

## Aluminium

## 6082 T4 Bar & Extrusion

Datasheet Updated  
05 August 2021

### RANGE

Alloy 6082 is typically supplied as channel, angle, tee, square bar, square box section, rectangular box section, flat bar, tube, sheet, shate & plate.

### SPECIFICATIONS

Commercial	6082 T4
EN	6082 T4

Structural aluminium alloy with the highest strength in the 6000 series.

### CHEMICAL COMPOSITION

**BS EN 573-3**  
**Alloy 6082**

Element	% Present
Manganese (Mn)	0.40 - 1.00
Iron (Fe)	0.00 - 0.50
Magnesium (Mg)	0.60 - 1.20
Silicon (Si)	0.70 - 1.30
Copper (Cu)	0.00 - 0.10
Zinc (Zn)	0.00 - 0.20
Titanium (Ti)	0.00 - 0.10
Chromium (Cr)	0.00 - 0.25
Other (Each)	0.00 - 0.05
Others (Total)	0.00 - 0.15
Aluminium (Al)	Balance

### ALLOY DESIGNATIONS

Aluminium alloy 6082 also corresponds to the following standard designations and specifications **but may not be a direct equivalent:**

- AA6082
- HE30
- DIN 3.2315
- EN AW-6082
- ISO: Al Si1MgMn
- A96082

### TEMPER TYPES

The most common tempers for 6082 aluminium are:

- T4
- T651
- O
- T6

### SUPPLIED FORMS

- Bar
- Tube
- Extrusions
- Rod

## APPLICATIONS

- Highly stressed applications
- Trusses
- Bridges
- Cranes
- Transport applications
- Ore skips
- Beer barrels
- Milk churns

## CHARACTERISTICS

- Excellent corrosion resistance
- Medium strength
- Good machinability. In the T6 and T651 temper, alloy 6082 machines well and produces tight coils of swarf when chip breakers are used.
- Good weldability

## MECHANICAL PROPERTIES

### BS EN 755-2

### Extruded Rod, Bar, Tube & Profiles Up to 200mm Dia. or A/F, Up to 25mm WT tube & Prof

Property	Value
Proof Stress	110 Min MPa
Tensile Strength	205 Min MPa
Elongation A50 mm	12 Min %
Hardness Brinell	70 HB
Elongation A	14 Min %

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