

GALVANIZING DESIGN DETAILS

EDMONTON TANK SIZE LIMITATIONS

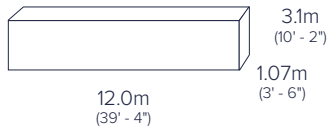
Lifting capacity = 10 tonnes

SINGLE DIP MAX.

(Double dipping - subject to a premium)



MAX. D/D DIMENSIONS FOR DEPTH



MAX. D/D DIMENSIONS FOR LENGTH



FABRICATION

According to ASTM A143, A384, A385; AHDGA Design Manual; these Design Details.

GALVANIZING

Galvanizing to ASTM A123; Pickling SSPC-SP8; Repair ASTM A780 (A2). Repair using paints containing zinc dust).

STEEL SELECTION

U.T.S. < 1100 MPa; Si < 0.05% C < 0.25%; Grade 8, A490.

EXTRA CLEANING CHARGES FOR:

(Light millscale and rust is accepted as standard)

- Weld scale (fabricator's responsibility to remove)
- Heavy or rolled in millscale
- Thick or pitted rust
- Castings must be blast cleaned
- Old galvanizing
- Paint, shellac, grease, heavy oil: remove before welding
- Nissen metal marker & excessive shop markings (for shop markings, use chalk, lumber crayon or Markall Paint Stick)

MINIMUM VENT & DRAIN HOLE SIZES: TUBULAR SECTIONS

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

1. 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

2. 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

WARPAGE

- Consult us on assemblies of thick and thin sections or double dips
- Double dip sections are significantly more prone to warpage

PERMANENT MARKING

13mm (1/2") stamps, 1.5mm (1/16") deep. Grind area before stamping. Tags must be steel. DAAM can provide customized tags at extra cost. Wire used for tags must be a minimum of 1.3mm in diameter.

BOLT HOLES

If strength allows, use 3mm (1/8") rather than 2mm (1/16") oversize (CISC 23.3.2).

RADIAL CLEARANCE

Minimum 3mm (1/8") on all hinges, moving parts and sleeves; disassembly by others prior to galvanizing.

THREADED PARTS

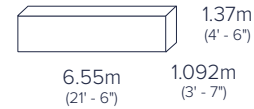
NC and NPT only. Nuts, bolts, or studs should be sent disassembled. Nut rethreading done at extra cost. NPT, nuts and male threads attached to steel, or too large to centrifuge, must be manually rethreaded at a significant extra cost. Chamfer male thread ends.

SASKATOON TANK SIZE LIMITATIONS

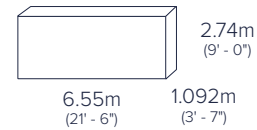
Lifting capacity = 6 tonnes

SINGLE DIP MAX.

(Double dipping - subject to a premium)



MAX. D/D DIMENSIONS FOR DEPTH



MAX. D/D DIMENSIONS FOR LENGTH



OVERLAPPING SURFACES

Overlapping surfaces that are seal welded can be a maximum of 64in² (400cm²) or venting is required.

COLD BENDING

Use proper bending radii (usually > 4x section thickness).

HANGING HOLES / LIFTING LUGS

Installed if required, at extra cost. Check with us for location and size required.

TANKS & PIPE SPOOLS

Consult us on fabrication design.

DELIVERY

Deliver all materials disassembled on an open truck.

WET STORAGE STAIN

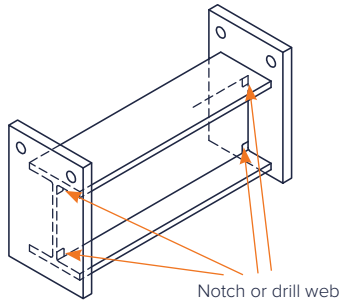
Freshly galvanized surfaces must be stacked to drain off water and ventilate.

DOUBLE DIP

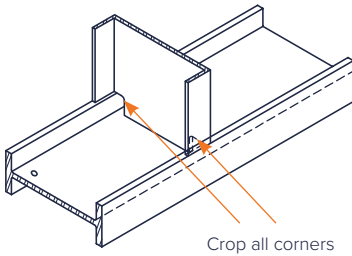
DAAM Galvanizing is not responsible for warpage, distortion and/or related stresses created by the differential heating and cooling during the double dip process. Please utilize alternative design in order to single dip. Any damage resulting from the double dipping process is not the responsibility of the galvanizer.

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.

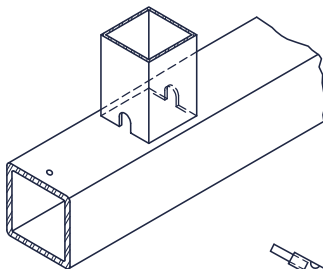


C OR WF



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.)



VENT & DRAIN HOLES STRUCTURAL SECTIONS

CROP

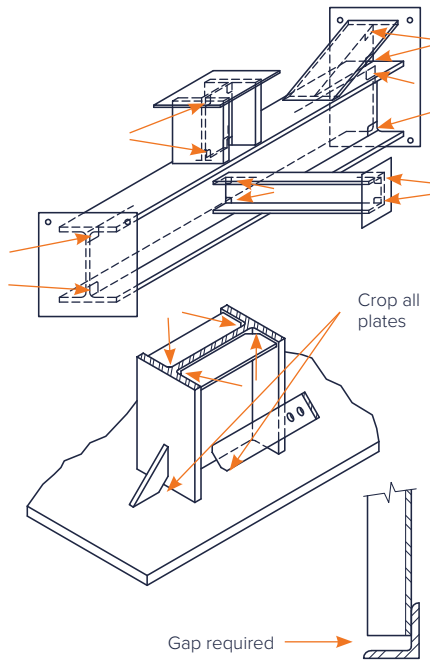
Min. 25mm x 25mm (1" x 1")

HOLES

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

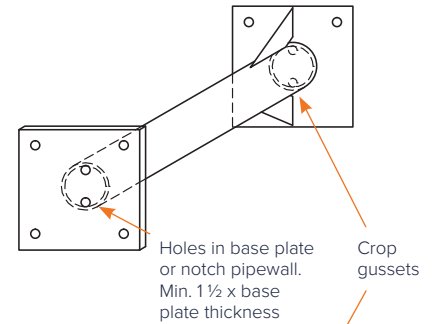
COMPLEX BEAMS & ASSEMBLIES

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

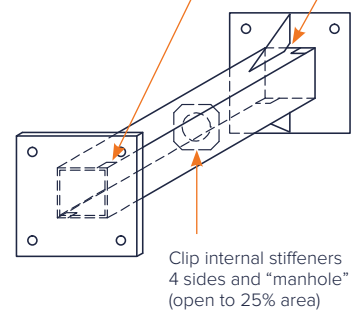


PIPE COLUMNS

- Abrasive blast shellac before welding

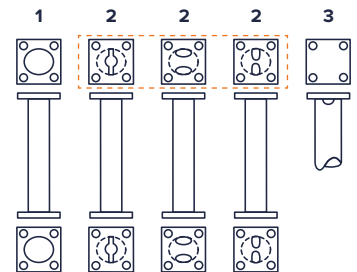


H.S.S. COLUMNS



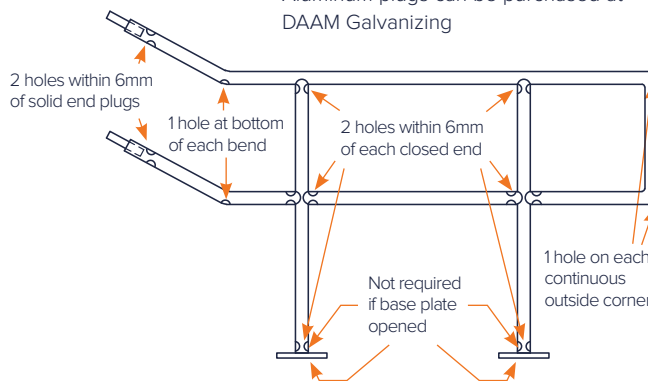
END PLATES

1. The most desirable fabrication is completely open, with the same diameter as the section top and bottom.
2. These are equal substitutes if the full opening is not allowed.
3. 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.



PIPE HANDRAIL & H.S.S. FABRICATIONS

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



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

daamgalvanizing.com
LIFELONG PROTECTION