed by water quenching) and ageing (precipitation) heat treatment. It is most commonly supplied in the aged TS or T6 tempers. To soften Alloy 6063 back to Temper O it can be annealed by heating to 415°(, holding for 2 - 3 hours then cooling; the rate of cooling should be about 30°C per hour down to 260°C. Heating to 345°C followed by uncontrolled cooling may be used to remove the effects of cold work, or to partially remove the effects of heat treatment.

### SPECIFIED PROPERTIES

These properties are specified for extruded product in AS/NZS 1866:1997.

COMPOSITION SPECIFICATION(%) (single values are maximum except as noted)

								OTHERS	
Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	EACH	TOTAL
0.20- 0.6	0.35	0.10	0.10	0.45- 0.9	0.10	0.10	0.10	0.05	0.15

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### PHYSICAL PROPERTIES

DENSITY (kg/m³)	ELASTIC MODULUS (GPa)	MEAN COEFFICIENT OF THERMAL	THERMAL CONDUCTIVITY AT 25°C	ELECTRICAL CON	ELECTRICAL RESISTIVITY (n.m)		
		EXPANSION 20-100° (um/m/°C)	(W/m.K)	EQUAL VOLUME	EQUAL MASS	, ,	
2700	69	23.4	209	32	105	31	

### **REFERENCES**

- AS/NZS 1866:1997 Aluminium And Aluminium Alloys Extruded Rod,Bar, Solid And Hollow Shapes.
- Aluminium Association Aluminium Standards and Data 2009 Metric SI.
- WTIA Technical Note 2-Successful Welding of Aluminium.

#### LIMITATION OF LIABILITY

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