

Fiberglass Tank Volume Charts

Baffle Placement Volume Chart

This document shows various volume measurements for 1000- and 1500-gallon Orenco injection-molded fiberglass septic tanks.

The table below shows the volume split — in gallonage and percentage — between the two compartments of a tank, depending on which rib a baffle is installed in. For example, if a baffle is inserted in Rib 3 in a 1500-gallon tank (as shown in the diagram), the first compartment will have 1126-gallons (63%) and the second compartment will have the remaining volume: 674 gallons (37%).

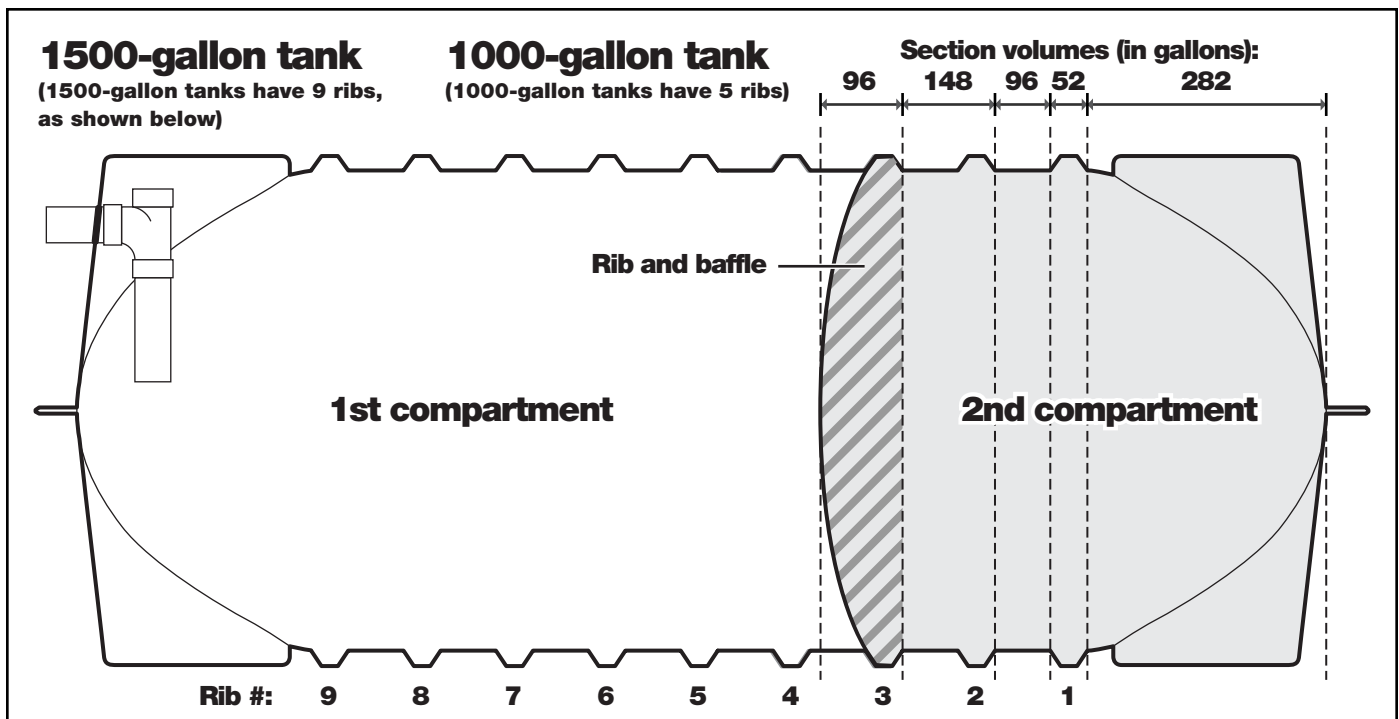
If you would prefer to calculate the volumes cumulatively, especially if you intend to use multiple baffles, here are some important sectional volumes:

Tank end to rib:	282 gallons
Rib:	52 gallons
Midsection (between ribs):	96 gallons
Rib and midsection:	148 gallons
Rib and baffle:	96 gallons

These volumes appear in gallons on the upper right corner of the figure below.

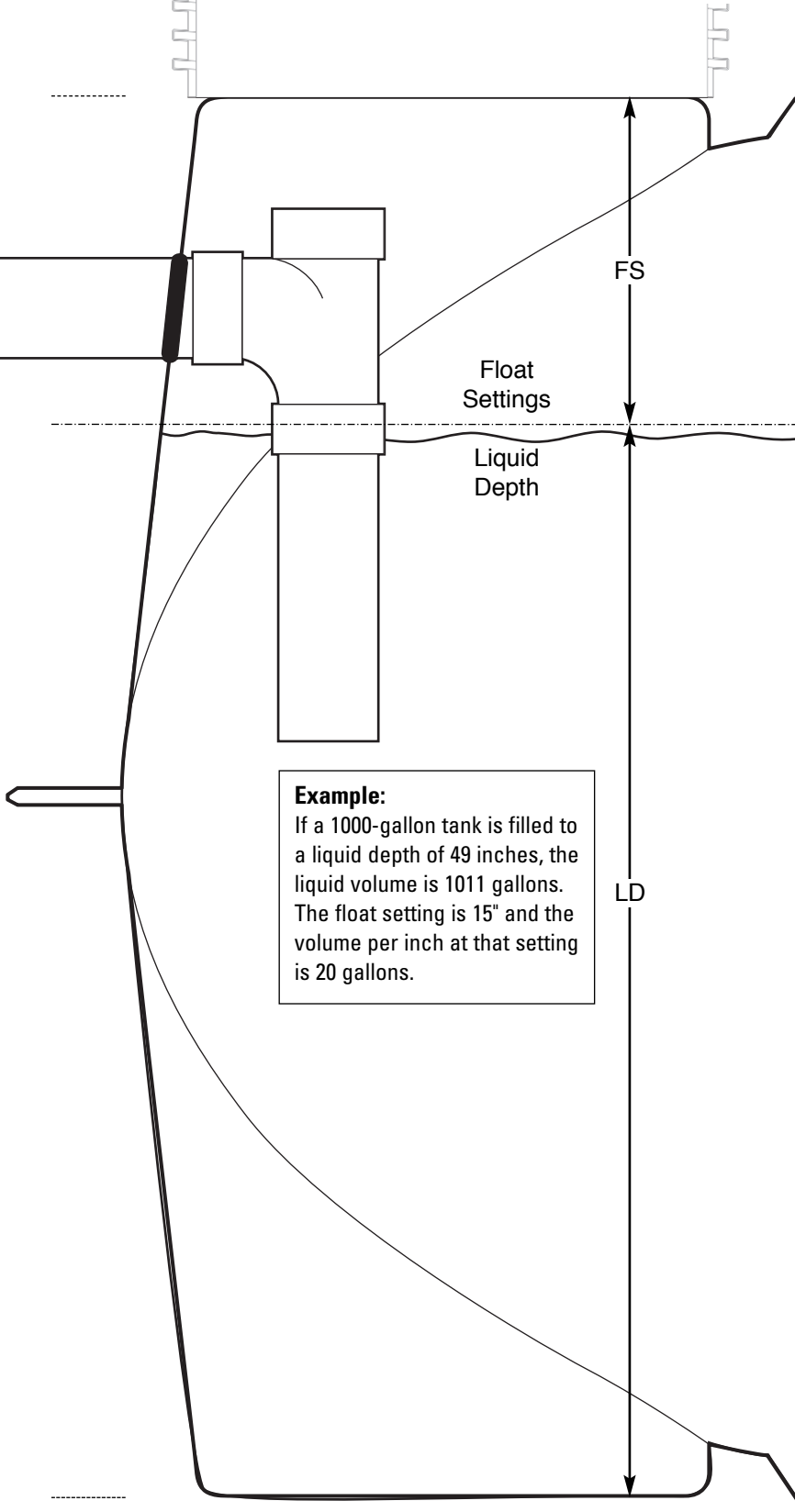
Note: Because the gallonage numbers above are rounded figures, some of the totals reached by adding them together may not match the total volume of the tank.

Rib	1000-gallon tank				1500-gallon tank			
	1st compart.		2nd compart.		1st compart.		2nd compart.	
1	832 gal	69%	378 gal	31%	1422 gal	79%	378 gal	21%
2	684 gal	57%	526 gal	43%	1274 gal	71%	526 gal	29%
3	536 gal	44%	674 gal	56%	1126 gal	63%	674 gal	37%
4	388 gal	32%	822 gal	68%	978 gal	54%	822 gal	46%
5	240 gal	20%	970 gal	80%	830 gal	46%	970 gal	54%
6	n/a	n/a	n/a	n/a	682 gal	38%	1118 gal	62%
7	n/a	n/a	n/a	n/a	534 gal	30%	1266 gal	70%
8	n/a	n/a	n/a	n/a	386 gal	21%	1414 gal	79%
9	n/a	n/a	n/a	n/a	238 gal	13%	1562 gal	87%



Liquid Depth Volume Chart

The chart below shows the relationship between tank volume, the float setting elevation, and the liquid depth. The float setting (FS) is measured from the top of the tank to the liquid surface; liquid depth (LD) is measured from the liquid surface to the floor of the tank.



Example:
 If a 1000-gallon tank is filled to a liquid depth of 49 inches, the liquid volume is 1011 gallons. The float setting is 15" and the volume per inch at that setting is 20 gallons.

Liquid depth LD (in.)	1000-gallon tank		
	Float setting FS (in.)	Gallons per inch of depth	Gallons in tank
64	Top	26	1210
63	—	—	—
62	—	—	—
61	—	—	—
60	4	—	1184
59	5	11	1173
58	6	12	1161
57	7	13	1148
56	8	14	1134
55	9	15	1119
54	10	16	1103
53	11*	17	1086
52	12	17	1069
51	13**	19	1050
50	14	19	1031
49	15	20	1011
48	16	20	991
47	17	21	970
46	18	22	948
45	19	22	926
44	20	23	903
43	21	23	880
42	22	23	857
41	23	24	833
40	24	24	809
39	25	24	785
38	26	25	760
37	27	25	735
36	28	26	709
35	29	26	683
34	30	26	657
33	31	26	631
32	32	26	605
31	33	26	579
30	34	26	553
29	35	26	527
28	36	26	501
27	37	26	475
26	38	25	450
25	39	25	425
24	40	24	401
23	41	24	377
22	42	24	353
21	43	23	330
20	44	23	307
19	45	23	284
18	46	22	262
17	47	21	240
16	48	20	219
15	49	20	199
14	50	19	179
13	51	19	160
12	52	17	141
11	53	17	124
10	54	16	107
9	55	15	91
8	56	14	76
7	57	13	62
6	58	12	49
5	59	11	37
4	60	—	26
3	—	—	—
—	—	—	—
—	—	—	—
Floor	64	—	0

* The invert of inlet is typically set 11 inches down from the top of the tank (see Float Setting columns), or in accordance with prevailing state or local regulations.

** For gravity discharge applications, the invert of outlet is typically located 13 inches from the top.

1500-gallon tank			
Liquid depth LD (in.)	Float setting FS (in.)	Gallons per inch of depth	Gallons in tank
--- 64 ---	--- Top ---	--- 19 ---	--- 1800 ---
--- 63 ---	---	---	---
--- 62 ---	---	---	---
--- 61 ---	---	--- 16 ---	---
--- 60 ---	--- 4 ---	--- 17 ---	--- 1765 ---
--- 59 ---	--- 5 ---	--- 18 ---	--- 1748 ---
--- 58 ---	--- 6 ---	--- 21 ---	--- 1730 ---
--- 57 ---	--- 7 ---	--- 22 ---	--- 1709 ---
--- 56 ---	--- 8 ---	--- 23 ---	--- 1687 ---
--- 55 ---	--- 9 ---	--- 24 ---	--- 1664 ---
--- 54 ---	--- 10 ---	--- 25 ---	--- 1640 ---
--- 53 ---	--- 11* ---	--- 26 ---	--- 1615 ---
--- 52 ---	--- 12 ---	--- 28 ---	--- 1589 ---
--- 51 ---	--- 13** ---	--- 29 ---	--- 1561 ---
--- 50 ---	--- 14 ---	--- 30 ---	--- 1532 ---
--- 49 ---	--- 15 ---	--- 31 ---	--- 1502 ---
--- 48 ---	--- 16 ---	--- 32 ---	--- 1471 ---
--- 47 ---	--- 17 ---	--- 32 ---	--- 1439 ---
--- 46 ---	--- 18 ---	--- 33 ---	--- 1407 ---
--- 45 ---	--- 19 ---	--- 34 ---	--- 1374 ---
--- 44 ---	--- 20 ---	--- 35 ---	--- 1340 ---
--- 43 ---	--- 21 ---	--- 35 ---	--- 1305 ---
--- 42 ---	--- 22 ---	--- 36 ---	--- 1270 ---
--- 41 ---	--- 23 ---	--- 36 ---	--- 1234 ---
--- 40 ---	--- 24 ---	--- 36 ---	--- 1198 ---
--- 39 ---	--- 25 ---	--- 36 ---	--- 1162 ---
--- 38 ---	--- 26 ---	--- 37 ---	--- 1126 ---
--- 37 ---	--- 27 ---	--- 37 ---	--- 1089 ---
--- 36 ---	--- 28 ---	--- 37 ---	--- 1052 ---
--- 35 ---	--- 29 ---	--- 38 ---	--- 1015 ---
--- 34 ---	--- 30 ---	--- 38 ---	--- 977 ---
--- 33 ---	--- 31 ---	--- 39 ---	--- 939 ---
--- 32 ---	--- 32 ---	--- 39 ---	--- 900 ---
--- 31 ---	--- 33 ---	--- 38 ---	--- 861 ---
--- 30 ---	--- 34 ---	--- 38 ---	--- 823 ---
--- 29 ---	--- 35 ---	--- 37 ---	--- 785 ---
--- 28 ---	--- 36 ---	--- 37 ---	--- 748 ---
--- 27 ---	--- 37 ---	--- 37 ---	--- 711 ---
--- 26 ---	--- 38 ---	--- 36 ---	--- 674 ---
--- 25 ---	--- 39 ---	--- 36 ---	--- 638 ---
--- 24 ---	--- 40 ---	--- 36 ---	--- 602 ---
--- 23 ---	--- 41 ---	--- 36 ---	--- 566 ---
--- 22 ---	--- 42 ---	--- 35 ---	--- 530 ---
--- 21 ---	--- 43 ---	--- 35 ---	--- 495 ---
--- 20 ---	--- 44 ---	--- 34 ---	--- 460 ---
--- 19 ---	--- 45 ---	--- 33 ---	--- 426 ---
--- 18 ---	--- 46 ---	--- 32 ---	--- 393 ---
--- 17 ---	--- 47 ---	--- 32 ---	--- 361 ---
--- 16 ---	--- 48 ---	--- 31 ---	--- 329 ---
--- 15 ---	--- 49 ---	--- 30 ---	--- 298 ---
--- 14 ---	--- 50 ---	--- 29 ---	--- 268 ---
--- 13 ---	--- 51 ---	--- 28 ---	--- 239 ---
--- 12 ---	--- 52 ---	--- 26 ---	--- 211 ---
--- 11 ---	--- 53 ---	--- 25 ---	--- 185 ---
--- 10 ---	--- 54 ---	--- 24 ---	--- 160 ---
--- 9 ---	--- 55 ---	--- 23 ---	--- 136 ---
--- 8 ---	--- 56 ---	--- 22 ---	--- 113 ---
--- 7 ---	--- 57 ---	--- 21 ---	--- 91 ---
--- 6 ---	--- 58 ---	--- 18 ---	--- 70 ---
--- 5 ---	--- 59 ---	--- 17 ---	--- 52 ---
--- 4 ---	--- 60 ---	--- 16 ---	--- 35 ---
--- 3 ---	---	--- 19 ---	---
---	---	---	---
---	---	---	---
---	---	---	---
--- Floor ---	--- 64 ---	---	--- 0 ---

