

GALVANIZING DESIGN DETAILS

EDMONTON TANK SIZE LIMITATIONS

Lifting capacity = 10 tonnes

SINGLE DIP MAX.

(Double dipping - subject to a premium)



MAX. D/D DIMENSIONS FOR DEPTH

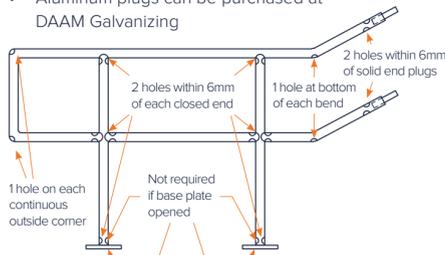


MAX. D/D DIMENSIONS FOR LENGTH



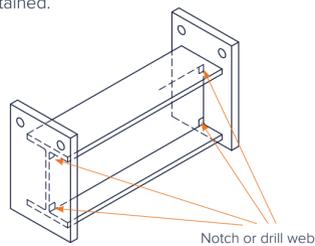
PIPE HANDRAIL & H.S.S. FABRICATIONS

- Remove shellac and paint on pipe and fittings prior to fabrication
- Abrasive blasting can be done at DAAM for extra cost
- Hole size per vent and hole table
- All holes in plane of handrail
- Aluminum plugs can be purchased at DAAM Galvanizing

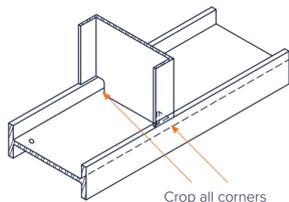


SIMPLE BEAMS (small end plates only)

Holes optional. If holes can be provided in the locations indicated, a cleaner, blemish free coating will be obtained.

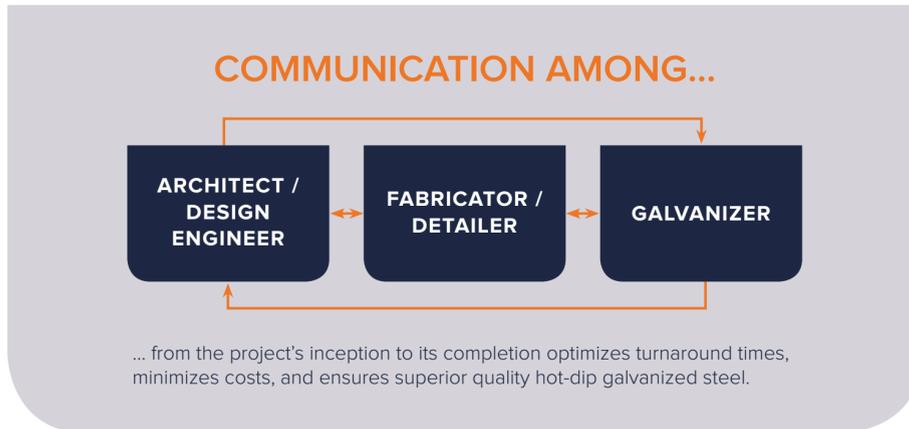
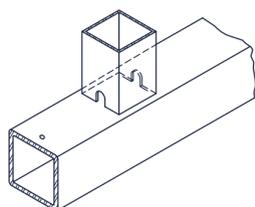


C OR WF



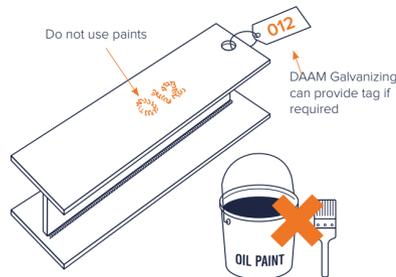
H.S.S.

- Holes in same plane as frame
- Total hole area 10% x-section area each end
- Minimum square opening size 20mm x 20mm / 3/4" x 3/4" (see minimum drain hole size table.)



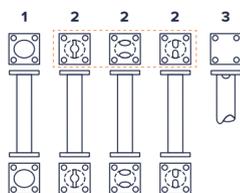
IDENTIFICATION MARKINGS

For permanent identification, use heavily embossed, punched or welded lettering. For temporary identification, use heavily embossed metal tags wired to the work. Wire must be a minimum of 1.3mm in diameter.



END PLATES

- The most desirable fabrication is completely open, with the same diameter as the section top and bottom.
- These are equal substitutes if the full opening is not allowed.
- This must be used when no holes are allowed in the cap or base plate—two half circles 180° apart and at opposite ends of the pole.



VENT & DRAIN HOLES: STRUCTURAL SECTIONS

CROP

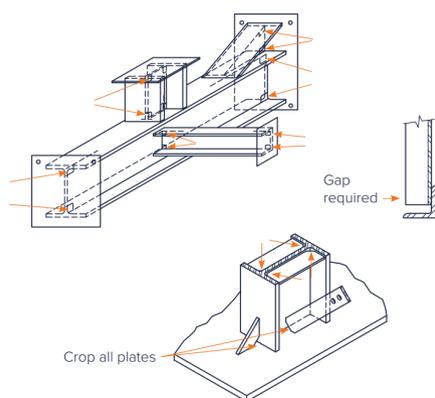
Min. 25mm x 25mm (1" x 1")

HOLES

Always ≥ material thickness: min. 10mm (3/8") within 6mm (1/4") from corner or weld

COMPLEX BEAMS & ASSEMBLIES

(WF, Channel, Angle, H.S.S. Stubs) NOTCHES OR HOLES REQUIRED



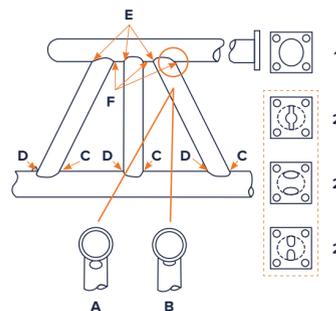
PIPE TRUSS 3" (7.6CM) & LARGER

Hole locations for the vertical members should be as shown in examples A and B.

Each vertical member should have two holes at each end and 180° apart in line with the horizontal members, as indicated by the arrows. The size of the holes preferably should be equal, and the combined area of the two holes at either end of the verticals (areas C and D OR areas E and F) should be at least 30% of the cross-sectional area.

END PLATES - HORIZONTAL

- The most desirable fabrication is completely open with the same hole diameter as the tube inner diameter.
- Equal substitutes would have openings as shown and would be at least 30% of the area of the inside diameter.



THREADED PARTS

Nuts, bolts or studs to be galvanized should be sent to the galvanizer, disassembled. Bolts are completely galvanized, but internal threads on nuts must be tapped oversize after galvanizing to accommodate the increased diameter of the bolts. To remove excess zinc, small parts are centrifuged in special equipment when removed from the galvanizing bath.

WELDING LARGER OVERLAPPING SURFACES

If contacting surfaces cannot be avoided, areas less than 64in² (400cm²) may be fully seal welded. For areas larger than 64in², vent holes must be provided.

WELDING FLUX RESIDUES

Welding flux residues must be removed by wire brushing, chipping, grinding, pneumatic needle or abrasive blast cleaning.

SASKATOON TANK SIZE LIMITATIONS

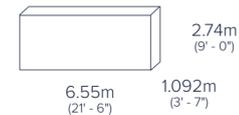
Lifting capacity = 6 tonnes

SINGLE DIP MAX.

(Double dipping - subject to a premium)



MAX. D/D DIMENSIONS FOR DEPTH



MAX. D/D DIMENSIONS FOR LENGTH



MINIMUM VENT & DRAIN HOLE SIZES: TUBULAR SECTIONS

Drain hole sizes to be the **greater** of the following two options:

- Meet or exceed the following tubular size chart:

NOMINAL	O.D.	HOLE SIZE (PER END)	
<= 2"	60	2@10	3/8
2 1/2"	73	2@13	1/2
3" - 3 1/2"	89 - 102	2@16	5/8
4" - 5"	114 - 141	2@19	3/4
6"	168	2@22	7/8
7"	190	2@25	1
8"	219	2@29	1 1/8
10"	273	2@38	1 1/2
12"	324	2@44	1 3/4
14"	356	2@51	2
16"	406	2@57	2 1/4

- Hole size to be 1.5 times the plate or wall thickness.

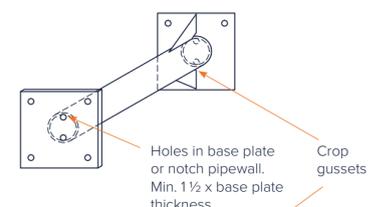
NOTES

- Single drain diameter 25% of section size
- Holes within 6mm (1/4") from corner or weld

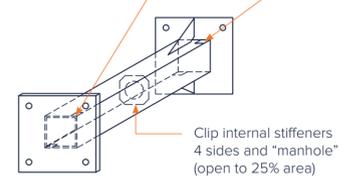
Please consult us for each above point at the Design, Drafting, Estimating & Fabrication stage, if required.

PIPE COLUMNS

- Abrasive blast shellac before welding



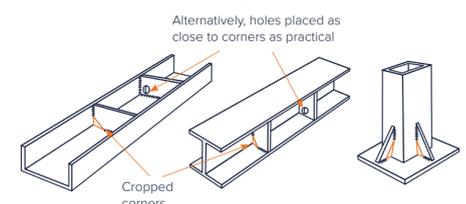
H.S.S. COLUMNS



STIFFENERS AND GUSSETS

Welded strengthening gussets and webs on columns and beams, and strengthening gussets in members fabricated from channel sections, should have corners, cropped or holed:

- to prevent the entrapment of air in pockets and corners allowing complete access of pickle acids and molten zinc to the surface of the work.
- to facilitate drainage during withdrawal from acid and rinse tanks, and from the galvanizing bath.



EDMONTON PLANT
9390 48 Street NW, Edmonton, AB T6B 2R3

SASKATOON PLANT
874 57 Street East, Saskatoon, SK S7K 5Z1

CALGARY DEPOT
10630 Enterprise Way SE, Calgary, AB T3S 0A2

LIFELONG PROTECTION