



Daam Galvanizing Ltd.

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**GALVANIZING
DESIGN DETAILS - Pg. 1/2
MAY 2010**

TANK DESIGN SIZE (L x W x D)

Galvanizing: 12.6 m x 1.016 m x 2.440 m
(41'4" x 3'4" x 8'0")

Pickling: 15.7 m x 1.0 m x 2.0 m
(51'6" x 3'3" x 6'6")

Premium for Double Dipping

STEEL SELECTION: Si < 0.05% C < 0.25%

U.T.S. < 1100 MPa; No Quench & Tempered Steels
A490, 2H, Grade 8, B7, 4140 Q&T Nuts and bolts.

MATERIAL: accepted as standard is covered with loose millscale or light storage rust

EXTRA CLEANING CHARGES For:

- weld scale (removal is fabricator responsibility)
- 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)

WARPAGE: consult us on assemblies of thick and thin sections or double dips

PERMANENT MARKING: 13 mm/1/2" stamps, 1.5 mm/1/16" deep.
Grind area before stamping

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

RADIAL CLEARANCE: Minimum 3 mm/1/8" on all hinges, moving parts and sleeves; disassemble.

THREADED PARTS: NC and NPT only. Loose nuts rethreaded at reasonable cost. NPT, nuts and male threads attached to steel or too large to centrifuge, must be manually rethreaded at significant extra cost. Chamfer male thread ends

OVERLAPPING SURFACES: consult us on spacing or seal welding
(400 cm², 64 in² max or venting required)

COLD BENDING: Use proper bending radii (usually > 4x section thickness)

HANGING HOLES or lifting lugs if required at extra cost. Check with us for location and size required.

TANKS & PIPE SPOOLS: consult us on fabrication design

DELIVER all materials disassembled, open truck

PAINTING: advise us

WET STORAGE STAIN: Freshly galvanized surfaces must be stacked to drain off water and ventilate

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

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

These are guidelines only. Always consult us for each above point at the Design, Drafting, Estimating & Fabrication stage.

MINIMUM VENT & HOLE SIZES: TUBULAR SECTIONS

Drain holes min. 1 1/2 x plate thickness (vents 1x)

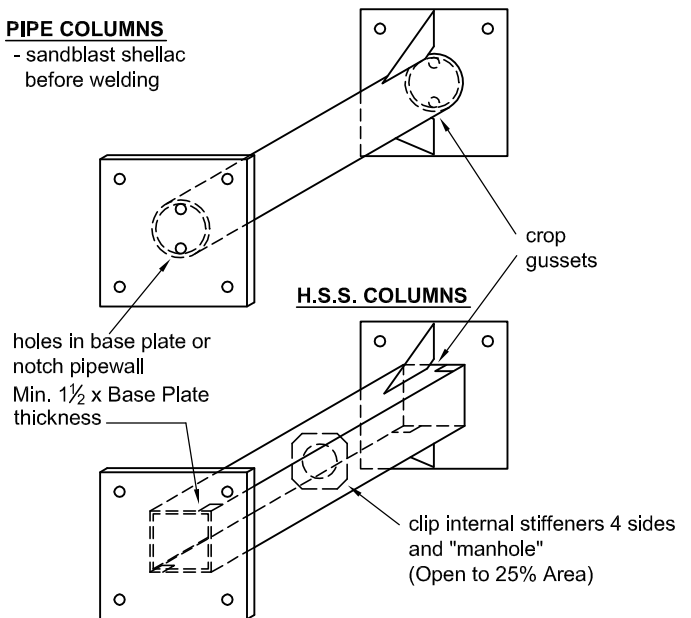
Single drain diameter 25% of section size.

Holes within 6 mm/1/4" from corner or weld

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

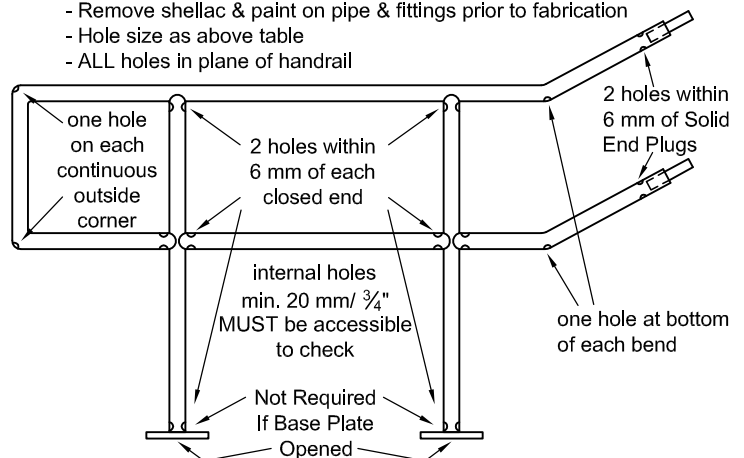
PIPE COLUMNS

- sandblast shellac before welding



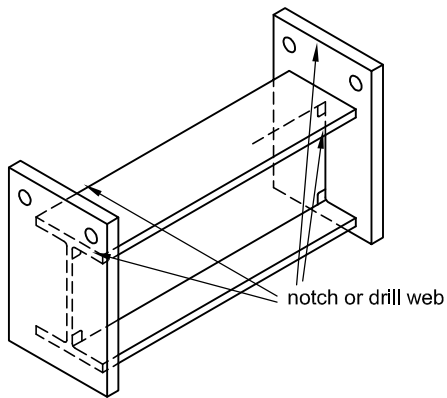
PIPE HANDRAIL & H.S.S. FABRICATIONS

- Remove shellac & paint on pipe & fittings prior to fabrication
- Hole size as above table
- ALL holes in plane of handrail

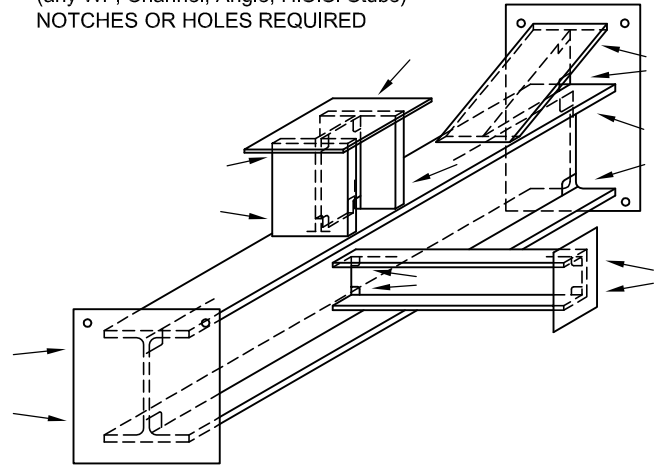


VENT & DRAIN HOLES: STRUCTURAL SECTIONS
 CROP: min. 25 mm x 25 mm / 1" x 1"
 HOLES: always \geq material thickness: min. 10 mm / $\frac{3}{8}$ "
 Within 6 mm / $\frac{1}{4}$ " from corner or weld

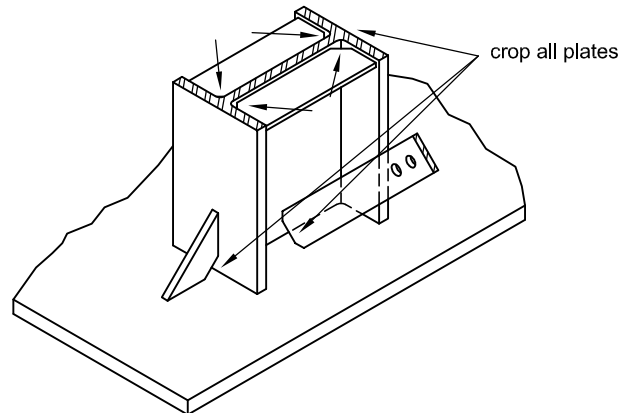
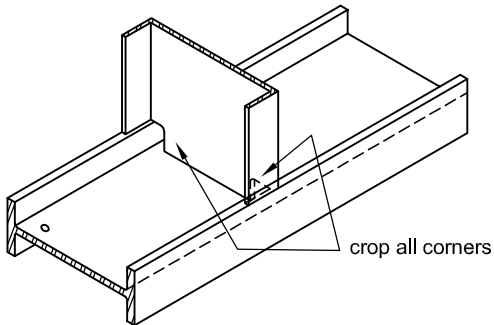
SIMPLE BEAMS (small end plates only)
 (Holes Optional: If holes can be provided in the locations indicated, a cleaner, blemish free coating will be obtained).



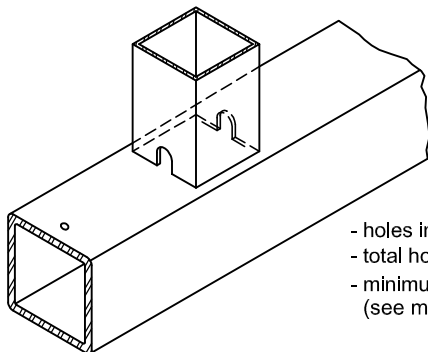
COMPLEX BEAMS & ASSEMBLIES
 (any WF, Channel, Angle, H.S.S. Stubs)
 NOTCHES OR HOLES REQUIRED



C or WF



HSS



- holes in same plane as frame
- total hole area 10% x-section area each end
- minimum square opening size 20 x 20 mm / $\frac{3}{4}$ " x $\frac{3}{4}$ "
 (see minimum drain hole size table)

