

Metalwork FAQ's

The following are some notes and that address questions that we are frequently asked.

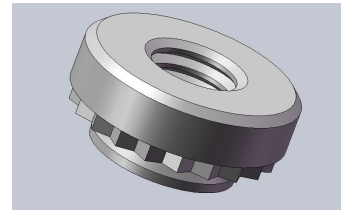
- Unless specified otherwise we will generally use aluminium sheet grade 5251H22 and our extrusion is to grade 6063AT6.
- The most common sheet material thicknesses we use are :
1.0mm 1.2mm 1.5mm 2.0mm 2.5mm 3.0mm
- There is a vast array of different fixings; however the following are three types that we use on a regular basis.



Standoff



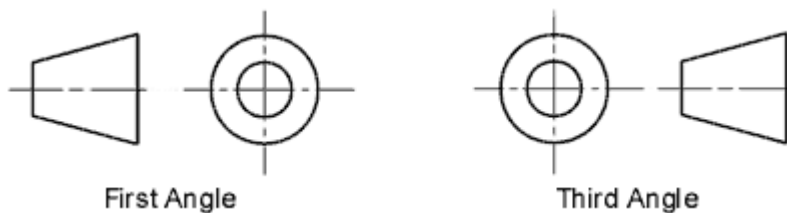
Stud



Self clinching nut

A point to note when using studs and standoffs is that the length quoted includes the thickness of the material into which the fixing is being inserted.

- Consideration needs to be given when punching small holes into parts. As a general rule, the diameter of the hole to be punched, should be at least the thickness of the material.
- Care also needs to be taken when holes are near to a bend to ensure the fold does not distort the hole. Similarly some care is required when inserting holes and fixings into our extrusion to ensure there is room to locate the tooling.
- The convention for drawing projection in the UK is 3rd angle projection and this is the convention we follow in house. We can also work to 1st angle projection, but in either case it is helpful if the type of projection used is identified on the drawings.
- The following symbols are normally used to identify which projection system has been used.



First Angle

Third Angle

There are numerous guides that cover this topic on the web and for further guidance a good place to start is the entry in Wikipedia http://en.wikipedia.org/wiki/Orthographic_projection .

- All dimensions given on a drawing are assumed to be for the bare metal. Suitable allowances therefore need to be made for finish thickness if the part is to have any kind of finish applied, to ensure there is sufficient clearance in the holes .