

## 3D OR NOT 3D THAT IS THE QUESTION?

The purpose of this information sheet is to provide specific guidance targeted at areas within the fabrication process that will lead to improvements in the finished product. It is our aim to educate and provide awareness to our customers, that will save time and money, by correcting potential design flaws. Considering how to fabricate material to make it suitable for galvanizing will lead to the best finish on any galvanized and powder-coated surface.



The principle for a good galvanized finish is quite simple. All material that has to be galvanized is dipped at an angle. This is best achieved by having material fabricated in only 2 dimensions or flat packed, allowing for the molten zinc to flow freely from one end of the item to the other, which in turn will provide the highest quality finish.

### Flat packed 2 dimensional items

A common problem encountered by galvanizers is receiving "L" or "U" shaped handrails that are fabricated in 3 dimensions. Whilst understanding that customers may want to fabricated material this way it does lead to potential quality issues on the finished article. When manufactured like this the return section of the handrail will hang level across the width of the galvanizing bath and therefore doesn't get sufficient angle for the molten zinc to run off. This causes runs, spikes, uneven surfaces and a poor finish. Furthermore the long section comes out against the side of the bath again causing poor quality.

The optimum method for a superior galvanizing finish is always to fabricate as shown by Option 1



3 dimensional items



Option 1

Option 2

**Please note that if you choose to fabricated like Option 2, the quality may suffer, it will take longer and cost you more as the galvanizer has to process less at a time!!**

Should you wish any further information please do not hesitate to contact one of our experts on  
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