## Aluminium Alloy

6063 T6



#### **Product Information**

Aluminium alloy 6063 is a medium strength alloy and is also referred to as an architectural alloy.

It generally has a good surface finish and high corrosion resistance.

Alloy 6063 is readily suited to welding, can be easily anodised and is most common in T6 temper. T4 temper is very good for forming.

#### Typical Applications

- Window frames
- Door frames
- Shopfitting
- Architectural applications
- Extrusions

#### Available Forms

- Extrusions
- Tube
- Rod
- Bar

#### Aluminium Alloy 6063A

Aluminium Alloy 6063A is a variation of 6063 with the same surface finish however it has greater strength.

6063A is commonly used in road transport and rail transport applications.

#### Temper Types

| 0  | Soft   |
|----|--|
| T4 | Solution heat treated and naturally aged to a substantially stable condition |
| Т6 | Solution heat treated and artificially aged                                  |

# Aluminium Alloy **6063 T6**



#### Chemical Composition

|      | Mn   | Fe   | Mg   | Si   | Cu   | Zn   | Ti   | Cr   | Al  |
|------|------|------|------|------|------|------|------|------|-----|
| Min. | _    | _    | 0.45 | 0.20 | _    | _    | _    | _    | Bal |
| Max. | 0.10 | 0.35 | 0.90 | 0.60 | 0.10 | 0.10 | 0.10 | 0.10 | Bal |

| Typical Physical and Mechanical Properties | Typical Values |
|--|----------------|
| Density                                    | 2.70 g/cm3     |
| Melting point                              | 600°c          |
| Modulus of elasticity                      | 69.5 GPa       |
| Thermal conductivity                       | 200 W/m.k      |
| Tensile strength                           | 215 MPa Min    |
| Proof stress                               | 170 MPa Min    |
| Hardness Brinell                           | 75 HB          |

### Weldability

Aluminium alloy 6063 is suitable for all conventional welding methods.

Welding wire should generally be alloy 5183 or alloy 4043.