

IMPORTANT CHANGES TO THE REQUIRED MINIMUM HOLE SIZE FOR VENTING & DRAINAGE ON ALL ARTICLES TO BE GALVANIZED OR POWDER COATED.

The standard that is used to advise on the design requirements for galvanizing is **ISO 14713 part 2**

This standard, in which Part 2 is specific to Hot Dip Galvanizing, outlines the accepted requirements and general principles of design which are appropriate for articles that are to be hot dip galvanized. One important recommendation is the minimum hole size for tubular handrails and hollow sections. Attached is an extraction from the standard that highlights the **minimum hole size** and from this table you can see the recommendation is **10mm**.

Section cross-sectional shape and dimensions (mm)			Number and location of holes or crops at each end of the hollow section										
			1 hole	1 hole	2 holes	2 holes	2 crops at corners	4 holes	4 holes	4 crops at corners	4 holes of 15 mm + 1 central hole	4 holes of 15 mm + 1 central hole	4 crops at corners of 25 mm + 1 central hole
Round	Square	Rectangular	Diameter of hole (mm)			Size of crop (mm)	Diameter of hole (mm)		Size of crop (mm)	Diameter of central hole (mm)			
15	15	—	10	10	—	—	—	—	—	—	—	—	—
20	20	30 × 15	10	10	—	—	—	—	—	—	—	—	—
30	30	40 × 20	12	12	10	10	—	—	—	—	—	—	—
40	40	50 × 30	14	14	12	12	10	—	—	—	—	—	—
50	50	60 × 40	16	16	12	12	13	10	10	—	—	—	—
60	60	80 × 40	20	20	12	12	15	10	10	12	—	—	—
80	80	100 × 60	25	20	16	16	20	12	12	15	—	—	—
100	100	120 × 80	30	25	20	20	25	14	15	20	—	—	—
120	120	160 × 80	35	30	25	25	30	20	20	25	—	—	—
160	160	200 × 120	45	40	35	30	40	25	20	30	35	—	—
200	200	260 × 140	60	50	40	35	50	30	25	35	50	40	—
300	300	350 × 250	—	—	60	55	75	45	40	55	80	70	75
400	400	450 × 250	—	—	80	75	100	60	50	75	110	100	110
500	500	600 × 300	—	—	100	90	125	75	65	90	140	125	135
600	600	700 × 400	—	—	120	110	150	85	75	110	170	150	165

NOTE 1 The shaded holes or crops indicate the hole or crop in the opposite end of the hollow section.
 NOTE 2 The size of crop given in this table refers to the length of the adjacent side (not the diagonal length).
 NOTE 3 Table entries that are not applicable are designated by "—".

From **1st July 2024** in line with best practice and the recommendation from **ISO 14713 part 2** on the venting required to provide a safe environment for employees working within a galvanizing plant we will be implementing a policy of drilling a **minimum hole size of 10mm**. The correct placement of vent and drain holes of minimum size will result in customers receiving the best finish possible finish on any galvanized or powder coated surface.

Should you wish any further information please do not hesitate to contact one of our experts on Elgin – 01343 548855 or Cumbernauld – 01236 731444 or alternatively email any enquiries direct to our technical team at design@higalv.co.uk