

## Aluminium

## 6082 O Sheet & Plate

Datasheet Updated  
05 August 2021

### SPECIFICATIONS

Commercial	6082 O
EN	6082 O

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

- Sheet
- Plate

### 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 485-2**

**Sheet 0.4mm to 6.00mm**

Property	Value
Proof Stress	85 Max MPa
Tensile Strength	150 Max MPa
Hardness Brinell	40 HB

### DISCLAIMER

This Data is indicative only and as such is not to be relied upon in place of the full specification. In particular, mechanical property requirements vary widely with temper, product and product dimensions. All information is based on our present knowledge and is given in good faith. No liability will be accepted by the Company in respect of any action taken by any third party in reliance thereon. Please note that the 'Datasheet Update' date shown above is no guarantee of accuracy or whether the datasheet is up to date.

The information provided in this datasheet has been drawn from various recognised sources, including EN Standards, recognised industry references (printed & online) and manufacturers' data. No guarantee is given that the information is from the latest issue of those sources or about the accuracy of those sources. Material supplied by the Company may vary significantly from this data but will conform to all relevant and applicable standards. As the products detailed may be used for a wide variety of purposes and as the Company has no control over their use; the Company specifically excludes all conditions or warranties expressed or implied by statute or otherwise as to dimensions, properties and/or fitness for any particular purpose, whether expressed or implied. Advice given by the Company to any third party is given for that party's assistance only and without liability on the part of the Company. All transactions are subject to the Company's current Conditions of Sale. The extent of the Company's liabilities to any customer is clearly set out in those Conditions; a copy of which is available on request.