

6061 Aluminium Extrusions

Smiths Profiles

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For heavy duty structures

6061 offers great versatility and strength whilst reducing overall weight.

6061 aluminium is a treatable heat alloy with medium to high strength. The alloy offers higher strength when compared with 6005A.

The product finds use in heavy structural applications due to a combination of strength and reduced weight and offers a range of positive characteristics. For example, the alloy promotes superior corrosion resistance and weldability, although welding performance is reduced in the welding zone. Machinability of the material is acceptable.

Formability is good in the T4 temper but is more limited in the T6 temper (6061 extrusions are usually offered in the T6 temper, which is solution heat-treated and artificially aged). Whilst the alloy is versatile as an extruded product, 6061 should not be used in more complex cross-sections as it is not suitable.



Finishing

6061 responds well to anodising and offers good finishing capabilities. Heat dissipation and conductivity are also good. The aluminium alloy provides excellent versatility resulting in forming characteristics with no limits in the overall complexity of the finished product.

Commercial Applications

6061 extrusions find use in heavy-duty applications such as aircraft construction, rail coachwork, electricity pylons, motorboats, truck frames and boiler making.

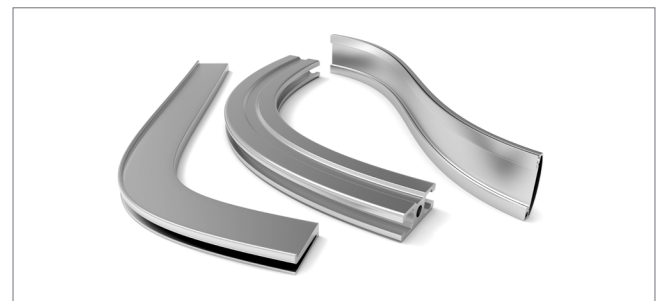
About Smiths Profiles

Smiths Profiles is based in Cheltenham, Gloucestershire and is backed up by the resources of its parent company, Smiths Metal Centres, which has a network of 13 distribution centres across the UK.

We will supply your extruded product taking into account the design and application required with one single objective - to meet your requirements in the most cost efficient way.

Key Features:

- Heavy structural applications
- Combines great strength with reduced weight
- Very good corrosion resistance
- Acceptable weldability
- Responds well to anodising
- Good formability especially in T4 temper
- Great versatility



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Quality Management

Smiths Profiles operate an **ISO 9001 approved** quality management system. Our quality management system (QMS) is fully embedded in our industry-leading bespoke IT platform.