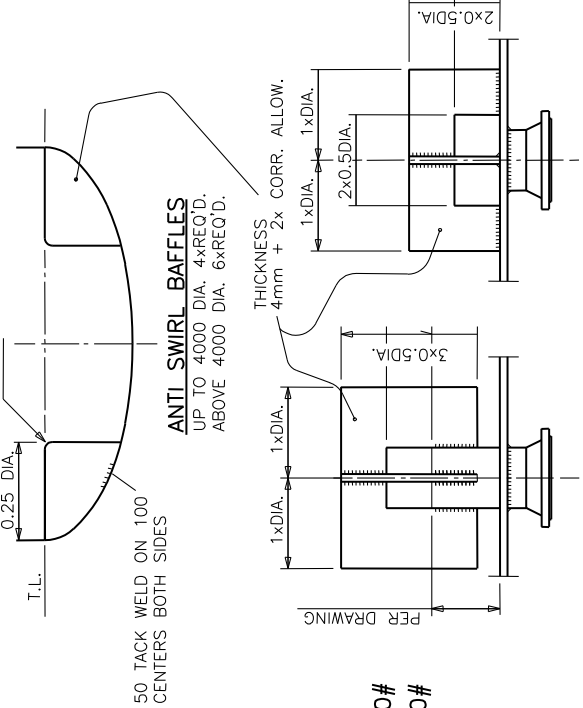
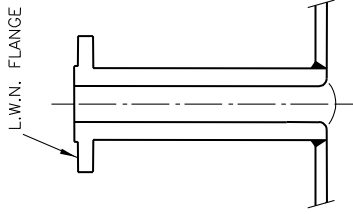


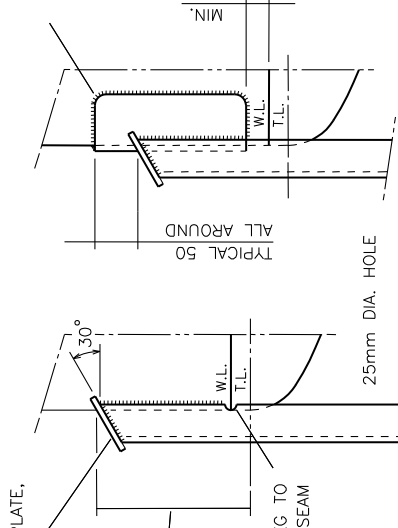


1/2" DIA. ALL RATINGS  
 3/4" DIA. RATING 150#  
 3/4" DIA. RATING ≥300#  
 1" DIA. RATING ≥150#  
 NOZZLES < 1 1/2"

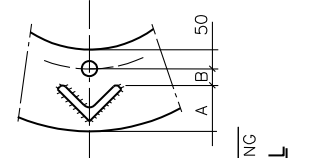


**VORTEX BREAKERS**

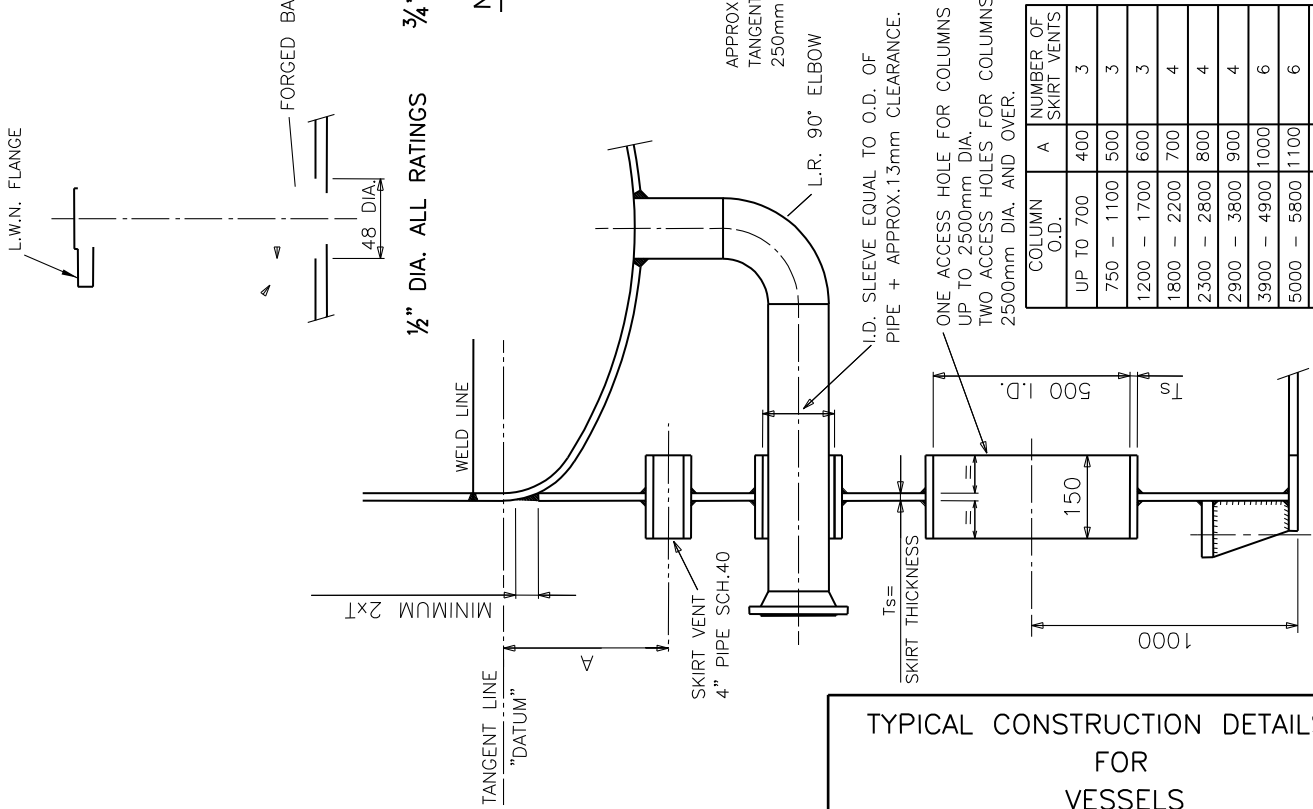
BACK-UP PLATES FOR LEGS TO HAVE SAME THICKNESS AND MATERIAL AS LOCAL VESSEL WALL USE BACK-UP PLATES ONLY IF REQUESTED ON VESSEL DRAWING.



ANGLE SIZE	A	B
60 X 60	60	30
65 X 65	65	30
70 X 70	65	25
75 X 75	70	25
80 X 80	75	20
90 X 90	80	15
100 X 100	90	10
110 X 110	95	0
120 X 120	100	0
130 X 130	110	0
140 X 140	120	0
150 X 150	125	0



**LEGS FOR VERTICAL VESSELS**



COLUMN O.D.	A	NUMBER OF SKIRT VENTS
UP TO 700	400	3
750 - 1100	500	3
1200 - 1700	600	3
1800 - 2200	700	4
2300 - 2800	800	4
2900 - 3800	900	4
3900 - 4900	1000	6
5000 - 5800	1100	6
5900 - 6700	1200	6
6800 AND >	1200	6

**TYPICAL CONSTRUCTION DETAILS FOR VESSELS**