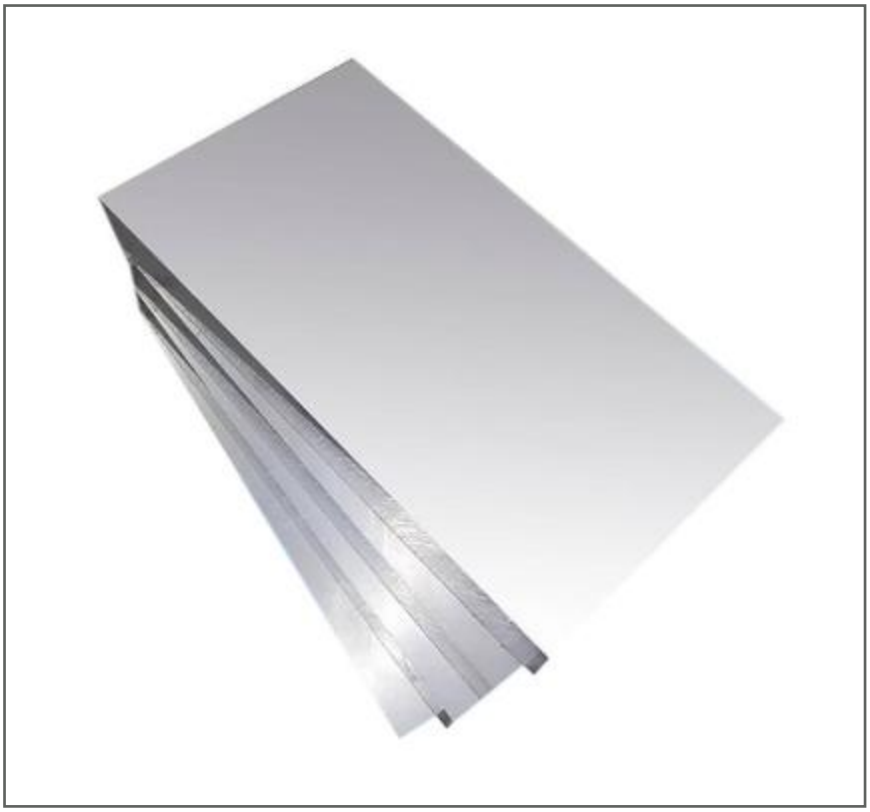
Metal Sheets

Features

- Very high strength aerospace aluminium
- Used where strength is critical and where good corrosion resistance is not important
- Highly durable under repetitive loading cycles, a critical feature for aircraft components that undergo constant stress fluctuations.
- With a Brinell hardness typically around 150 HB, it provides excellent resistance to surface wear and indentation.
- Very good low temperature properties
- Commonly used for aircraft fittings, gears and shafts, fuse parts, meter shafts and gears, missile parts, regulating valve parts, worm gears, keys, aircraft, aerospace and defense applications; bike frame and all-terrain vehicle (ATV) sprockets.

RS PRO 7075 Aluminium Sheet, L:500MM X W:300MM X T:31.7MM

RS Stock No: 0783481



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.

Metal Sheets

Product Description

RS PRO 7075 Aluminium Sheet

The RS PRO 7075 Aluminium Sheet 7075 is a very high strength aerospace aluminium and is commonly used in applications where the strength of the material is critical and where the need for good corrosion resistance is not important. Offering superior stress corrosion resistance, 7075 provides very high yield and tensile strengths which is dictated by the particular chosen temper.

Key Features:

- *Reliable Machinability: Rated as "fair" to "good," it produces crisp, easily broken chips, though it requires sharp carbide tooling and rigid setups to manage its hardness.*
- *Low-Temperature Performance: Maintains its strength and toughness even at cryogenic temperatures (below -50°C), unlike many steels that become brittle in the cold.*
- *Dimensional Stability: Exhibits minimal warping after heat treatment, which is essential for precision molds and high-tolerance mechanical parts.*
- *Responds well to hardcoat (Type III) anodizing, which can be used to significantly improve its surface protection and wear resistance.*

Applications:

- *Airframes and Structures: Used for wing spars, ribs, and fuselage frames that must carry enormous loads.*
- *Skin Panels: T6 temper sheets are standard for aircraft skins.*
- *Landing Gear: Chosen for its ability to withstand sudden impacts during take-off and landing.*
- *Spacecraft: Components like heat shields and structural parts use 7075 because it manages heat well and resists wear.*

General Specifications

Material	Aluminium 7075
Form	Sheet
Length	500MM
Width	300MM
Thickness	31.7MM

Metal Sheets

Mechanical Specifications

Hardness	150HB
Density	2.80 – 2.81g/cm³
Tensile Strength	275 - 540MPa
Thermal Conductivity	134-160 W/mK
Yield Strength	455 – 165MPa

Similar Products

RS Code	Grade	Thickness
0783478	7075	10MM
0783479	7075	12.7MM
0783480	7075	25.4MM
0783482	7075	38.1MM
0783483	7075	45MM
0783484	7075	50.8MM
0783485	7075	60MM
0783486	7075	76.2MM
0783487	7075	90MM
0783488	7075	101.6MM
0783489	7075	1.6MM
0783490	7075	40MM
0783491	7075	20MM
0783492	7075	65MM