

Galvaguide No.1



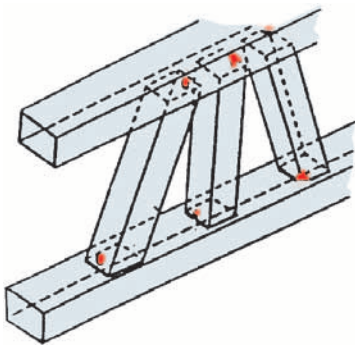
Venting and Draining

A regular problem at our plants is receiving work that has been incorrectly designed or vented for galvanizing. This makes it at best difficult to dip to get good quality, and at worst it could be dangerous!

For instance, if you don't leave sufficient clearance (i.e. at least a minimum of 1mm) between moving parts, such as hinges, then zinc will seize them up and make them inoperable. Also, some structures/fabrications may require lifting points or suspension holes to allow the safe handling for processing.

This data sheet should assist you to achieve optimum venting for hot dip galvanizing. Our experienced sales department will be pleased to help you should you require further advice.

Tubes & Closed Sections

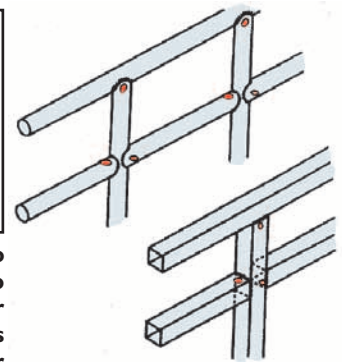


Every sealed section of fabrication must be vented for reasons of safety and allow the access of molten zinc/air during the galvanizing process.

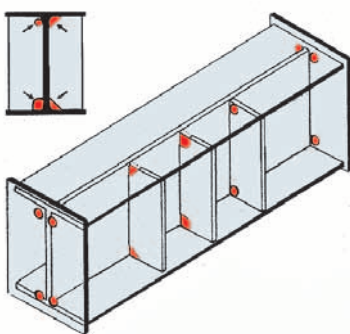
Inadequate venting is **EXTREMELY DANGEROUS** as the build up of gas inside a cavity can cause an explosion. On tubular sections holes for notches will be required diagonally opposite each other, as close to the weld as possible. The following table is a guide to assist you:

Diameter of Section	Minimum Vent Hole
<25	10mm
25 - 50	16mm
50 - 100	25mm
100 - 150	2 x 25mm
>150	2 x 50mm

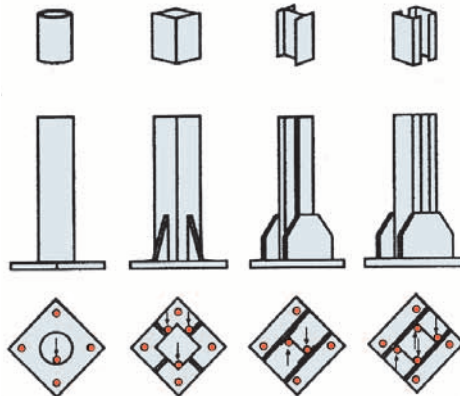
It may also be possible to "internally vent" sections prior to welding, when considering this or designing complex fabrications please feel free to contact our sales department.



End plates/Stiffeners

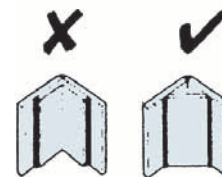


External stiffeners, webs and welded gussets on beams, columns and RSC should have their corners cropped or drilled to allow the easy flow of zinc during the process.

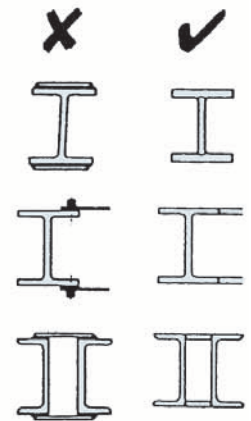


Strengtheners

Examples of how weldments should be designed in order to avoid acid traps (narrow crevices).



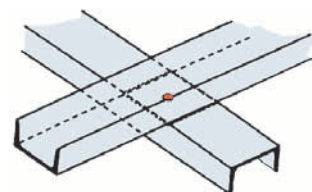
Welding should be continuous on heavy sections where possible, otherwise intermittent at weld centres not greater than 100mm apart. If anti-spatter compounds are required then WATER-soluble types must be used.



Enclosed Plates

If contacting surfaces cannot be avoided as with these channels, then the edges of the contacting areas should be continuously welded and a hole drilled through both members. This will eliminate the possibility of an explosion during the galvanizing process.

If this is not possible the welds should be intermittent, however, it will not be necessary if the enclosed area is less than approximately 70cm²



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