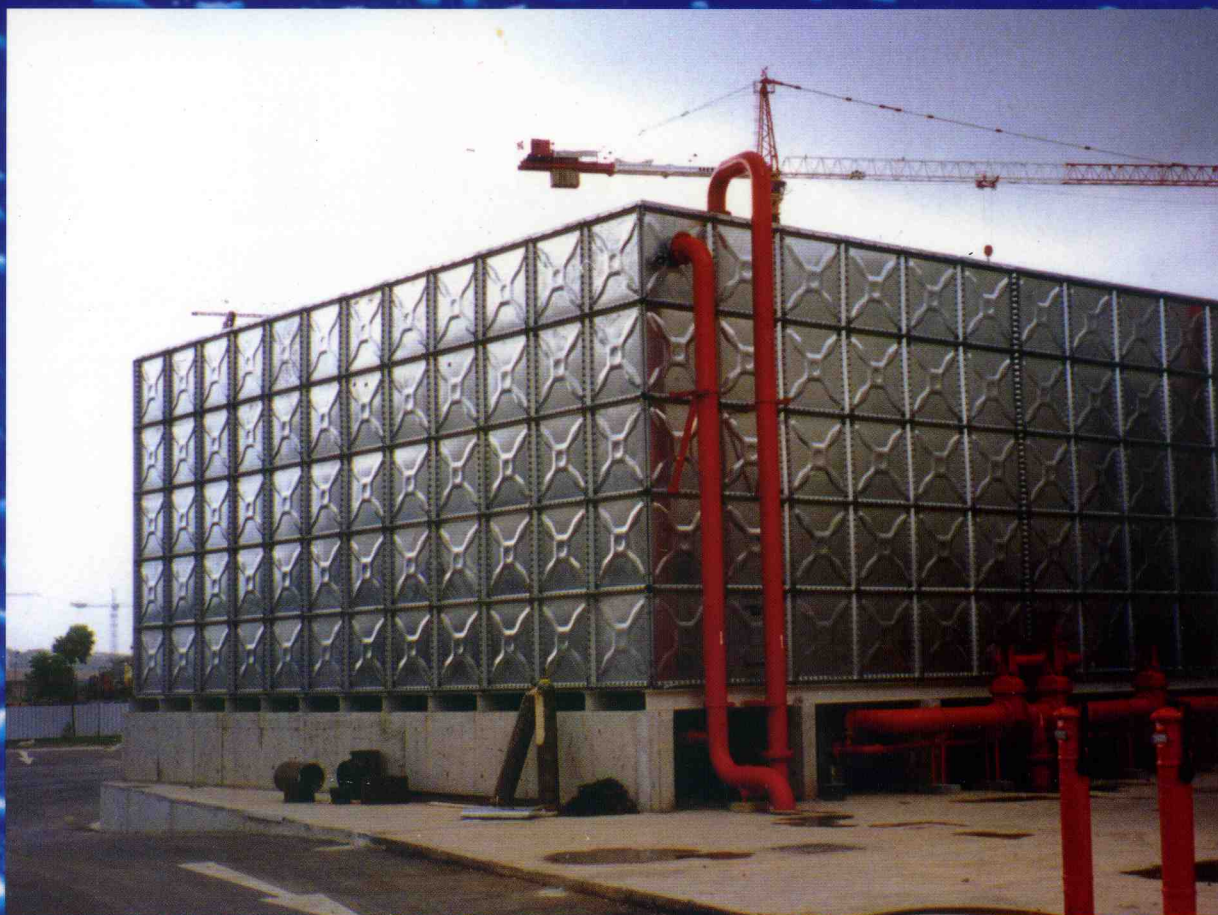
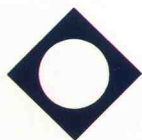


# HWACO

PRESSED STEEL & STAINLESS STEEL  
SECTIONAL TANKS







# HWACO PRESSED STEEL SECTIONAL WATER TANKS

## GENERAL SPECIFICATIONS

### STANDARD :

HWACO PRESSED STEEL SECTIONAL WATER TANK (RECTANGULAR) CONSTRUCTED WITH HYDRAULICALLY PRESSED FLANGED PANELS, CONFORM TO BRITISH STANDARD 1564 : 1975 AND ALSO TO SINGAPORE STANDARD 22 : 1979.

### MATERIALS :

THE STEEL USED IN THE MANUFACTURE OF THE PLATES, STAYS, CLEATS CONFORM TO THE REQUIREMENTS OF B.S. 4360 GRADE 43A.

### FLANGES OF PLATES :

THE PLATES ARE PRESSED WITH A COMBINED DOUBLE FLANGE AT AN ANGLE OF 45 AND 90 TO THE FACE OF THE PLATE ON FOUR SIDES.

### STAYS AND CLEATS :

THE SIDES AND ENDS OF ALL TANKS SHALL BE SUPPORTED BY STAYS AT THE JUNCTION OF TWO OR MORE PLATES. THE STAYS SHALL BE MADE FROM MILD STEEL ROLLED SECTIONS OR MILD STEEL ANGLES. CLEATS ARE MADE FROM MILD STEEL PLATES.

### BOLTS AND NUTS :

- (A) ELECTROPLATED STEEL BOLTS, NUTS AND WASHERS (STANDARD)
- (B) HOT DIPPED GALVANISED STEEL BOLTS, NUTS AND WASHERS (OPTIONAL)

### JOINTING COMPOUNDS :

PVC FOAM SEALANT ARE SUPPLIED FOR JOINTING BETWEEN FLANGES.

### COVERS :

COVERS ARE 2MM THICK, SUPPORTED BY COVER STRUCTURES OR POLES.

### FINISH :

- HWACO SHOPCOAT, RED OXIDE PRIMER
- BLACK BITUMINOUS PAINT
- HOT DIPPED GALVANISED
- EPOXY COATING

### DIMENSION :

THE NOMINAL SIZE OF UNIT PLATES SHALL BE 4FT. (1.22M) SQUARE. THE SIZE OF THE TANKS SHALL BE SPECIFIED AS MULTIPLES OF THE NOMINAL DIMENSION OF 4 FT. (1.22M). THE NOMINAL CAPACITY SHALL BE BASED UPON THE NOMINAL DIMENSIONS OF THE TANK.  
(E.G. 1.22M X 1.22M X 1.22M EQUALS 400 GALLONS)

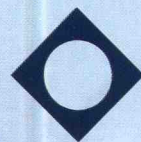
THICKNESS OF THE TANK PANEL : HWACO TANK 1.22M X 1.22M PANEL

TANK HEIGHT	1.22 M	2.44 M	3.66 M	4.88 M
BOTTOM PANELS	5 MM	5 MM	5 MM	6 MM
1ST TIER PANELS	5 MM	5 MM	5 MM	6 MM
2ND TIER PANELS		5 MM	5 MM	5 MM
3RD TIER PANELS			5 MM	5 MM
4TH TIER PANELS				5 MM
TOP COVER PANELS	2 MM	2 MM	2 MM	2 MM

THICKNESS OF THE TANK PANEL : HWACO TANK 1.0M X 1.0M PANEL

TANK HEIGHT	1.0 M	2.0 M	3.0 M	4.0 M	5.0 M
BOTTOM PANELS	5 MM	5 MM	5 MM	5 MM	6 MM
1ST TIER PANELS	5 MM	5 MM	5 MM	5 MM	6 MM
2ND TIER PANELS		5 MM	5 MM	5 MM	5 MM
3RD TIER PANELS			5 MM	5 MM	5 MM
4TH TIER PANELS				5 MM	5 MM
5TH TIER PANELS					5 MM
TOP COVER PANELS	2 MM	2 MM	2 MM	2 MM	2 MM

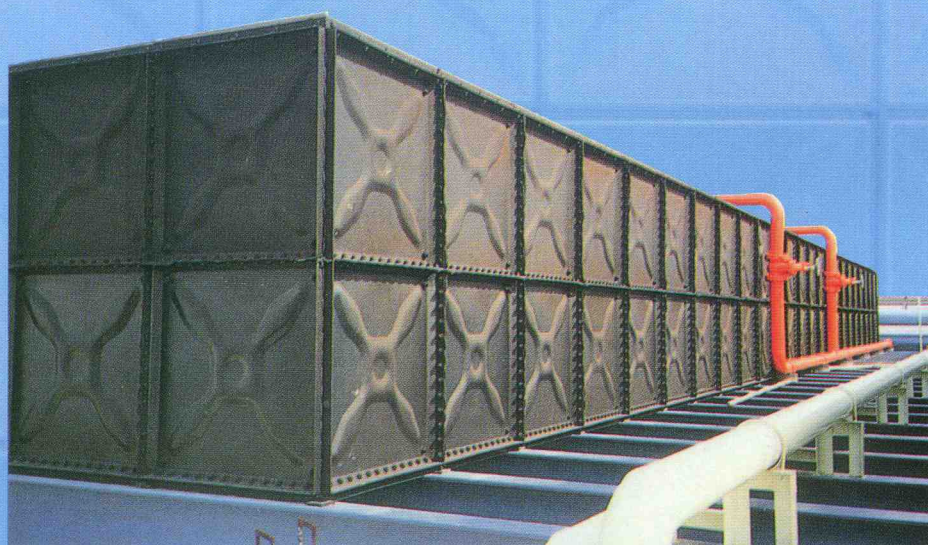




12m x 12m x 5m

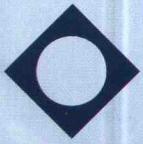


28m x 6m x 3m



24m x 5m x 2m

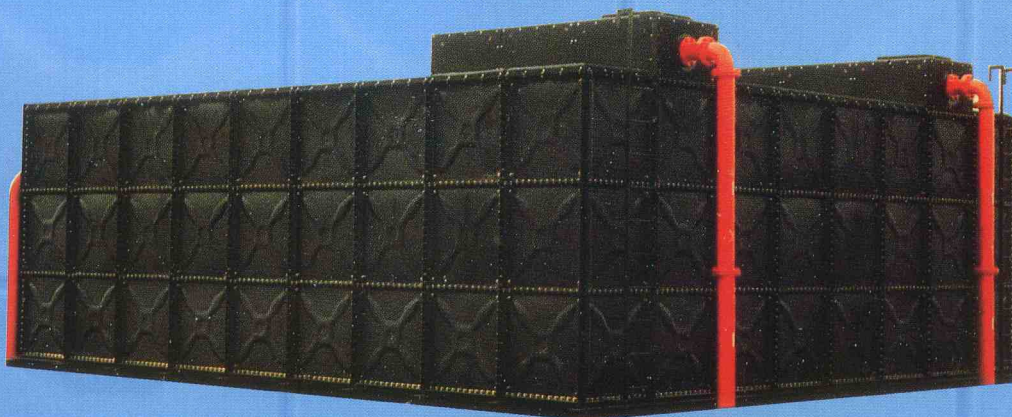




8m x 7m x 4m

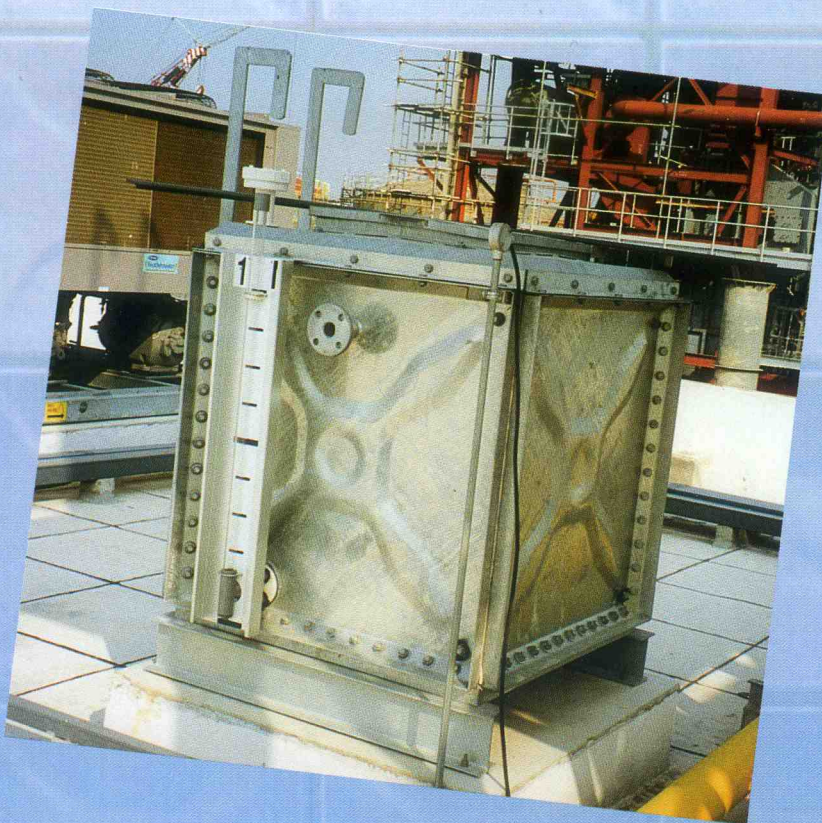
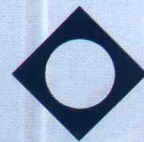


64' x 32' x 8'



9m x 8m x 3m



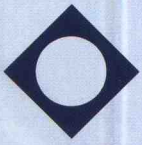


1m x 1m x 1m



17m x 8m x 5m





PANEL TYPE COVER & BALL VALVE BOX (TOP SUMP)



BOTTOM SUMP





# HWACO PRESSED STEEL TANK

tanks with external flanges plates 1000mm square

TABLE 1

1 000 mm DEEP - PLATES 5 mm THICK				NOMINAL TANK SIZE Length x Breadth mm mm	2000 mm DEEP - PLATES 5 mm THICK			
Plates in tank number	Approx. weight empty Kgs.	Nominal capacity Gallons	Nominal capacity Litres		Nominal capacity Litres	Nominal capacity Gallons	Approx. weight empty Kgs.	Plates in tank number
8	410	440	2 000	2 000 x 1 000	4 000	880	760	14
11	560	660	3 000	3 000 x 1 000	6 000	1320	1070	19
14	760	880	4 000	4 000 x 1 000	8 000	1760	1320	24
12	660	880	4 000	2 000 x 2 000	8 000	1760	1120	20
16	870	1320	6 000	3 000 x 2 000	12 000	2640	1430	26
20	1060	1760	8 000	4 000 x 2 000	16 000	3520	1730	32
24	1270	2200	10 000	5 000 x 2 000	20 000	4400	2190	38
21	1120	1980	9 000	3 000 x 3 000	18 000	3960	1870	33
26	1370	2640	12 000	4 000 x 3 000	24 000	5280	2250	40
31	1630	3300	15 000	5 000 x 3 000	30 000	6600	2630	47
36	1880	3960	18 000	6 000 x 3 000	36 000	7920	3110	54
32	1670	3520	16 000	4 000 x 4 000	32 000	7040	2750	48
38	1980	4400	20 000	5 000 x 4 000	40 000	8800	3170	56
44	2290	5280	24 000	6 000 x 4 000	48 000	10560	3610	64
50	2640	6160	28 000	7 000 x 4 000	56 000	12320	4080	72
56	2950	7040	32 000	8 000 x 4 000	64 000	14080	4450	80
45	2340	5500	25 000	5 000 x 5 000	50 000	11000	3580	65
52	2750	6600	30 000	6 000 x 5 000	60 000	13200	4070	74
60	3150	7920	36 000	6 000 x 6 000	72 000	15840	4650	84
68	3580	9240	42 000	7 000 x 6 000	84 000	18480	5180	94
77	4080	10780	49 000	7 000 x 7 000	98 000	21560	5740	105
3 000 mm DEEP - PLATES 5 mm THICK					4 000 mm DEEP - PLATES 5 mm THICK			
45	2980	5940	27 000	3 000 x 3 000	36 000	7920	4010	57
54	3610	7920	36 000	4 000 x 3 000	48 000	10560	4780	68
64	4270	10560	48 000	4 000 x 4 000	64 000	14080	5690	80
74	4980	13200	60 000	5 000 x 4 000	80 000	17600	6560	92
85	5740	16500	75 000	5 000 x 5 000	100 000	22000	7470	105
96	6510	19800	90 000	6 000 x 5 000	120 000	26400	8380	118
108	7320	23760	108 000	6 000 x 6 000	144 000	31680	9390	132
120	8180	27720	126 000	7 000 x 6 000	168 000	36960	10420	146
132	8990	31680	144 000	8 000 x 6 000	192 000	42240	11430	160
133	9090	32340	147 000	7 000 x 7 000	196 000	43120	11540	161
146	9970	36960	168 000	8 000 x 7 000	224 000	49280	12600	176
159	10880	41580	189 000	9 000 x 7 000	252 000	55440	13720	191
160	10980	42240	192 000	8 000 x 8 000	256 000	56320	13810	192
174	11940	47520	216 000	9 000 x 8 000	288 000	63360	14940	208
188	12960	52800	240 000	10 000 x 8 000	320 000	70400	16160	224
189	13010	53460	243 000	9 000 x 9 000	324 000	71280	16250	225
220	15190	66000	300 000	10 000 x 10 000	400 000	88000	18800	260
236	16310	72600	330 000	11 000 x 10 000	440 000	96800	20360	278
253	17530	79860	363 000	11 000 x 11 000	484 000	106480	21730	297
270	18750	87120	396 000	12 000 x 11 000	528 000	116160	22980	316
288	19980	95040	432 000	12 000 x 12 000	576 000	126720	24670	336
306	21340	102960	468 000	13 000 x 12 000	624 000	137280	26150	356
325	22760	111540	507 000	13 000 x 13 000	676 000	148720	27650	377

- NOTES: (1) NOMINAL CAPACITIES ARE WITHOUT ALLOWANCE FOR FREEBOARD.  
 (2) APPROXIMATE TOTAL WEIGHTS INCLUDE PLATES, STAY, CLEATS, BOLTS, NUTS, WASHERS AND JOINTING MATERIALS. (EXCLUDED PARTITION AND COVER)  
 (3) CAPACITIES ARE BASED ON A 1000MM CUBE CONTAINING 1000 LITRES.  
 (4) TO ESTIMATE NETT CAPACITIES A REDUCTION FROM 12.5% ON THE SMALLER TANKS TO 2.5% ON THE LARGER SHOULD BE ALLOWED.





# HWACO PRESSED STEEL TANK

TABLES OF SIZES, APPROXIMATE WEIGHTS AND NOMINAL CAPACITIES OF TANKS WITH EXTERNAL FLANGES

TABLE 2

TANKS 4 FEET OR 1.22 METRES DEEP, PLATES 5 MM THICK THROUGHOUT												
NOMINAL TANK SIZE		NUMBER OF PLATES	NOMINAL CAPACITY		APPROX. TOTAL WEIGHT EMPTY		APPROXIMATE OUTSIDE DIMENSIONS					
LENGTH BY BREADTH	LENGTH BY BREADTH						LENGTH		BREADTH		DEPTH	
FEET	METRES		GALLONS	LITRES	CWT	KG.	FT.	IN.	FT.	IN.	FT.	IN.
4 x 4	1.22 x 1.22	5	400	1 818	8	406	4	6	4	6	4	3
8 x 4	2.44 x 1.22	8	800	3 637	13	660	8	6	4	6	4	3
12 x 4	3.66 x 1.22	11	1 200	5 455	17	863	12	6	4	6	4	3
8 x 8	2.44 x 2.44	12	1 600	7 273	19	965	8	6	8	6	4	3
12 x 8	3.66 x 2.44	16	2 400	10 910	25	1 270	12	6	8	6	4	3
16 x 8	4.88 x 2.44	20	3 200	14 547	31	1 575	16	6	8	6	4	3
20 x 8	6.10 x 2.44	24	4 000	18 184	38	1 930	20	6	8	6	4	3
12 x 12	3.66 x 3.66	21	3 600	16 366	33	1 676	12	6	12	6	4	3
16 x 12	4.88 x 3.66	26	4 800	21 821	41	2 083	16	6	12	6	4	3
20 x 12	6.10 x 3.66	31	6 000	27 276	49	2 489	20	6	12	6	4	3
24 x 12	7.32 x 3.66	36	7 200	32 731	57	2 896	24	6	12	6	4	3
28 x 12	8.54 x 3.66	41	8 400	38 186	66	3 353	28	6	12	6	4	3
16 x 16	4.88 x 4.88	32	6 400	29 094	51	2 591	16	6	16	6	4	3
20 x 16	6.10 x 4.88	38	8 000	36 368	60	3 048	20	6	16	6	4	3
24 x 16	7.32 x 4.88	44	9 600	43 641	69	3 505	24	6	16	6	4	3
28 x 16	8.54 x 4.88	50	11 200	50 915	80	4 064	28	6	16	6	4	3
32 x 16	9.76 x 4.88	56	12 800	58 189	92	4 674	32	6	16	6	4	3
20 x 20	6.10 x 6.10	45	10 000	45 460	71	3 607	20	6	20	6	4	3
24 x 20	7.32 x 6.10	52	12 000	54 552	82	4 166	24	6	20	6	4	3
24 x 24	7.32 x 7.32	60	14 400	65 462	93	4 724	24	6	24	6	4	3
28 x 28	8.54 x 8.54	77	19 600	89 102	121	6 147	28	6	28	6	4	3

TABLE 3

TANKS 8 FEET OR 2.44 METRES DEEP, PLATES 5 MM THICK THROUGHOUT												
NOMINAL TANK SIZE		NUMBER OF PLATES	NOMINAL CAPACITY		APPROX. TOTAL WEIGHT EMPTY		APPROXIMATE OUTSIDE DIMENSIONS					
LENGTH BY BREADTH	LENGTH BY BREADTH						LENGTH		BREADTH		DEPTH	
FEET	METRES		GALLONS	LITRES	CWT	KG.	FT.	IN.	FT.	IN.	FT.	IN.
8 x 4	2.44 x 1.22	14	1 600	7 273	23	1 168	8	6	4	6	8	3
12 x 4	3.66 x 1.22	19	2 400	10 910	32	1 626	12	6	4	6	8	3
16 x 4	4.88 x 1.22	24	3 200	14 547	41	2 083	16	6	4	6	8	3
8 x 8	2.44 x 2.44	20	3 200	14 547	33	1 676	8	6	8	6	8	3
12 x 8	3.66 x 2.44	26	4 800	21 821	43	2 184	12	6	8	6	8	3
16 x 8	4.88 x 2.44	32	6 400	29 094	53	2 692	16	6	8	6	8	3
20 x 8	6.10 x 2.44	38	8 000	36 368	62	3 150	20	6	8	6	8	3
12 x 12	3.66 x 3.66	33	7 200	32 731	54	2 743	12	6	12	6	8	3
16 x 12	4.88 x 3.66	40	9 600	43 641	65	3 302	16	6	12	6	8	3
20 x 12	6.10 x 3.66	47	12 000	54 552	77	3 912	20	6	12	6	8	3
24 x 12	7.32 x 3.66	54	14 400	65 462	88	4 470	24	6	12	6	8	3
28 x 12	8.54 x 3.66	61	16 800	76 373	100	5 080	28	6	12	6	8	3
16 x 16	4.88 x 4.88	48	12 800	58 189	79	4 013	16	6	16	6	8	3
20 x 16	6.10 x 4.88	56	16 000	72 736	92	4 674	20	6	16	6	8	3
24 x 16	7.32 x 4.88	64	19 200	87 283	106	5 385	24	6	16	6	8	3
28 x 16	8.54 x 4.88	72	22 400	101 830	120	6 096	28	6	16	6	8	3
32 x 16	9.76 x 4.88	80	25 600	116 378	134	6 807	32	6	16	6	8	3
20 x 20	6.10 x 6.10	65	20 000	90 920	109	5 537	20	6	20	6	8	3
24 x 20	7.32 x 6.10	74	24 000	109 104	121	6 147	24	6	20	6	8	3
24 x 24	7.32 x 7.32	84	28 800	130 925	139	7 061	24	6	24	6	8	3
28 x 28	8.54 x 8.54	105	39 200	178 203	172	8 738	28	6	28	6	8	3

- NOTES: (1) NOMINAL CAPACITIES ARE WITHOUT ALLOWANCE FOR FREEBOARD.  
 (2) APPROXIMATE TOTAL WEIGHTS INCLUDE PLATES, STAY, CLEATS, BOLTS, NUTS, WASHERS AND JOINTING MATERIALS. (EXCLUDED PARTITION AND COVER)  
 (3) CAPACITIES ARE BASED ON A 1000MM CUBE CONTAINING 1000 LITRES.  
 (4) TO ESTIMATE NETT CAPACITIES A REDUCTION FROM 12.5% ON THE SMALLER TANKS TO 2.5% ON THE LARGER SHOULD BE ALLOWED.





# HWACO PRESSED STEEL TANK

TABLES OF SIZES, APPROXIMATE WEIGHTS AND NOMINAL CAPACITIES OF TANKS WITH EXTERNAL FLANGES

TABLE 4

TANKS 12 FEET OR 3.66 METRES DEEP, PLATES 5 MM THICK THROUGHOUT												
NOMINAL TANK SIZE		NUMBER OF PLATES	NOMINAL CAPACITY		APPROX. TOTAL WEIGHT EMPTY		APPROXIMATE OUTSIDE DIMENSIONS					
LENGTH BY BREADTH	LENGTH BY BREADTH						LENGTH		BREADTH		DEPTH	
							FT.	IN.	FT.	IN.	FT.	IN.
FEET	METRES	5 MM	GALLONS	LITRES	CWT	KG.	FT.	IN.	METRES	FT.	IN.	METRES
12 x 12	3.66 x 3.66	45	10 800	49 097	90	4 572	12	6	3.8	12	6	3.7
16 x 12	4.88 x 3.66	54	14 400	65 462	109	5 537	16	6	5.0	12	6	3.7
16 x 16	4.88 x 4.88	64	19 200	87 283	129	6 553	16	6	5.0	16	6	3.7
20 x 16	6.10 x 4.88	74	24 000	109 104	150	7 620	20	6	6.2	16	6	3.7
20 x 20	6.10 x 6.10	85	30 000	136 380	171	8 687	20	6	6.2	20	6	3.7
24 x 20	7.32 x 6.10	96	36 000	163 656	196	9 957	24	6	7.5	20	6	3.7
24 x 24	7.32 x 7.32	108	43 200	196 387	219	11 125	24	6	7.5	24	6	3.7
28 x 24	8.54 x 7.32	120	50 400	229 118	246	12 495	28	6	8.7	24	6	3.7
28 x 28	8.54 x 8.54	133	58 800	267 305	273	13 868	28	6	8.7	28	6	3.7
32 x 28	9.76 x 8.54	146	67 200	305 491	300	15 240	32	6	10.0	28	6	3.7
36 x 28	10.98 x 8.54	159	75 600	343 678	327	16 612	32	6	11.1	28	6	3.7
32 x 32	9.76 x 9.76	160	76 800	349 133	329	16 713	32	6	10.0	32	6	3.7
36 x 32	10.98 x 9.76	174	86 400	392 774	359	18 237	36	6	11.1	32	6	3.7
40 x 32	12.20 x 9.76	188	96 000	436 416	388	19 710	40	6	12.4	32	6	3.7
36 x 36	10.98 x 10.98	189	97 200	441 871	390	19 812	36	6	11.1	36	6	3.7
40 x 36	12.20 x 10.98	204	108 000	490 968	421	21 387	40	6	12.4	36	6	3.7
40 x 40	12.20 x 12.20	220	120 000	545 520	456	23 165	40	6	12.4	40	6	3.7
44 x 40	13.42 x 12.20	236	132 000	600 072	489	24 841	44	6	13.6	40	6	3.7
44 x 44	13.42 x 13.42	253	145 200	660 079	527	26 772	44	6	13.6	44	6	3.7
48 x 44	14.64 x 13.42	290	158 400	720 086	562	28 550	48	6	14.8	44	6	3.7
48 x 48	14.64 x 14.64	288	172 800	785 549	601	30 531	48	6	14.8	48	6	3.7
52 x 48	15.86 x 14.64	306	187 200	851 011	638	32 410	52	6	16.0	48	6	3.7
52 x 52	15.86 x 15.86	325	202 800	921 929	679	34 493	52	6	16.0	52	6	3.7

TABLE 5

TANKS 16 FEET OR 4.88 METRES DEEP, PLATES 5 MM AND 6 MM THICK THROUGHOUT																
NOMINAL TANK SIZE		NUMBER OF PLATES		NOMINAL CAPACITY		APPROX. TOTAL WEIGHT EMPTY		APPROXIMATE OUTSIDE DIMENSIONS								
LENGTH BY BREADTH	LENGTH BY BREADTH							LENGTH		BREADTH		DEPTH				
								FT.	IN.	METRES	FT.	IN.	METRES	FT.	IN.	METRES
FEET	METRES	5 MM	6 MM	GALLONS	LITRES	CWT	KG.	FT.	IN.	METRES	FT.	IN.	METRES	FT.	IN.	METRES
12 x 12	3.66 x 3.66	36	21	14 400	65 462	125	6 350	12	6	3.8	12	6	3.8	16	3	4.9
16 x 12	4.88 x 3.66	42	26	19 200	87 283	152	7 722	16	6	5.0	12	6	3.8	16	3	4.9
16 x 16	4.88 x 4.88	48	32	25 600	116 378	175	8 890	16	6	5.0	16	6	5.0	16	3	4.9
20 x 16	6.10 x 4.88	54	38	32 000	145 472	201	10 211	20	6	6.2	16	6	5.0	16	3	4.9
20 x 20	6.10 x 6.10	60	45	40 000	181 840	230	11 684	20	6	6.2	20	6	6.2	16	3	4.9
24 x 20	7.32 x 6.10	66	52	48 000	218 208	260	13 208	24	6	7.5	20	6	6.2	16	3	4.9
24 x 24	7.32 x 7.32	72	60	57 600	261 850	292	14 834	24	6	7.5	24	6	7.5	16	3	4.9
28 x 24	8.54 x 7.32	78	68	67 200	305 491	322	16 358	28	6	8.7	24	6	7.5	16	3	4.9
28 x 28	8.54 x 8.54	84	77	78 400	356 406	355	18 034	28	6	8.7	28	6	8.7	16	3	4.9
32 x 28	9.76 x 8.54	90	86	89 600	407 322	390	19 812	32	6	10.0	28	6	8.7	16	3	4.9
36 x 28	10.98 x 8.54	96	95	100 800	458 237	422	21 438	36	6	11.1	28	6	8.7	16	3	4.9
32 x 32	9.76 x 9.76	96	96	102 400	465 510	426	21 641	32	6	10.0	32	6	10.0	16	3	4.9
36 x 32	10.98 x 9.76	102	106	115 200	523 699	464	23 571	36	6	11.1	32	6	10.0	16	3	4.9
40 x 32	12.20 x 9.76	108	116	128 000	581 888	498	25 298	40	6	12.4	32	6	10.0	16	3	4.9
36 x 36	10.98 x 10.98	108	117	129 600	598 162	506	25 705	36	6	11.1	36	6	11.1	16	3	4.9
40 x 36	12.20 x 10.98	114	128	144 000	654 624	539	27 381	40	6	12.4	36	6	11.1	16	3	4.9
40 x 40	12.20 x 12.20	120	140	160 000	727 360	580	29 464	40	6	12.4	40	6	12.4	16	3	4.9
44 x 40	13.42 x 12.20	126	152	176 000	800 096	620	31 496	44	6	13.6	40	6	12.4	16	3	4.9
44 x 44	13.42 x 13.42	132	165	193 600	880 106	665	33 782	44	6	13.6	44	6	13.6	16	3	4.9
48 x 44	14.63 x 13.42	138	178	211 200	960 115	707	35 916	48	6	14.8	44	6	13.6	16	3	4.9
48 x 48	14.64 x 14.64	144	192	230 400	1 047 398	752	38 202	48	6	14.8	48	6	14.8	16	3	4.9
52 x 48	15.86 x 14.64	150	206	249 600	1 134 682	798	40 538	52	6	16.0	48	6	14.8	16	3	4.9
52 x 52	15.86 x 15.86	156	221	270 400	1 229 238	846	42 977	52	6	16.0	52	6	16.0	16	3	4.9

- NOTES: (1) NOMINAL CAPACITIES ARE WITHOUT ALLOWANCE FOR FREEBOARD.  
(2) APPROXIMATE TOTAL WEIGHTS INCLUDE PLATES, STAY, CLEATS, BOLTS, NUTS, WASHERS AND JOINTING MATERIALS. (EXCLUDED PARTITION AND COVER)  
(3) CAPACITIES ARE BASED ON A 1000MM CUBE CONTAINING 1000 LITRES.  
(4) TO ESTIMATE NETT CAPACITIES A REDUCTION FROM 12.5% ON THE SMALLER TANKS TO 2.5% ON THE LARGER SHOULD BE ALLOWED.





# HWACO PRESSED STAINLESS STEEL SECTIONAL WATER TANKS

## GENERAL SPECIFICATIONS

### STANDARD :

HWACO PRESSED STAINLESS STEEL SECTIONAL WATER TANK ARE FABRICATED WITH HYDRAULICALLY PRESSED FLANGED PANELS.

### MATERIALS :

THE WATER TANK PANELS, ANGLE STAYS AND CLEATS ARE MADE FROM STAINLESS STEEL CONFORMING TO AMERICAN IRON AND STEEL INSTITUTE (AISI) GRADE 316.

### FLANGES OF PLATES :

THE PLATES ARE PRESSED WITH A COMBINED DOUBLE FLANGE AT AN ANGLE OF 45 AND 90 TO THE FACE OF THE PLATE ON ALL FOUR SIDES.

### STAYS AND CLEATS :

ALL TANKS ARE INTERNALLY BRACED WITH ANGLE STAYS TO ENSURE RIGIDITY WHEN FILLED WITH WATER.

### BOLTS, NUTS AND WASHERS :

- (A) ALL BOLTS, NUTS AND WASHERS IN CONTACT WITH WATER CONTAINED WITHIN THE TANK SHALL BE OF STAINLESS STEEL CONFORMING TO AISI 316.
- (B) ALL BOLTS, NUTS AND WASHERS FOR TANK EXTERNAL FLANGES ARE STAINLESS STEEL AISI 304.

### JOINTING COMPOUNDS :

NON TOXIC PVC FOAM SHALL BE SUPPLIED FOR JOINTING BETWEEN FLANGES AND JOINTING OF CLEATS.

### COVERS :

STAINLESS STEEL GRADE 316 COVER FOR TANK ARE SUPPLIED IN PANEL FORM OF 1.5MM THICKNESS.

### PIPE CONNECTION :

WELDED SOCKETS OR HOLES CUT ON PANELS ARE PROVIDED FOR THREADED PIPING OR FLANGED PIPING CONNECTIONS.

### LADDERS AND LEVEL INDICATOR :

INTERNAL CATLADDER SHALL BE MADE OF GRADE 304 STAINLESS STEEL AND EXTERNAL CATLADDER SHALL BE MADE OF ALUMINIUM. LEVEL INDICATOR SHALL BE OF VISUAL TUBE TYPE.

### DIMENSION :

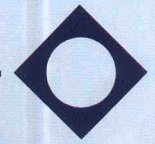
HWACO PRESSED STAINLESS STEEL SECTIONAL WATER TANK PANEL COMES IN 2 NOMINAL SIZES OF 1.22M (4 FT) SQUARE AND 1.0M SQUARE.

THICKNESS OF THE TANK PANEL : HWACO TANK 1.0M X 1.0M / 1.22M X 1.22M PANEL

TANK HEIGHT	1.0M / 1.22M	2.0M / 2.44M	3.0M / 3.66M
BOTTOM PANELS	2.5 MM	2.5 MM	3.0 MM
1ST TIER PANELS	2.5 MM	2.5 MM	3.0 MM
2ND TIER PANELS		2.5 MM	2.5 MM
3RD TIER PANELS			2.5 MM
TOP COVER PANELS	1.5 MM	1.5 MM	1.5 MM

NOTE: THICKER MATERIALS ARE AVAILABLE. PLEASE SPECIFY THICKNESS ON ENQUIRY.



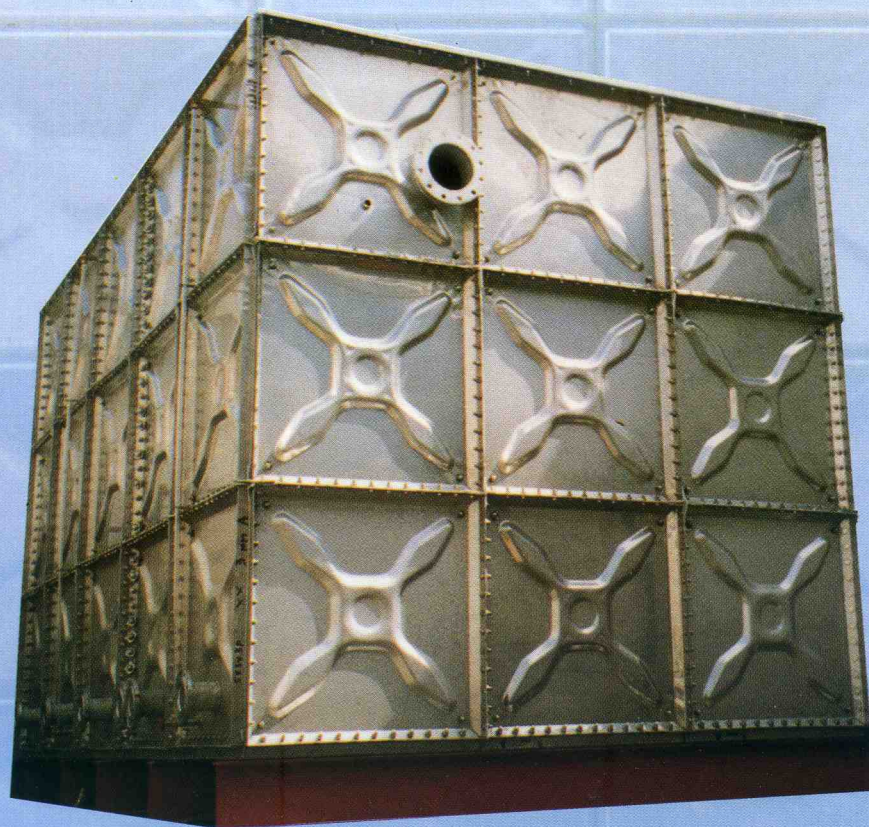
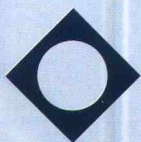


2m x 2m x 2m

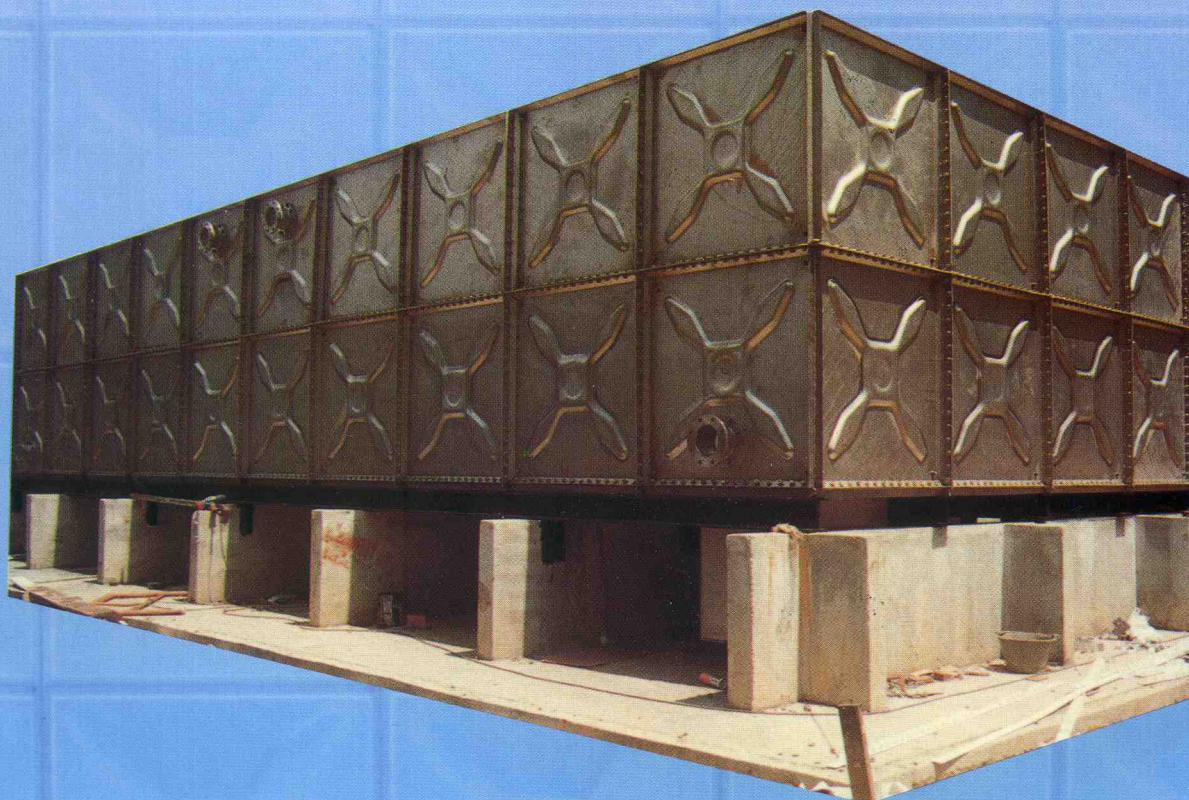


15m x 8m x 3m





5m x 3m x 3m



12.2m x 4.88m x 2.44m





# HWACO PRESSED STEEL & STAINLESS STEEL TANKS

## ERECTION INSTRUCTION

1. BEFORE STARTING TO ASSEMBLE THE TANK, PLEASE ENSURE THAT THE SUPPORTS (JOISTS, DWARF WALLS OR OTHER MEANS OF SUPPORTS) ARE LEVELLED AND SPACED ACCORDINGLY.
2. LAYOUT THE BOTTOM PANELS WITH THE FLANGES DOWNWARDS ON THE SUPPORT. LEAVE ABOUT 50MM BETWEEN EACH PANEL, USE THE PVC FOAM SEALANT TO STICK ON THE JOINTING FLANGE OF ONE PANEL AND BRING THE TWO PANELS TOGETHER, PUT THE BOLTS TO THE FLANGE HOLES AND SCREW THE NUTS WITH WASHERS.

## DO NOT TIGHTEN YET

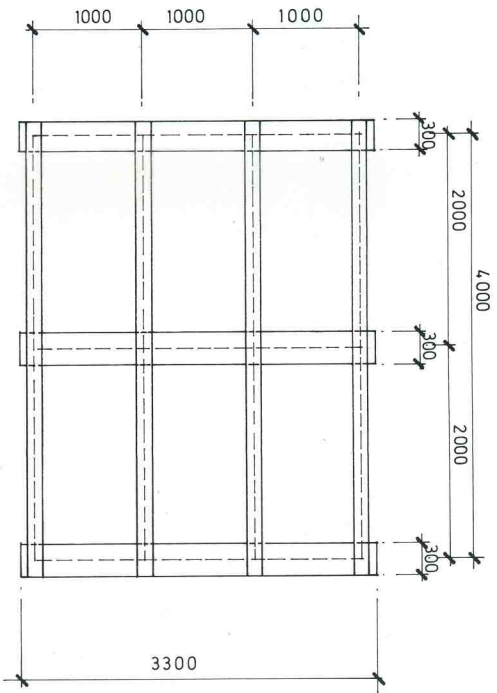
3. REPEAT THE ABOVE PROCEDURE ON THE NEXT PANEL UNTIL THE TANK BOTTOM IS COMPLETED. AFTER COMPLETING THE BOTTOM PANELS, CONTINUE THE SAME PROCEDURE TO THE FIRST TIER SIDE PANELS AND THEN THE SECOND TIER SIDE PANELS.
4. PVC FOAM SEALANT TO BE PUT ON THE JOINT JUNCTION BEFORE PUTTING ON THE CLEATS. FOR EACH CLEAT, FIX THE BOLT INSIDE THE TANK AND SCREW ON THE NUT WITH WASHER OUTSIDE THE TANK AND TIGHTEN. FOR CLEATS POSITION PLEASE REFER TO DRAWING.
5. CONNECT THE ANGLE STAYS TO THE CLEATS AS INDICATED IN THE MARKING PLAN, BUT DO NOT TIGHTEN UNTIL ALL THE ANGLE STAYS ARE IN POSITION.
6. AFTER ALL THE PLATES AND STAYS HAVE BEEN ASSEMBLED, TIGHTEN THE BOLTS & NUTS, COMMENCING WITH THOSE IN THE TANK BOTTOM FOLLOWED IN TURN BY THOSE ON EACH SIDE.

## GENERAL PRINCIPLES

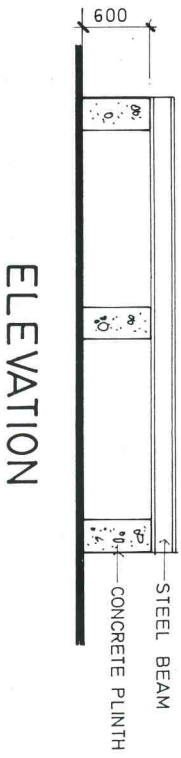
1. CLEARANCE BETWEEN GROUND AND TANK BOTTOM SHOULD BE A MINIMUM OF 600MM TO ALLOW ACCESS OF MAN TO FASTEN BOLTS AND NUTS.
2. THERE IS ALWAYS A CLEAT AT JOINT JUNCTION INSIDE THE TANK.
3. THERE IS ALWAYS A STAY RUNNING FROM JOINT JUNCTION INSIDE THE TANK.
4. ALL STAYS AND CLEATS TO BE BOLTED IN BEFORE COMMENCING GENERAL TIGHTENING.
5. TO PREVENT LEAKAGE, PLEASE ENSURE THAT ADEQUATE SIZE PVC FOAM IS USED ON EACH JOINT JUNCTION BEFORE THE CLEAT IS FASTENED.



Example A 4 m (L) x 3 m (W) Water Tank  
Steel Beam And Concrete Plinth Layout

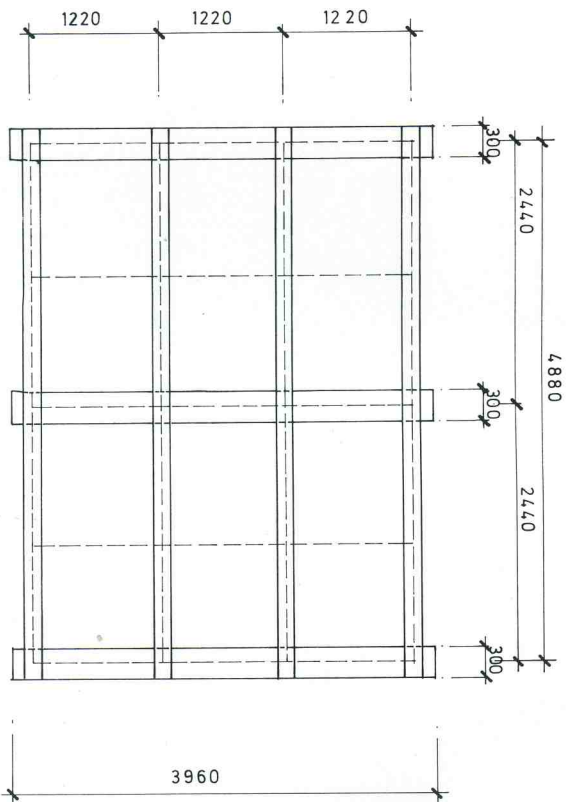


PLAN

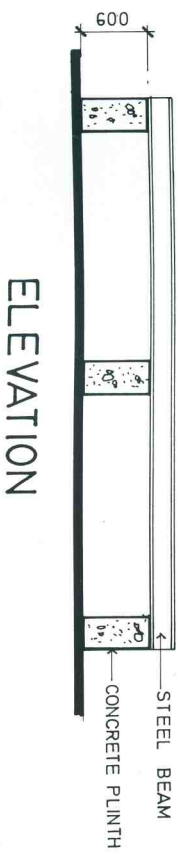


ELEVATION

Example B 4.88 m (L) x 3.66 m (W) Water Tank  
Steel Beam And Concrete Plinth Layout

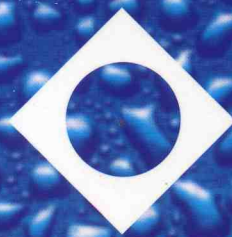


PLAN



ELEVATION





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