

Aluminium

6063 O Bar & Extrusion

Datasheet Updated
05 August 2021

SPECIFICATIONS

Commercial	6063 O
EN	6063 O

One of the most popular alloys in the 6000 series and most widely known as an architectural alloy.

CHEMICAL COMPOSITION

BS EN 573-3
Alloy 6063

Element	% Present
Manganese (Mn)	0.00 - 0.10
Iron (Fe)	0.00 - 0.35
Magnesium (Mg)	0.45 - 0.90
Silicon (Si)	0.20 - 0.60
Zinc (Zn)	0.00 - 0.10
Titanium (Ti)	0.00 - 0.10
Chromium (Cr)	0.00 - 0.10
Copper (Cu)	0.00 - 0.10
Other (Each)	0.00 - 0.05
Others (Total)	0.00 - 0.15
Aluminium (Al)	Balance

ALLOY DESIGNATIONS

Aluminium alloy 6063/6063A also corresponds to the following standard designations and specifications **but may not be a direct equivalent**:

- AA6063
- Al Mg0.7Si
- GS10
- AlMgSi0.5
- A-GS
- 3.32206
- ASTM B210
- ASTM B221
- ASTM B241 (Pipe- Seamless)
- ASTM B345 (Pipe- Seamless)
- ASTM B361
- ASTM B429
- ASTM B483
- ASTM B491
- MIL G-18014
- MIL G-18015
- MIL P-25995
- MIL W-85
- QQ A-200/9
- SAE J454
- UNS A96063
- HE19

TEMPER TYPES

The most common temper for 6063 aluminium are:

- T4
- O
- T6

SUPPLIED FORMS

- Bar
- Tube
- Extrusions

APPLICATIONS

- Extrusions
- Window frames
- Doors
- Shop fittings
- Irrigation tubing
- In balustrading the rails and posts are normally in the T6 temper and formed elbows and bends are T4
- Hydro formed tube for chassis

CHARACTERISTICS

- High corrosion resistance
- Medium strength
- Good surface finish
- Readily suited to welding
- Easily anodised
- Good formability in the T4 condition

MECHANICAL PROPERTIES

BS EN 755-2

Rod & Bar Up to 200mm Dia.

Property	Value
Tensile Strength	130 Max MPa
Elongation A50 mm	16 Min %
Hardness Brinell	25 HB
Elongation A	18 Min %

BS EN 755-2

Tube Up to 25mm Wall Thickness

Property	Value
Tensile Strength	130 Max MPa
Elongation A50 mm	16 Min %
Hardness Brinell	25 HB
Elongation A	18 Min %

DISCLAIMER

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