

Table 1 and 2 provide the cumulative storage volumes for the HydroStor HS31 chamber and end cap. These tables can be used to calculate the stage-storage volumes for the retention or detention systems. Contact your local Prinsco Representative for more information regarding the stage storage volumes.

Table 1 – HS31 Incremental Storage Volume per Chamber

Depth of water in the System in. (mm)	Cumulative Single Chamber Storage ft ³ (m ³)	Cumulative Storage for System ft ³ (m ³)	Depth of water in the System in. (mm)	Cumulative Single Chamber Storage ft ³ (m ³)	Cumulative Storage for System ft ³ (m ³)
28 (711)	↑ 15.14 (0.43)	31.24 (0.88)	14 (356)	10.19 (0.29)	17.2 (0.49)
27 (686)	↑ 15.14 (0.43)	30.45 (0.86)	13 (330)	9.05 (0.26)	15.72 (0.45)
26 (660)	Stone 15.14 (0.43)	29.66 (0.84)	12 (305)	7.86 (0.22)	14.21 (0.4)
25 (635)	Cover 15.14 (0.43)	28.87 (0.82)	11 (279)	6.63 (0.19)	12.68 (0.36)
24 (610)	↓ 15.14 (0.43)	28.08 (0.8)	10 (254)	5.37 (0.15)	11.13 (0.32)
23 (584)	↓ 15.14 (0.43)	27.29 (0.77)	9 (229)	4.07 (0.12)	9.56 (0.27)
22 (559)	15.14 (0.43)	26.5 (0.75)	8 (203)	2.74 (0.08)	7.97 (0.23)
21 (533)	15.09 (0.43)	25.68 (0.73)	7 (178)	1.38 (0.04)	6.36 (0.18)
20 (508)	14.89 (0.42)	24.77 (0.7)	6 (152)	↑ 0 (0)	4.74 (0.13)
19 (483)	14.55 (0.41)	23.77 (0.67)	5 (127)	↑ 0 (0)	3.95 (0.11)
18 (457)	13.94 (0.39)	22.61 (0.64)	4 (102)	Stone 0 (0)	3.16 (0.09)
17 (432)	13.16 (0.37)	21.35 (0.6)	3 (76)	Foundation 0 (0)	2.37 (0.07)
16 (406)	12.26 (0.35)	20.02 (0.57)	2 (51)	↓ 0 (0)	1.58 (0.04)
15 (381)	11.26 (0.32)	18.63 (0.53)	1 (25)	↓ 0 (0)	0.79 (0.02)

Note: Calculations assume 6" (150 mm) of stone above chambers, 6" stone for foundation, 6" (150 mm) of stone between chambers and 40% stone porosity. Add 0.79 ft³ (0.02 m³) for each additional inch of stone foundation or cover.



Table 2 – HS31 Incremental Storage Volume per End Cap

Depth of water in the System in. (mm)	Cumulative Single End Cap Storage ft ³ (m ³)	Cumulative Storage for System ft ³ (m ³)	Depth of water in the System in. (mm)	Cumulative Single End Cap Storage ft ³ (m ³)	Cumulative Storage for System ft ³ (m ³)
28 (711)	↑ 0.62 (0.02)	5.19 (0.15)	14 (356)	0.43 (0.01)	2.66 (0.08)
27 (686)	0.62 (0.02)	5.02 (0.14)	13 (330)	0.39 (0.01)	2.46 (0.07)
26 (660)	Stone 0.62 (0.02)	4.85 (0.14)	12 (305)	0.34 (0.01)	2.26 (0.06)
25 (635)	Cover 0.62 (0.02)	4.68 (0.13)	11 (279)	0.29 (0.01)	2.06 (0.06)
24 (610)	↓ 0.62 (0.02)	4.51 (0.13)	10 (254)	0.24 (0.01)	1.86 (0.05)
23 (584)	0.62 (0.02)	4.34 (0.12)	9 (229)	0.18 (0.01)	1.65 (0.05)
22 (559)	0.62 (0.02)	4.17 (0.12)	8 (203)	0.12 (0)	1.44 (0.04)
21 (533)	0.62 (0.02)	4 (0.11)	7 (178)	0.06 (0)	1.23 (0.03)
20 (508)	0.61 (0.02)	3.82 (0.11)	6 (152)	↑ 0 (0)	1.02 (0.03)
19 (483)	0.59 (0.02)	3.63 (0.1)	5 (127)	0 (0)	0.85 (0.02)
18 (457)	0.57 (0.02)	3.44 (0.1)	4 (102)	Stone 0 (0)	0.68 (0.02)
17 (432)	0.54 (0.02)	3.25 (0.09)	3 (76)	Foundation 0 (0)	0.51 (0.01)
16 (406)	0.51 (0.01)	3.06 (0.09)	2 (51)	↓ 0 (0)	0.34 (0.01)
15 (381)	0.47 (0.01)	2.86 (0.08)	1 (25)	0 (0)	0.17 (0)

Note: Calculations assume 6" (150 mm) of stone above chambers, 6" stone for foundation, 6" (150 mm) of stone between chambers and 40% stone porosity. Add 0.17 ft³ (0.005 m³) for each additional inch of stone foundation or cover.