

DATA SHEET

STORMCHAMBER®

PRODUCT DESCRIPTION : Semi-circular retention and infiltration chamber

FUNCTION : Subsurface storage of surface runoff with or without ground water replenishment and possible conveyance to an outlet

MANUFACTURING STANDARD: ASTM F2922 et ASTM F2787

RAW MATERIALS : High-density polyethylene (HDPE) ASTM D3350

TECHNICAL DATA: Structural strength: CAN/CSA - S6 - 02 (CL-625) and AASHTO (H-25 and HS-25)



CHAMBER TECHNICAL DATA TABLE

Features	SC-18		SC-34E		SC-44	
Length - Departure chamber	2565 mm	101,0 in	2616 mm	103,0 in	2273 mm	89,5 in
Installed length -Departure chamber	2438 mm	96,0 in	2464 mm	97,0 in	2089 mm	82,3 in
Length - Intermediate chamber	2527 mm	99,5 in	2565 mm	101,0 in	2223 mm	87,5 in
Installed length - Intermediate chamber	2318 mm	91,3 in	2311 mm	91,0 in	1905 mm	75,0 in
Length - End chamber	2546 mm	100,3 in	2610 mm	102,8 in	2254 mm	88,8 in
Installed length -End chamber	2438 mm	96,0 in	2464 mm	97,0 in	2089 mm	82,3 in
Height	457 mm	18,0 in	864 mm	34,0 in	1118 mm	44,0 in
Width	965 mm	38,0 in	1524 mm	60,0 in	1937 mm	76,3 in
Interior width	832 mm	32,8 in	1397 mm	55,0 in	1746 mm	68,8 in
Volume (chamber only)	0,605 m ³	21,4 ft ³	2,062 m ³	72,8 ft ³	2,662 m ³	94,0 ft ³
Weight	24,1 kg	53,0 lb	45,4 kg	100,0 lb	54,5 kg	120,0 lb
Maximum connection diameter	300 mm	12 in	600 mm	24 in	750 mm	30 in

SYSTEM TECHNICAL DATA TABLE¹

Features	SC-18		SC-34E		SC-44	
Installed volume (min.)	1,153 m ³	40.7 ft ³	3,130 m ³	110,5 ft ³	4,321 m ³	152.6 ft ³
Minimum backfill height ²	457 mm	18,0 in	457 mm	18,0 in	559 mm	22,0 in
Maximum backfill height ³	4,88 m	16,0 ft	4,88 m	16,0 ft	2,44 m	8,0 ft
Height MIN. of net stone under the chamber (bedding) ⁴	152 mm	6,0 in	152 mm	6,0 in	229 mm	9,0 in
Height MIN. of net stone above the chamber ³	152 mm	6,0 in	152 mm	6,0 in	305 mm	12,0 in
Minimum spacing between rows	152 mm	6,0 in	229 mm	9,0 in	229 mm	9,0 in
Min. spacing between chambers and excavation wall ⁵	305 mm	12,0 in	305 mm	12,0 in	305 mm	12,0 in

Notes :

⁽¹⁾ The system corresponds to the chamber installed in the minimum configuration of clear crushed stone.

⁽²⁾ Traffic (load CL-625, H-25 or HS-25) is allowed if the height between the top of the chambers and the final elevation reaches this value at least.

⁽³⁾ For values below the minimum or above the maximum, please contact your Soleno representative.

⁽⁴⁾ The minimum seat is indicated to obtain a functional retention system. The design engineer is responsible for ensuring the stability of the foundation. In addition, for values below the minimum, please contact your Soleno representative.

⁽⁵⁾ The minimum space between the chambers and the excavation wall is filled with clear crushed stone.

NOTE : Values in the tables are approximate and may change without notice.

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STORMCHAMBER® (CONT'D)

MINIMUM RETENTION VOLUMES¹

Assises		SC-18		SC-34E		SC-44	
mm	in	m ³	ft ³	m ³	ft ³	m ³	ft ³
152	6	1,15	40,70	3,13	110,54	-	-
229	9	1,22	43,16	3,25	114,58	4,32	152,61
305	12	1,29	45,61	3,36	118,63	4,44	156,66
381	15	1,36	48,07	3,33	122,67	4,55	160,71
457	18	1,43	50,53	3,59	126,72	4,67	164,76

Note⁽¹⁾: Volumes in the table are based on the minimum clear crushed stone configuration (backfill and spacing) and a 40% void pourcentage in the stone.

MINIMUM EXCAVATION VOLUMES¹

Assises		SC-18		SC-34E		SC-44	
mm	in	m ³	ft ³	m ³	ft ³	m ³	ft ³
152	6	2,43	85,94	5,54	195,48	-	-
229	9	2,61	92,08	5,82	205,59	7,17	253,09
305	12	2,78	98,22	6,11	215,70	7,45	263,22
381	15	2,96	104,36	6,39	225,81	7,74	273,34
457	18	3,13	110,50	6,68	235,93	8,03	283,46

Note⁽¹⁾: Volumes in the table are based on the minimum clear crushed stone configuration and spacing.

MINIMUM VOLUMES OF WASHED CRUSHED STONE¹

Assises		SC-18		SC-34E		SC-44	
mm	in	m ³	ft ³	m ³	ft ³	m ³	ft ³
152	6	1,12	39,71	2,35	82,85	-	-
229	9	1,30	45,85	2,63	92,96	3,52	124,48
305	12	1,47	51,99	2,92	103,07	3,81	134,60
381	15	1,65	58,12	3,20	113,18	4,10	144,72
457	18	1,82	64,26	3,49	123,29	4,38	154,85

Note 1: Volumes in the table are based on the minimum clear crushed stone configuration (backfill and spacing) and a 40% void pourcentage in the stone.

APPLICATIONS : Detention system
Retention system

OPTIONS : Pretreatment unit recommended Multi-stage installation
Maintenance and access well Sediment trap
Flow regulator

INSTALLATION : Visit our website at solen.com for the installation guide.

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