

Clear Anodised Aluminium Slats



Slat Sizes:

- 40x20 x 2mm (x length)
- 70x30 x 3mm (x length)

Weight per length:

- 40x20 x1800mm = 1.0 kg
- 70x30 x1500mm = 2.0 kg
- 70x30 x1800mm = 2.4 kg

Features, Benefits & Advantages:

- 100% Recyclable.
- Maintenance free – no polishing or painting necessary.
- Easy to clean & sanitise.
- Highly chemical resistant – graffiti is easily cleaned off.
- Very strong – high strength to weight ratio.
- Dimensionally stable - will not warp, twist, cup or crack.
- Marine grade – suitable for beachfront locations.
- Non-Combustible.
- Not excessively hot in the sun due to the conductive nature and fast cooling of aluminium.

Specifications:

40x20 x2mm RHS Profile	70x30 x3mm RHS Profile
Alloy: 6063	Alloy: 6060
Temper: T5	Temper: T5
Tensile Strength: 150 MPa	Tensile Strength: 150 MPa
Yield Strength: 110 N/m ²	Yield Strength: 110 N/m ²
15 micron clear anodised	15 micron clear anodised

Properties of Aluminium

Aluminium is exceedingly strong and rigid. It is deemed Non-Combustible and prized for its excellent thermal and electrical properties as well as corrosion resistance.

Aluminium extrusions used in the marine industry are the 6000 series alloys. The 6000 series alloys have been used in the marine industry for over 50 years.

Aluminium will melt at around 660°C, or 1220°F. Its high specific heat, thermal conductivity, and reflectivity all help to give the metal some interesting characteristics and make it viable for furniture and construction applications. The fire-protection gained through the proper use of aluminium has led to its extensive use in oil platforms.

The specific heat of a material, also referred to as the specific heat capacity, is the amount of heat energy required to raise the temperature of that material by one unit. This is calculated by dividing the required energy at a unit of temperature by the mass of the material. The specific heat of aluminium alloys ranges from 816 to 1050 J/(kg·K) in SI units, or 0.195 to 0.258 Btu/(lb·°F). This is approximately twice that of steel, meaning that a given mass of aluminium will take twice as much energy to heat up by one degree as the same mass of steel. Put another way, ***aluminium furniture and structural elements will take twice as long to heat up as an equivalent mass of steel.***

The thermal conductivity of a material is a measure of its ability to transfer heat. For aluminium alloys, this ranges from 88 to 251 W/(m·K) or 51 to 164 Btu(h·ft·°F), 3-6 times higher than normal steel and 10-17 times higher than stainless steel. *The advantages this provides include the ability to remove heat from a source area and distribute it to the rest of the material. This slows the rate at which the entire mass heats up while also allowing some of the heat to radiate off the material due to it being spread out across a larger surface area. What this means is that aluminium furniture is in fact not hot to sit on by comparison to materials which retain heat.*

Warranty

Refer to 'Astra Street Furniture Warranty Policy' document for product warranty. This can be found on www.astrastreetfurniture.com.au.

