

Design for hot dip galvanizing



Holes for venting and draining should be as vertically as possible under suspension points.

suspension points

Allow suspension!

Missing holes for venting and draining on hollow sections can cause dangerous explosions!

Holes for venting and draining must be visible from outside!

Only use appropriate welding sprays!

Remove paint, welding slag and welding residues!

Avoid overlapping surfaces and gaps!

Design holes for venting and draining even for open sections

Avoid dead spots/corners - vent unavoidable overlapping surfaces!

Avoid bulky components as far as possible!












Holes for venting and draining must have a sufficient size and number and must be visible from outside!

How to read the table on the right:

A hollow section with the dimension 60 mm x 40 mm requires at each end either

- at least one hole with a diameter of 16 mm
- or
- at least two holes with a diameter of 12 mm
- or
- at least four holes with a diameter of 10 mm
- or
- at least two cut-outs (crops) with a length of 13 mm on the adjacent sides.

The table applies to constructions up to approx. 6 m in length. Longer constructions require additional and/or larger holes.

Recommended minimum sizes for holes for ventilation and drainage in hollow profiles			Number and location of holes or crops at each end of the hollow section											
			1 hole	1 hole	2 holes	2 holes	4 holes	4 holes	2 crops at corners	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 L	
Section cross-sectional shape and dimensions (mm)														
Round	Square	Rect- angular	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	10	10	13	—	—	—	—	
60	60	80 × 40	20	20	12	12	10	10	15	12	—	—	—	
80	80	100 × 60	25	20	16	16	12	12	20	15	—	—	—	
100	100	120 × 80	30	25	20	20	14	15	25	20	—	—	—	
120	120	160 × 80	35	30	25	25	20	20	30	25	—	—	—	
160	160	200 × 120	45	40	35	30	25	20	40	30	35	—	—	
200	200	260 × 140	60	50	40	35	30	25	50	35	50	40	—	
300	300	350 × 250	—	—	60	55	45	40	75	55	80	70	75	
400	400	450 × 250	—	—	80	75	60	50	100	75	110	100	110	
500	500	600 × 300	—	—	100	90	75	65	125	90	140	125	135	
600	600	700 × 400	—	—	120	110	85	75	150	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 *—