

Tables 1 and 2 provide the cumulative storage volumes for the HydroStor HS75 chamber and end cap, as well as the total storage volumes within their respective footprint. These tables can be used to estimate the stage-storage volumes for a retention or detention system. Contact your local Prinsco Representative for more information regarding incremental storage volumes.

**Table 1: HS75 Incremental Storage Volume per Chamber**

Depth of Water in the System in (mm)		Cumulative Single Chamber Storage ft <sup>3</sup> (m <sup>3</sup> )	Cumulative System Storage ft <sup>3</sup> (m <sup>3</sup> )
42 (1,067)		46.36 (1.313)	74.86 (2.120)
41 (1,041)	↑	46.36 (1.313)	73.74 (2.088)
40 (1,016)	Stone	46.36 (1.313)	72.62 (2.056)
39 (991)	Cover	46.36 (1.313)	71.50 (2.025)
38 (965)		46.36 (1.313)	70.38 (1.993)
37 (940)	↓	46.36 (1.313)	69.26 (1.961)
36 (914)		46.36 (1.313)	68.14 (1.930)
35 (889)		46.36 (1.313)	67.02 (1.898)
34 (864)		46.23 (1.309)	65.83 (1.864)
33 (838)		45.93 (1.301)	64.53 (1.827)
32 (813)		45.32 (1.283)	63.04 (1.785)
31 (787)		44.46 (1.259)	61.41 (1.739)
30 (762)		43.45 (1.230)	59.68 (1.690)
29 (737)		42.31 (1.198)	57.87 (1.639)
28 (711)		41.07 (1.163)	56.01 (1.586)
27 (686)		39.74 (1.125)	54.09 (1.532)
26 (660)		38.33 (1.085)	52.12 (1.476)
25 (635)		36.85 (1.043)	50.11 (1.419)
24 (610)		35.30 (1.000)	48.06 (1.361)
23 (584)		33.69 (0.954)	45.98 (1.302)
22 (559)		32.03 (0.907)	43.86 (1.242)
21 (533)		30.31 (0.858)	41.71 (1.181)
20 (508)		28.54 (0.808)	39.53 (1.119)
19 (483)		26.72 (0.757)	37.32 (1.057)
18 (457)		24.87 (0.704)	35.09 (0.994)
17 (432)		22.97 (0.651)	32.83 (0.930)
16 (406)		21.04 (0.596)	30.55 (0.865)
15 (381)		19.07 (0.540)	28.24 (0.800)
14 (356)		17.06 (0.483)	25.92 (0.734)
13 (330)		15.03 (0.426)	23.58 (0.668)
12 (305)		12.97 (0.367)	21.22 (0.601)
11 (279)		10.87 (0.308)	18.85 (0.534)
10 (254)		8.75 (0.248)	16.45 (0.466)
9 (229)		6.60 (0.187)	14.04 (0.398)
8 (203)		4.43 (0.125)	11.62 (0.329)
7 (178)		2.23 (0.063)	9.18 (0.260)
6 (152)	↑	0.00 (0.00)	6.72 (0.190)
5 (127)	↑	0.00 (0.00)	5.60 (0.159)
4 (102)	Stone	0.00 (0.00)	4.48 (0.127)
3 (76)	Foundation	0.00 (0.00)	3.36 (0.095)
2 (51)	↓	0.00 (0.00)	2.24 (0.063)
1 (25)	↓	0.00 (0.00)	1.12 (0.032)

Notes:

- 1) Calculations assume 6" (150 mm) of stone above chambers, 6" (150 mm) stone for foundation, 6" (150 mm) of stone between chambers and 40% stone porosity.
- 2) Add 1.12 ft<sup>3</sup> (0.032 m<sup>3</sup>) of storage for each additional inch of stone foundation or stone cover.
- 3) An additional 9" (225 mm) of stone and storage on the side of perimeter chambers, adjacent to trench walls, is not included in Table 1. Add 0.177 ft<sup>3</sup> (0.005 m<sup>3</sup>) of storage per inch of depth for each perimeter chamber.
- 4) Manifold and related additional storage is not included in Table 1 or 2.



Table 2: HS75 Incremental Storage Volume per End Cap

Depth of Water in the System in (mm)		Cumulative Single End Cap Storage ft <sup>3</sup> (m <sup>3</sup> )	Cumulative System Storage ft <sup>3</sup> (m <sup>3</sup> )
42 (1,067)	↑	5.76 (0.163)	21.46 (0.608)
41 (1,041)	↑	5.76 (0.163)	21.03 (0.596)
40 (1,016)	Stone	5.76 (0.163)	20.61 (0.583)
39 (991)	Cover	5.76 (0.163)	20.18 (0.571)
38 (965)	↓	5.76 (0.163)	19.75 (0.559)
37 (940)	↓	5.76 (0.163)	19.32 (0.547)
36 (914)		5.76 (0.163)	18.89 (0.535)
35 (889)		5.76 (0.163)	18.46 (0.523)
34 (864)		5.76 (0.163)	18.03 (0.511)
33 (838)		5.75 (0.163)	17.60 (0.498)
32 (813)		5.73 (0.162)	17.16 (0.486)
31 (787)		5.68 (0.161)	16.70 (0.473)
30 (762)		5.61 (0.159)	16.23 (0.460)
29 (737)		5.52 (0.156)	15.75 (0.446)
28 (711)		5.42 (0.153)	15.26 (0.432)
27 (686)		5.30 (0.150)	14.76 (0.418)
26 (660)		5.16 (0.146)	14.24 (0.403)
25 (635)		5.01 (0.142)	13.72 (0.389)
24 (610)		4.84 (0.137)	13.20 (0.374)
23 (584)		4.66 (0.132)	12.66 (0.358)
22 (559)		4.46 (0.126)	12.11 (0.343)
21 (533)		4.26 (0.121)	11.56 (0.327)
20 (508)		4.04 (0.114)	11.00 (0.311)
19 (483)		3.81 (0.108)	10.43 (0.295)
18 (457)		3.56 (0.101)	9.86 (0.279)
17 (432)		3.31 (0.094)	9.28 (0.263)
16 (406)		3.05 (0.086)	8.69 (0.246)
15 (381)		2.78 (0.079)	8.10 (0.229)
14 (356)		2.49 (0.071)	7.50 (0.212)
13 (330)		2.21 (0.062)	6.90 (0.195)
12 (305)		1.91 (0.054)	6.29 (0.178)
11 (279)		1.61 (0.045)	5.68 (0.161)
10 (254)		1.30 (0.037)	5.07 (0.143)
9 (229)		0.98 (0.028)	4.45 (0.126)
8 (203)		0.66 (0.019)	3.83 (0.108)
7 (178)		0.33 (0.009)	3.20 (0.091)
6 (152)	↑	0.00 (0.00)	2.57 (0.073)
5 (127)	↑	0.00 (0.00)	2.14 (0.061)
4 (102)	Stone	0.00 (0.00)	1.72 (0.049)
3 (76)	Foundation	0.00 (0.00)	1.29 (0.036)
2 (51)	↓	0.00 (0.00)	0.86 (0.024)
1 (25)	↓	0.00 (0.00)	0.43 (0.012)

## Note:

- Calculations assume 6" (150 mm) of stone above end caps, 6" (152 mm) stone for foundation, 6" (150 mm) of stone between end caps, 12" (300 mm) of stone perimeter in front of end caps, and 40% stone porosity.
- Add 0.43 ft<sup>3</sup> (0.012 m<sup>3</sup>) of storage for each additional inch of stone foundation or stone cover.
- Manifold and related additional storage is not included in Table 1 or 2.