

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



Model Diameter	Sheets	Exact Diameter (feet)	Capacity Per Foot (gallons)	Max Water Depth (Ft)		Freeboard		AISC Design		Model Sidewall Height		Actual Sidewall Height (feet)																																					
				A .375" max.	B .5" max.	GF=1	Conc=0																																										
						0	0	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										
98	35	97.91	56,323	37.4	49.5	310	568	826	1084	1342	1600	1859	2067	2276	2484	2692	2787																																
Height						5.51	10.09	14.68	19.26	23.84	28.43	33.01	36.71	40.41	44.11	47.81	51.51	24.17																															
101	36	100.70	59,587	36.4	48.2	328	601	874	1147	1420	1693	1966	2187	2407	2628	2849	2872																																
Height						5.51	10.09	14.68	19.26	23.84	28.43	33.01	36.71	40.41	44.11	47.81	51.51	39.77																															
104	37	103.50	62,944	35.4	46.9	346	635	923	1212	1500	1789	2077	2310	2543	2776	2952	2952																																
Height						5.51	10.09	14.68	19.26	23.84	28.43	33.01	36.71	40.41	44.11	47.81	51.51	55.37																															
106	38	106.30	66,392	34.5	45.6	365	670	974	1278	1582	1887	2191	2437	2682	2928	3027																																	
Height						5.51	10.09	14.68	19.26	23.84	28.43	33.01	36.71	40.41	44.11	47.81	26.56																																
109	39	109.10	69,932	33.6	44.4	385	705	1026	1346	1667	1987	2308	2567	2825	3084	3104																																	
Height						5.51	10.09	14.68	19.26	23.84	28.43	33.01	36.71	40.41	44.11	47.81	40.96																																
112	40	111.90	73,565	32.7	43.3	405	742	1079	1416	1753	2091	2363	2635	2907	3180	3185																																	
Height						5.51	10.09	14.68	19.26	23.84	28.43	32.13	35.83	39.53	43.23	46.93	43.58																																
115	41	114.69	77,289	31.9	42.3	425	780	1134	1488	1842	2196	2483	2769	3055	3269	3269																																	
Height						5.51	10.09	14.68	19.26	23.84	28.43	32.13	35.83	39.53	43.23	46.93	55.58																																
117	42	117.49	81,105	31.2	41.3	446	818	1190	1562	1933	2305	2605	2905	3205	3349																																		
Height						5.51	10.09	14.68	19.26	23.84	28.43	32.13	35.83	39.53	43.23	23.16																																	
120	43	120.29	85,013	30.5	40.3	468	858	1247	1637	2026	2416	2731	3045	3360	3426																																		
Height						5.51	10.09	14.68	19.26	23.84	28.43	32.13	35.83	39.53	43.23	35																																	
123	44	123.09	89,013	29.8	39.4	490	898	1306	1714	2122	2530	2859	3189	3507																																			
Height						5.51	10.09	14.68	19.26	23.84	28.43	32.13	35.83	39.53	1.55																																		
126	45	125.89	93,105	29.1	38.5	513	939	1366	1793	2219	2646	2991	3335	3584																																			
Height						5.51	10.09	14.68	19.26	23.84	28.43	32.13	35.83	39.53	12.35																																		
129	46	128.68	97,289	28.5	37.7	536	981	1427	1873	2319	2765	3125	3485	3667																																			
Height						5.51	10.09	14.68	19.26	23.84	28.43	32.13	35.83	39.53	21.95																																		
131	47	131.48	101,565	27.9	36.9	559	1025	1490	1956	2421	2797	3173	3549	3747																																			
Height						5.51	10.09	14.68	19.26	23.84	27.54	31.24	34.95	38.65	20.96																																		
134	48	134.27	105,933	27.3	36.1	583	1069	1554	2040	2525	2917	3309	3701	3824																																			
Height						5.51	10.09	14.68	19.26	23.84	27.54	31.24	34.95	38.65	30.56																																		
137	49	137.07	110,393	26.7	35.4	608	1114	1620	2126	2631	3040	3449	3857	3907																																			
Height						5.51	10.09	14.68	19.26	23.84	27.54	31.24	34.95	38.65	38.96																																		
140	50	139.87	114,945	26.2	34.7	633	1160	1686	2213	2740	3165	3591	3988																																				
Height						5.51	10.09	14.68	19.26	23.84	27.54	31.24	34.95	2.95																																			
143	51	142.67	119,589	25.7	34.0	658	1207	1755	2303	2851	3293	3736	4066																																				
Height						5.51	10.09	14.68	19.26	23.84	27.54	31.24	34.95	11.35																																			
145	52	145.46	124,324	25.2	33.3	685	1254	1824	2394	2964	3424	3884	4139																																				
Height						5.51	10.09	14.68	19.26	23.84	27.54	31.24	34.95	19.75																																			
148	53	148.26	129,152	24.7	32.7	711	1303	1895	2487	3079	3557	4035	4223																																				
Height						5.51	10.09	14.68	19.26	23.84	27.54	31.24	34.95	26.95																																			
151	54	151.06	134,072	24.2	32.1	738	1353	1967	2582	3196	3692	4189	4303																																				
Height						5.51	10.09	14.68	19.26	23.84	27.54	31.24	34.95	34.15																																			
154	55	153.86	139,083	23.8	31.5	766	1403	2041	2678	3193	3708	4222	4381																																				
Height						5.51	10.09	14.68	19.26	22.96	26.66	30.36	34.06	30.77																																			
157	56	156.66	144,187	23.4	30.9	794	1455	2116	2776	3310	3844	4377	4455																																				
Height						5.51	10.09	14.68	19.26	22.96	26.66	30.36	34.06	37.97																																			
159	57	159.46	149,382	23.0	30.4	823	1507	2192	2876	3429	3982	4535	4541																																				
Height						5.51	10.09	14.68	19.26	22.96	26.66	30.36	34.06	43.97																																			
162	58	162.26	154,670	22.6	29.9	852	1561	2269	2978	3551	4123	4624																																					
Height						5.51	10.09	14.68	19.26	22.96	26.66	30.36	5.55																																				
171	61	170.65	171,082	21.5	28.4	942	1726	2510	3294	3928	4561	4858																																					
Height						5.51	10.09	14.68	19.26	22.96	26.66	30.36	23.55																																				
179	64	179.04	188,318	20.5	27.1	1,037	1900	2763	3626	4323	5020	5103																																					
Height						5.51	10.09	14.68	19.26	22.96	26.66	30.36	39.15																																				
187	67	187.43	206,381	19.5	25.9	1,137	2083	3028	3974	4738	5345																																						
Height						5.51	10.09	14.68	19.26	22.96	26.66	9.14																																					
193	69	193.03	218,898	19.0	25.1	1,206	2209	3212	4022	4832	5494																																						
Height						5.51	10.09	14.68	18.38	22.08	25.78	8.16																																					
201	72	201.42	238,340	18.2	24.1	1,313	2405	3497	4380	5262	5743																																						
Height						5.51	10.09	14.68	18.38	22.08	25.78	20.16																																					
210	75	209.81	258,609	17.5	23.1	1,424	2610	3795	4752	5709	5973																																						
Height						5.51	10.09	14.68	18.38	22.08	25.78	32.16																																					
218	78	218.20	279,712	16.8	22.2	1,541	2823	4105	5140	6175	6209																																						
Height						5.51	10.09	14.68	18.38	22.08	25.78	42.96																																					
227	81	226.59	301,642	16.2	21.4	1,662	3044	4426	5543	6455																																							
Height						5.51	10.09	14.68	18.38	22.08	8.14																																						
235	84	234.99	324,399	15.6	20.6	1,787	3274	4760	5961	6682																																							
Height						5.51	10.09	14.68	18.38	22.08	17.74																																						
243	87	243.38	347,984	15.1	19.9	1,917	3512	5107	6394	6924																																							
Height						5.51	10.09	14.68	18.38	22.08	26.14																																						

Notes:

- 100 mph wind speed
- 25 psf live snow load
- Seismic zone 0
- Specific gravity 1.0 @ STP
- Structure height limitations dependent upon local soil conditions and construction techniques
- Assumes a maximum material thickness of .375 HSLA
- Model Designation => Model Diameter & Model Sidewall Height
Example: Model Designation 4228 => 42' diameter & 28' height
- For steel floor option: Add .678' X Capacity Per Foot (gallons) to listed capacities
- No freeboard allowance except in the yellow shaded areas where the freeboard is variable
- 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

