AQUASTORE® TANK CAPACITY CHART

WATER TANKS WITH CONCRETE FLOORS (US Gallons x 1000)

Glass Floor

Freeboard GF=1 Conc=0: 0

Model Sidewall Height

Actual Sidewall Height (feet)

Model Diameter	Sheets	Exact Diameter (feet)	Capacity Per Foot (gallons)	Max Water Depth AWWA Z = 0,1 Design (feet)	Max Water Depth .5" Max Height	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
11	4	11.19	735	65.1	65.1	4	7	10	14	17	20	24	27	30	34	37	41	44	47	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Height						5.51	10.09	14.68	19.26	23.84	28.43	33.01	37.59	42.17	46.76	51.34	55.92	60.51	65.09	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	5	13.98	1,149	138.4	138.4	6	11	16	22	27	32	37	43	48	53	58	64	69	74	80	85	90	95	101	106	111	116	122	127	132	137	143	148	153	159		
Height						5.51	10.09	14.68	19.26	23.84	28.43	33.01	37.59	42.17	46.76	51.34	55.92	60.51	65.09	69.67	74.26	78.84	83.42	88.00	92.59	97.17	101.75	106.34	110.92	115.50	120.09	124.67	129.25	133.83	138.42		
17	6	16.78	1,655	138.4	138.4	9	16	24	31	39	47	54	62	69	77	84	92	100	107	115	122	130	138	145	153	160	168	175	183	191	198	206	213	221	229		
Height						5.51	10.09	14.68	19.26	23.84	28.43	33.01	37.59	42.17	46.76	51.34	55.92	60.51	65.09	69.67	74.26	78.84	83.42	88.00	92.59	97.17	101.75	106.34	110.92	115.50	120.09	124.67	129.25	133.83	138.42		
20	7	19.58	2,252	138.4	138.4	12	22	33	43	53	64	74	84	94	105	115	125	136	146	156	167	177	187	198	208	218	229	239	249	260	270	280	291	301	311		
Height						5.51	10.09	14.68	19.26	23.84	28.43	33.01	37.59	42.17	46.76	51.34	55.92	60.51	65.09	69.67	74.26	78.84	83.42	88.00	92.59	97.17	101.75	106.34	110.92	115.50	120.09	124.67	129.25	133.83	138.42		
22	8	22.37	2,942	138.4	138.4	16	29	43	56	70	83	97	110	124	137	151	164	178	191	204	218	231	245	258	272	285	299	312	326	339	353	366	380	393	407	**407**	
Height						5.51	10.09	14.68	19.26	23.84	28.43	33.01	37.59	42.17	46.76	51.34	55.92	60.51	65.09	69.67	74.26	78.84	83.42	88.00	92.59	97.17	101.75	106.34	110.92	115.50	120.09	124.67	129.25	133.83	138.42	**142.13**	
25	9	25.17	3,724	123.2	138.4	20	37	54	71	88	105	122	139	157	174	191	208	225	242	259	276	293	310	327	344	361	378	395	413	430	447	**461**	**474**	**488**	**502**	**515**	
Height						5.51	10.09	14.68	19.26	23.84	28.43	33.01	37.59	42.17	46.76	51.34	55.92	60.51	65.09	69.67	74.26	78.84	83.42	88.00	92.59	97.17	101.75	106.34	110.92	115.50	120.09	**123.79**	**127.50**	**131.21**	**134.92**	**138.63**	
28	10	27.97	4,597	110.9	138.4	25	46	67	88	109	130	151	172	193	214	236	257	278	299	320	341	362	383	404	425	446	467	488	505	**522**	**539**	**557**	**574**	**591**	**608**	**625**	**636**
Height						5.51	10.09	14.68	19.26	23.84	28.43	33.01	37.59	42.17	46.76	51.34	55.92	60.51	65.09	69.67	74.26	78.84	83.42	88.00	92.59	97.17	101.75	106.34	110.05	**113.76**	**117.46**	**121.17**	**124.88**	**128.59**	**132.30**	**136.01**	**139.72**
31	11	30.77	5,563	100.8	134.6	30	56	81	107	132	158	183	209	234	260	285	311	336	362	387	413	438	464	489	515	540	**561**	**581**	**602**	**623**	**643**	**664**	**685**	**705**	**726**	**746**	**748**
Height						5.51	10.09	14.68	19.26	23.84	28.43	33.01	37.59	42.17	46.76	51.34	55.92	60.51	65.09	69.67	74.26	78.84	83.42	88.00	92.59	97.17	**100.88**	**104.59**	**108.30**	**112.01**	**115.72**	**119.43**	**123.14**	**126.85**	**130.56**	**134.27**	**137.98**
34	12	33.56	6,620	92.4	123.2	36	66	97	127	157	188	218	248	279	309	339	370	400	430	461	491	521	552	582	607	**631**	**656**	**680**	**705**	**729**	**754**	**779**	**803**	**815**			
Height						5.51	10.09	14.68	19.26	23.84	28.43	33.01	37.59	42.17	46.76	51.34	55.92	60.51	65.09	69.67	74.26	78.84	83.42	88.00	91.71	**95.42**	**99.13**	**102.84**	**106.55**	**110.26**	**113.97**	**117.68**	**121.39**	**125.10**			
36	13	36.36	7,770	85.3	113.9	42	78	114	149	185	220	256	292	327	363	398	434	470	505	541	576	612	648	**677**	**705**	**734**	**763**	**792**	**821**	**849**	**878**	**885**					
Height						5.51	10.09	14.68	19.26	23.84	28.43	33.01	37.59	42.17	46.76	51.34	55.92	60.51	65.09	69.67	74.26	78.84	83.42	**87.13**	**90.84**	**94.55**	**98.26**	**101.97**	**105.68**	**109.39**	**113.10**	**116.81**					
39	14	39.16	9,011	79.2	105.7	49	90	132	173	214	256	297	338	380	421	462	503	545	586	627	669	710	**743**	**777**	**810**	**844**	**877**	**910**	**944**	**952**							
Height						5.51	10.09	14.68	19.26	23.84	28.43	33.01	37.59	42.17	46.76	51.34	55.92	60.51	65.09	69.67	74.26	78.84	**82.55**	**86.26**	**89.97**	**93.68**	**97.39**	**101.10**	**104.81**	**108.51**							
42	15	41.96	10,345	73.9	98.7	57	104	151	199	246	294	341	388	436	483	531	578	625	673	720	**759**	**797**	**835**	**874**	**912**	**951**	**989**	**1021**									
Height						5.51	10.09	14.68	19.26	23.84	28.43	33.01	37.59	42.17	46.76	51.34	55.92	60.51	65.09	69.67	**73.38**	**77.09**	**80.80**	**84.51**	**88.22**	**91.93**	**95.64**	**99.35**									
45	16	44.75	11,770	69.3	92.5	64	118	172	226	280	334	388	442	496	550	604	658	712	766	809	**853**	**897**	**940**	**984**	**1028**	**1071**	**1088**										
Height						5.51	10.09	14.68	19.26	23.84	28.43	33.01	37.59	42.17	46.76	51.34	55.92	60.51	65.09	68.80	**72.51**	**76.22**	**79.93**	**83.64**	**87.35**	**91.06**	**94.77**										
48	17	47.55	13,287	65.2	87.1	73	134	195	255	316	377	438	499	560	621	682	743	803	864	**914**	**963**	**1012**	**1061**	**1111**	**1157**												
Height						5.51	10.09	14.68	19.26	23.84	28.43	33.01	37.59	42.17	46.76	51.34	55.92	60.51	65.09	**68.80**	**72.51**	**76.22**	**79.93**	**83.64**	**87.35**												
50	18	50.35	14,896	61.6	82.2	82	150	218	286	355	423	491	559	628	696	764	833	901	**956**	**1011**	**1067**	**1122**	**1177**	**1224**													
Height						5.51	10.09	14.68	19.26	23.84	28.43	33.01	37.59	42.17	46.76	51.34	55.92	60.51	**64.22**	**67.93**	**71.63**	**75.34**	**79.05**	**82.76**													
53	19	53.15	16,598	58.3	77.9	91	167	243	319	395	471	547	623	700	776	852	928	**989**	**1051**	**1112**	**1174**	**1236**	**1292**													
Height						5.51	10.09	14.68	19.26	23.84	28.43	33.01	37.59	42.17	46.76	51.34	55.92	**59.63**	**63.34**	**67.05**	**70.76**	**74.47**	**78.18**													
56	20	55.95	18,391	55.4	74.0	101	185	269	354	438	522	607	691	775	859	944	1012	**1080**	**1148**	**1217**	**1285**	**1353**														
Height						5.51	10.09	14.68	19.26	23.84	28.43	33.01	37.59	42.17	46.76	51.34	55.05	**58.76**	**62.47**	**66.18**	**69.89**	**73.60**														
59	21	58.74	20,276	52.8	70.5	111	204	297	390	483	576	669	762	855	948	1040	**1116**	**1191**	**1266**	**1341**	**1417**	**1429**														
Height						5.51	10.09	14.68	19.26	23.84	28.43	33.01	37.59	42.17	46.76	51.34	**55.05**	**58.76**	**62.47**	**66.18**	**69.89**	**73.60**														
62	22	61.54	22,253	50.4	67.3	122	224	326	428	530	632	734	836	938	1040	**1123**	**1205**	**1288**	**1370**	**1453**	**1497**															
Height						5.51	10.09	14.68	19.26	23.84	28.43	33.01	37.59	42.17	46.76	**50.47**	**54.18**	**57.89**	**61.60**	**65.30**	**69.01**															
64	23	64.34	24,322	48.2	64.3	134	245	356	468	579	691	802	914	1025	1137	**1227**	**1317**	**1407**	**1498**	**1563**																
Height						5.51	10.09	14.68	19.26	23.84	28.43	33.01	37.59	42.17	46.76	**50.47**	**54.18**	**57.89**	**61.60**	**65.30**																
67	24	67.13	26,483	46.2	61.7	145	267	388	510	631	752	874	995	1116	1215	**1313**	**1411**	**1509**	**1608**	**1634**																
Height						5.51	10.09	14.68	19.26	23.84	28.43	33.01	37.59	42.17	45.88	**49.59**	**53.30**	**57.01**	**60.72**	**64.43**																
70	25	69.93	28,736	44.3	59.2	158	290	421	553	685	816	948	1080	1211	**1318**	**1425**	**1531**	**1638**	**1701**																	
Height						5.51	10.09	14.68	19.26	23.84	28.43	33.01	37.59	42.17	**45.88**	**49.59**	**53.30**	**57.01**	**60.72**																	
73	26	72.73	31,081	42.6	56.9	171	313	456	598	741	883	1025	1168	1310	**1426**	**1541**	**1656**	**1768**																		
Height						5.51	10.09	14.68	19.26	23.84	28.43	33.01	37.59	42.17	**45.88**	**49.59**	**53.30**	**57.01**																		
76	27	75.53	33,518	41.1	54.8	184	338	491	645	799	952	1106	1259	**1384**	**1508**	**1632**	**1757**	**1836**																		
Height						5.51	10.09	14.68	19.26	23.84	28.43	33.01	37.59	**41.30**	**45.01**	**48.72**	**52.43**	**56.14**																		
78	28	78.32	36,046	39.6	52.8	198	363	529	694	859	1024	1189	1355	**1488**	**1622**	**1756**	**1889**	**1903**																		
Height						5.51	10.09	14.68	19.26	23.84	28.43	33.01	37.59	**41.30**	**45.01**	**48.72**	**52.43**	**56.14**																		
81	29	81.12	38,667	38.2	51.0	213	390	567	744	921	1099	1276	1453	**1596**	**1740**	**1883**	**1972**																			
Height						5.51	10.09	14.68	19.26	23.84	28.43	33.01	37.59	**41.30**	**45.01**	**48.72**	**52.43**																			
84	30	83.92	41,380	37.0	49.3	228	417	607	796	986	1176	1365	1519	**1672**	**1826**	**1979**	**2040**																			
Height						5.51	10.09	14.68	19.26	23.84	28.43	33.01	36.72	**40.43**	**44.14**	**47.85**	**51.56**																			
87	31	86.72	44,184	35.8	47.7	243	445	648	850	1053	1255	1458	**1622**	**1786**	**1950**	**2107**																				
Height						5.51	10.09	14.68	19.26	23.84	28.43	33.01	**36.72**	**40.43**	**44.14**	**47.85**																				
90	32	89.51	47,081	34.6	46.2	259	475	690	906	1122	1338	1554	**1728**	**1903**	**2078**	**2175**																				
Height						5.51	10.09	14.68	19.26	23.84	28.43	33.01	**36.72**	**40.43**	**44.14**	**47.85**																				
92	33	92.31	50,070	33.6	44.8	275	505	734	964	1193	1423	1652	**1838**	**2024**	**2209**	**2243**																				
Height						5.51	10.09	14.68	19.26	23.84	28.43	33.01	**36.72**	**40.43**	**44.14**	**47.85**																				
95	34	95.11	53,150	32.6	43.5	292	536	780	1023	1267	1510	**1754**	**1997**	**2241**	**2312**																				
Height						5.51	10.09	14.68	19.26	23.84	28.43	**33.01**	**37.59**	**42.17**	**46.76**																				

AQUASTORE® BY CST®

AWWA Seismic 0,1

AQUASTORE® TANK CAPACITY CHART
WATER TANKS WITH CONCRETE FLOORS (US Gallons x 1000)

Glass Floor

Model Diameter	Sheets	Exact Diameter (feet)	Capacity Per Foot (gallons)	Max Water Depth AWWA Z = 0,1 Design (feet)	Max Water Depth .5" Max Height	Freeboard GF=1	Freeboard Conc=0	0 / 0	Model Sidewall Height / Actual Sidewall Height (feet) 1	2	3	4	5	6	7	8	9	10
98	35	97.91	56,323	31.7	42.3				310	568	826	1084	1342	1600	**1859**	**2117**	**2375**	**2382**
Height									5.51	10.09	14.68	19.26	23.84	28.43	**33.01**	**37.59**	**42.17**	**46.76**
101	36	100.70	59,587	30.8	41.1				328	601	874	1147	1420	1693	**1966**	**2239**	**2449**	
Height									5.51	10.09	14.68	19.26	23.84	28.43	**33.01**	**37.59**	**42.17**	
104	37	103.50	62,944	30.0	40.0				346	635	923	1212	1500	1789	**2077**	**2366**	**2517**	
Height									5.51	10.09	14.68	19.26	23.84	28.43	**33.01**	**37.59**	**42.17**	
106	38	106.30	66,392	29.2	38.9				365	670	974	1278	1582	1887	**2191**	**2495**	**2582**	
Height									5.51	10.09	14.68	19.26	23.84	28.43	**33.01**	**37.59**	**42.17**	
109	39	109.10	69,932	28.4	37.9				385	705	1026	1346	1667	**1987**	**2308**	**2628**	**2650**	
Height									5.51	10.09	14.68	19.26	23.84	**28.43**	**33.01**	**37.59**	**42.17**	
112	40	111.90	73,565	27.7	37.0				405	742	1079	1416	1753	**2091**	**2428**	**2721**	**2721**	
Height									5.51	10.09	14.68	19.26	23.84	**28.43**	**33.01**	**37.59**	**42.17**	
115	41	114.69	77,289	27.0	36.1				425	780	1134	1488	1842	**2196**	**2551**	**2790**		
Height									5.51	10.09	14.68	19.26	23.84	**28.43**	**33.01**	**37.59**		
117	42	117.49	81,105	26.4	35.2				446	818	1190	1562	1933	**2305**	**2677**	**2854**		
Height									5.51	10.09	14.68	19.26	23.84	**28.43**	**33.01**	**37.59**		
120	43	120.29	85,013	25.8	34.4				468	858	1247	1637	2026	**2416**	**2806**	**2924**		
Height									5.51	10.09	14.68	19.26	23.84	**28.43**	**33.01**	**37.59**		
123	44	123.09	89,013	25.2	33.6				490	898	1306	1714	2122	**2530**	**2938**	**2990**		
Height									5.51	10.09	14.68	19.26	23.84	**28.43**	**33.01**	**37.59**		
126	45	125.89	93,105	24.6	32.9				513	939	1366	1793	2219	**2646**	**3063**			
Height									5.51	10.09	14.68	19.26	23.84	**28.43**	**33.01**			
129	46	128.68	97,289	24.1	32.1				536	981	1427	1873	2319	**2765**	**3122**			
Height									5.51	10.09	14.68	19.26	23.84	**28.43**	**33.01**			
131	47	131.48	101,565	23.6	31.5				559	1025	1490	1956	**2421**	**2886**	**3199**			
Height									5.51	10.09	14.68	19.26	**23.84**	**28.43**	**33.01**			
134	48	134.27	105,933	23.1	30.8				583	1069	1554	2040	**2525**	**3011**	**3262**			
Height									5.51	10.09	14.68	19.26	**23.84**	**28.43**	**33.01**			
137	49	137.07	110,393	22.6	30.2				608	1114	1620	2126	**2631**	**3137**	**3333**			
Height									5.51	10.09	14.68	19.26	**23.84**	**28.43**	**33.01**			
140	50	139.87	114,945	22.2	29.6				633	1160	1686	2213	**2740**	**3267**	**3402**			
Height									5.51	10.09	14.68	19.26	**23.84**	**28.43**	**33.01**			
143	51	142.67	119,589	21.7	29.0				658	1207	1755	2303	**2851**	**3399**	**3468**			
Height									5.51	10.09	14.68	19.26	**23.84**	**28.43**	**33.01**			
145	52	145.46	124,324	21.3	28.4				685	1254	1824	2394	**2964**	**3530**	**3530**			
Height									5.51	10.09	14.68	19.26	**23.84**	**28.43**	**33.01**			
148	53	148.26	129,152	20.9	27.9				711	1303	1895	2487	**3079**	**3603**				
Height									5.51	10.09	14.68	19.26	**23.84**	**28.43**				
151	54	151.06	134,072	20.5	27.4				738	1353	1967	2582	**3196**	**3673**				
Height									5.51	10.09	14.68	19.26	**23.84**	**28.43**				
154	55	153.86	139,083	20.2	26.9				766	1403	2041	2678	**3316**	**3741**				
Height									5.51	10.09	14.68	19.26	**23.84**	**28.43**				
157	56	156.66	144,187	19.8	26.4				794	1455	2116	2776	**3437**	**3806**				
Height									5.51	10.09	14.68	19.26	**23.84**	**28.43**				
159	57	159.46	149,382	19.4	25.9				823	1507	2192	2876	**3561**	**3868**				
Height									5.51	10.09	14.68	19.26	**23.84**	**28.43**				
162	58	162.26	154,670	19.1	25.5				852	1561	2269	**2978**	**3687**	**3944**				
Height									5.51	10.09	14.68	**19.26**	**23.84**	**28.43**				
171	61	170.65	171,082	18.2	24.2				942	1726	2510	**3294**	**4078**	**4140**				
Height									5.51	10.09	14.68	**19.26**	**23.84**	**28.43**				
179	64	179.04	188,318	17.3	23.1				1,037	1900	2763	**3626**	**4350**	**4350**				
Height									5.51	10.09	14.68	**19.26**	**23.84**	**28.43**				
187	67	187.43	206,381	16.5	22.1				1,137	2083	3028	**3974**	**4561**					
Height									5.51	10.09	14.68	**19.26**	**23.84**					
193	69	193.03	218,898	16.1	21.4				1,206	2209	3212	**4215**	**4684**					
Height									5.51	10.09	14.68	**19.26**	**23.84**					
201	72	201.42	238,340	15.4	20.5				1,313	2405	3497	**4590**	**4885**					
Height									5.51	10.09	14.68	**19.26**	**23.84**					
210	75	209.81	258,609	14.8	19.7				1,424	2610	3795	**4980**	**5094**					
Height									5.51	10.09	14.68	**19.26**	**23.84**					
218	78	218.20	279,712	14.2	18.9				1,541	2823	**4105**	**5286**						
Height									5.51	10.09	**14.68**	**19.26**						
227	81	226.59	301,642	13.7	18.2				1,662	3044	**4426**	**5489**						
Height									5.51	10.09	**14.68**	**19.26**						
235	84	234.99	324,399	13.2	17.6				1,787	3274	**4760**	**5709**						
Height									5.51	10.09	**14.68**	**19.26**						
243	87	243.38	347,984	12.7	17.0				1,917	3512	**5107**	**5915**						
Height									5.51	10.09	**14.68**	**19.26**						

Notes:
1. 100 mph wind speed
2. 25 psf live snow load
3. Seismic zone 0,1,2A, 2B, 3, 4
4. Importance Factor, I = 1.25
5. Site Amplification Factor, S = 1.5
6. Specific gravity 1.0 @ STP
7. Structure height limitations dependent upon local soil conditions and construction techniques
8. AWWA Designates AWWA D103-97
9. Assumes a maximum material thickness of .375 HSLA
10. Model Designation => Model Diameter & Model Sidewall Height
    Example: *Model Designation 4228 => 42' diameter & 28' height*
11. For steel floor option: Add .678' X Capacity Per Foot (gallons) to listed capacities
12. No freeboard allowance except in the yellow shaded areas where the freeboard is variable
13. Embedded starter design assumes short starter <=38' in height and mid starter >38' in height

Conversions:

Gallons => Cubic feet

Multiply 1000 gallons by 133.68

Gallons => Cubic Meters

Multiply 1000 gallons by 3.785

AQUASTORE® BY CST®

Part No. ????????-???
Rel. 1 ECN ??????
5/1/2007