DESIGN FOR VITREOUS ENAMELLING - SHEET METAL PARTS.

Here are some specific examples of poor and preferred design for sheet metal parts which will be vitreous enameled

1. BENDS

**Poor design** - the bend is too sharp and will tend to result in enamel burning back off the sharp edge during firing. It will also be very difficult to apply an even coating on a bend a sharp as this. On light colours this will appear as a dark grey or black line. There will also be a very great likelihood of chipping due to stress concentration.

**Preferred design** - the bend is at least 3 x material thickness. The smooth shape will ensure that an even coating of fired enamel is achieved and the part will have a much greater resistance to chipping.

2. FLANGES

**Poor design** - the flange is too shallow and will tend to promote chipping and damage. Enamel will tend to burn back on the edge during firing, to show a dark line.

**Improved design** - the flange is deeper which will reduce the risk of chipping and edge damage. But there will still be a black line due to burn back during firing.

**Preferred design** - any burn back of enamel will be concealed on the return flange.