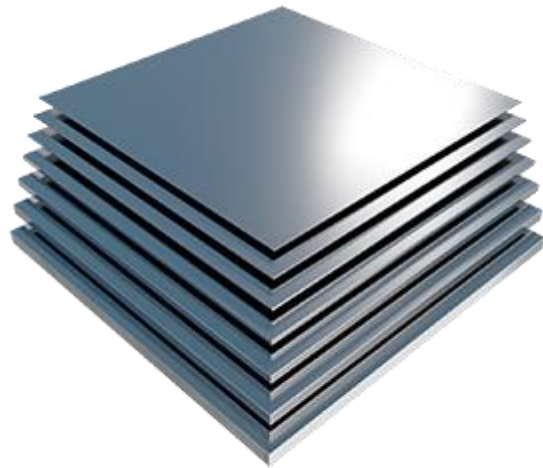


Features

- **Corrosion Resistance:** It demonstrates excellent resistance to attack by both seawater and industrial chemicals, making it ideal for marine and offshore applications.
- **Strength:** The 5083 alloy has the highest strength among all non-heat-treatable aluminium alloys. It maintains its strength well even after welding.
- **Weldability:** It has excellent weldability (arc and resistance welding) and is a preferred choice for applications requiring strong welded joints.
- **Temperature Range:** It is not recommended for continuous use in temperatures exceeding 65°C to avoid stress corrosion cracking but performs well in cryogenic applications (down to -195°C).
- **Formability:** The alloy has good cold formability and can be easily formed into various shapes.

RS PRO 5083 Aluminium Sheet, L:300MM X W:500MM X T:40MM

RS Stock No: 0764188



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 5083 Aluminium Sheet

A RS Pro 5083 Aluminium Sheet is a highly specialized, marine-grade material known for exceptional strength and corrosion resistance in harsh environments. While this specific configuration is not available from RS PRO, its general properties are consistently described by metal suppliers.

Key Features:

- Exceptional Performance in Extreme Environments: The alloy is specifically designed to perform in demanding conditions, making it a staple in heavy-duty applications.*
- Superior Corrosion Resistance: It offers high resistance to attack from both seawater and industrial chemicals, a key reason it is referred to as "marine grade".*
- Highest Strength of Non-Heat-Treatable Alloys: The 5083 alloy provides the maximum strength possible among non-heat-treatable aluminium alloys, and importantly, it retains exceptional strength after welding.*
- Excellent Weldability: It can be welded using standard arc and resistance welding methods without significant loss of strength, which simplifies fabrication of complex structures.*

Applications:

- Shipbuilding*
- Rail cars*
- Vehicle bodies*
- Pressure vessels*
- Mine skips and cages*
- Tipper Truck Bodies*

General Specifications

Material	Aluminium 5083
Colour	Natural
Form	Sheet
Hardness Vickers	75 HV

Mechanical Specifications

Length	300MM
Width	500MM
Thickness	40MM
Density	2.65g/cm³
Tensile Strength	300 MPa
Thermal Conductivity	121 W/m.K
Proof Stress	145 MPa
Melting Point	570°C

Similar Products

RS Code	Grade	Thickness
0764180	5083	1/2"
0764181	5083	20MM
0764182	5083	25MM
0764183	5083	30MM
0764184	5083	10MM
0764185	5083	16MM
0764187	5083	1"
0764189	5083	15MM
0764190	5083	50MM