

TECHNICAL DATA SHEET

Heavy Duty Aluminum Framework: 6061 T6 Aluminum Rafters, Gussets and Hardware and 6063 T6 on all other extrusions

From Wikipedia, the free encyclopedia

6061 is an [aluminum alloy](#), with [magnesium](#) and [silicon](#) as the alloying elements. It has generally good mechanical properties and is heat treatable and weldable. It is commonly produced in several heat temper grades, **6061-O**, **6061-T4**, **6061-T6**, **6061-T651**, **6061-T42**.

The alloy composition of **6061** is:

- [Silicon](#) minimum 0.4%, maximum 0.8% by weight
- [Iron](#) no minimum, maximum 0.7%
- [Copper](#) minimum 0.15%, maximum 0.40%
- [Manganese](#) no minimum, maximum 0.15%
- [Magnesium](#) minimum 0.8%, maximum 1.2%
- [Chromium](#) minimum 0.04%, maximum 0.35%
- [Zinc](#) no minimum, maximum 0.25%
- [Titanium](#) no minimum, maximum 0.15%
- Other elements no more than 0.05% each, 0.15% total
- Remainder [Aluminum](#)



All Fasteners are Stainless Steel

6061-T6

T6 temper 6061 has an ultimate tensile strength of at least 42,000 psi (290 MPa) and yield strength of at least 35,000 psi (241 MPa). In thicknesses of 0.250 inch (6.35 mm) or less, it has elongation of 8% or more; in thicker sections, it has elongation of 10%.

Uses

6061 is widely used for construction of [aircraft](#) structures, such as [wings](#) and [fuselages](#), more commonly in [homebuilt aircraft](#) than commercial or military aircraft.

6063 T6 Aluminum is mostly used in [extruded](#) shapes for architecture, particularly window frames, door frames, and roofs. It is typically produced with very smooth surfaces fit for [anodizing](#). We use this in all our other extrusions.

Our system incorporates **“Built-in Condensation Gutters”** on all rafters and crossbars, as well as **“Multi-Tubular Design”** for strength within each extrusion.

DURABLE POWDER COAT FRAME FINISHES

ANODIZED

WHITE

GREEN

SANDTONE

CLEAR

BRONZE

6 STANDARD COLORS AVAILABLE

*Colors above may be inaccurate due to printing. Ask for actual samples before choosing final color PLUS 100'S OF CUSTOM COLORS AT EXTRA COST

5" - HIGH DENSITY NYLON WHEELS
 with Self Lubricating Brass Hubs

Rolls Easily



**10 Year
 Warranty**

SIDE WALLS (SINGLE GLAZED)

1/4" Tempered Glass
 (Most Enclosures)



1/4" Polycarbonate
98% UV Inhibitors
 (Pool Enclosures)

*All Standard with Clear with Bronze Tinted available.

ROOF PANELING



MULTI WALL PANELS OFFER DURABILITY

***10mm, MACROLUX® MULTI Wall Polycarbon
 light transmission and great economy!***



Macrolux® MULTI Wall Polycarbonate Sheet is ideal for industrial and residential building such as: Greenhouse Applications • Skylights • Roofing, Glazing • Windows • Pool Enclosures

MAIN CHARACTERISTICS

- More air pockets, thus higher R value (1.92); U value = .52
- High Light Transmission – UV absorber co-extruded into top sheet
- Scratch Resistance