

Features

- **Cold Formability:** Very good; suitable for moderate bending and general pressing/panelling applications.
- **Corrosion Resistance:** High, particularly in marine and industrial environments.
- **Readily weldable** using standard methods such as MIG, TIG, and resistance welding, allowing for strong, high-quality welded structures.
- **Machinability:** Average; improved over pure aluminium due to higher strength but can require specific tooling to avoid edge build-up.
- It has good aesthetic properties and responds well to various surface treatments, including very good anodising properties for both decorative and technical requirements.
- Suitable for both indoor and outdoor use, exhibits good general weathering resistance and high chemical resistance, in addition to its noted marine corrosion resistance.

RS PRO 5251 Aluminium Sheet, L:500MM X W:300MM X T:3MM

RS Stock No: 0783244



RS PRO is the own brand of RS. The RS PRO Seal of Approval is your assurance of professional quality, a guarantee that every part is rigorously tested, inspected, and audited against demanding standards. Making RS PRO the Smart Choice for our customers.

Product Description

RS PRO 5251 Aluminium Sheet

A RS Pro 5251 Aluminium Sheet is a medium-strength, highly corrosion-resistant material suitable for applications in marine, offshore, and general fabrication environments.

Key Features:

- *Precision Finishing: The RS PRO sheets are precision-finished to meet international standards for tight thickness, tolerance, flatness, and dimensional accuracy.*
- *Strength-to-Weight Ratio: While a medium-strength alloy, it offers higher mechanical properties compared to pure aluminium grades (like 1050A SIC), providing a good combination of strength and formability for general sheet metal work.*
- *Machinability: Machinability is considered "average"; it is best machined at high speeds with plenty of lubrication and sharp tools to avoid edge build-up.*
- *Weldability: Readily weldable using gas, arc, and resistance welding methods.*

Applications:

- *Boat building and marine structures*
- *Architectural panelling*
- *Vehicle panels and pressings*
- *Boiler making*
- *Chemical and pharmaceutical industry equipment*
- *General fabrication and engineering projects*

General Specifications

Material	Aluminium 5251
Colour	Natural
Form	Sheet
Length	500MM
Width	300MM
Thickness	3MM

Mechanical Specifications

Modulus of Elasticity	70 GPa
Elongation	8% min (A50)
Hardness Brinell	56 HB (typical)
Density	2.69g/cm³
Tensile Strength	190 - 230MPa
Thermal Conductivity	134W/m.K
Proof Stress	120 Min MPa

Similar Products

RS Code	Grade	Thickness
0783242	5251	1MM
0783243	5251	2MM