

# StormTech<sup>®</sup> Product Catalog

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# StormTech Subsurface Stormwater Management

The ADS Design Tool 2.0 will help designers, owners and contractors design conceptual layouts and cost estimates.

Now available at <https://designtool.ads-pipe.com>



# StormTech Subsurface Stormwater Management

StormTech has thousands of chamber systems in service throughout the world. All StormTech chambers are designed to meet the most stringent industry performance standards for superior structural integrity. The StormTech system is designed primarily to be used under parking lots, roadways and heavy earth loads saving valuable land and protecting water resources for commercial and municipal applications. In our continuing desire to answer designers' challenges, StormTech has expanded the family of products providing engineers, developers, regulators and contractors with additional site specific flexibility.

## Advanced structural performance for greater long-term reliability

### StormTech developed a state of the art chamber design through:

- Collaboration with world-renowned experts of buried drainage structures to develop and evaluate the structural testing program and product design
- Designing chambers to exceed American Association of State Highway and Transportation Officials (CL-625 and AASHTO) LRFD design specifications for HS-20 live loads and deep burial earth loads
- Subjecting the chambers to rigorous full scale testing, under severe loading conditions to verify the AASHTO safety factors for live load and deep burial applications
- Designing chambers to conform to the product requirements of CSA B184.1 and ASTM F2922, and of CSA B184.2 and ASTM F2418 and design requirements of CSA B184.0 and ASTM F2787 ensuring both the assurance of product quality and safe structural design

### Our chambers provide

- Large capacity that **fits very tight footprints** providing developers with more usable land for development
- A proven attenuation alternative to cumbersome large diameter metal pipe
- Provides the strength of concrete vaults at a very competitive price
- The **robust continuous true elliptical arch design**, which effectively transfers loads to the surrounding backfill providing the long-term safety factors required by AASHTO. Offers developers a cost-effective underground system that will perform as designed for decades.
- **Designed in accordance with the AASHTO LRFD Bridge Design Specifications** providing engineers with a structural performance standard for live and long-term dead loads
- **Polypropylene and polyethylene** resins tested using ASTM standards to ensure long and short-term structural properties
- **Injection molded** for uniform wall thickness and repeatable quality
- Third-party **tested and patented Isolator Row PLUS** for less frequent maintenance, water quality and long-term performance
- Incorporates **traditional manifold/header designs** using conventional hydraulic equations that can easily verify flow equalization and scour velocity
- **Open chamber design** requiring only one chamber model to construct each row assuring ease of construction and no repeating end walls to obstruct access or flow.

StormTech offers a variety of chamber sizes (**SC-160LP, SC-310, DC-780, SC-800, MC-3500, MC-4500 and MC-7200**) so the consulting design engineer can choose the chamber that is best suited for the site conditions and regulatory requirements. StormTech has thousands of chamber systems in service worldwide. We provide plan layout and cost estimate services at no charge for consulting engineers and developers.

# Stormtech Subsurface Stormwater Management



MC-7200

MC-4500

MC-3500

SC-800

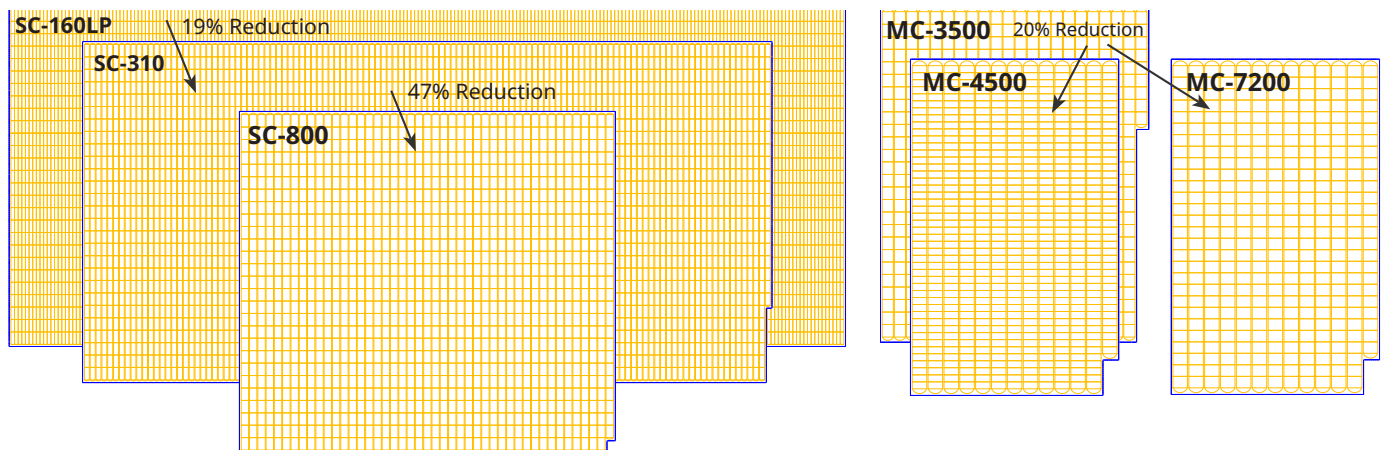
DC-780

SC-310

SC-160LP

| Product Specifications  | MC-7200      | MC-4500      | MC-3500      | SC-800      | DC-780      | SC-310      | SC-160LP    |
|---|--------------|--------------|--------------|-------------|-------------|-------------|-------------|
| Height, mm (in.)  | 1524 (60)    | 1524 (60)    | 45 (1143)    | 33 (838)    | 762 (30)    | 406 (16)    | 305 (12)    |
| Width, mm (in.)   | 2540 (100)   | 2540 (100)   | 77 (1956)    | 51 (1295)   | 1295 (51)   | 864 (34)    | 635 (25)    |
| Length, mm (in.)  | 2120 (83.4)  | 1321 (52.0)  | 90.0 (2286)  | 90.6 (2301) | 2304 (90.7) | 2304 (90.7) | 2304 (90.7) |
| Installed length, mm (in.)                                    | 2010 (79.1)  | 1227 (48.3)  | 86.0 (2184)  | 85.4 (2169) | 2169 (85.4) | 2169 (85.4) | 2169 (85.4) |
| Bare Chamber Storage, m <sup>3</sup> (cf)                     | 4.98 (175.9) | 3.01 (106.5) | 3.11 (109.9) | 1.43 (50.6) | 1.3 (46.2)  | 0.42 (14.7) | 0.19 (6.85) |
| Stone above, mm (in.)   | 229 (9)      | 305 (12)     | 305 (12)     | 152 (6)     | 152 (6)     | 152 (6)     | 152 (6)     |
| Minimum stone below, mm (in.)                                 | 229 (9)      | 229 (9)      | 229 (9)      | 152 (6)     | 229 (9)     | 152 (6)     | 102 (4)     |
| Row spacing, mm (in.)   | 229 (9)      | 229 (9)      | 152 (6)      | 152 (6)     | 152 (6)     | 76 (3)      | N/A         |
| Minimum installed storage, m <sup>3</sup> (cf)                | 1.35 (4.46)  | 4.60 (162.6) | 4.96 (175)   | 2.29 (81)   | 2.20 (78.4) | 0.83 (29.3) | 0.42 (14.9) |
| Storage per unit area, m <sup>3</sup> /m <sup>2</sup> (cf/sf) | 4.46 (1.35)  | 1.35 (4.44)  | 1.07 (3.53)  | 0.72 (2.39) | 0.70 (2.31) | 0.39 (1.3)  | 0.30 (1)    |
| Max cover from ground, mm (in.)                               | 2133 (84)    | 2133 (84)    | 2438 (96)    | 2438 (96)   | 3657 (144)  | 2438 (96)   | 3048 (120)  |

## Example: Footprint Comparison- 3000 m<sup>3</sup> Project (105944 ft<sup>3</sup>)



# StormTech SC-160LP Chamber

Designed to meet the most stringent industry performance standards for superior structural integrity while providing designers with a cost-effective method to save valuable land and protect water resources. The StormTech system is designed primarily to be used under parking lots, thus maximizing land usage for commercial and municipal applications. StormTech chambers can also be used in conjunction with Green Infrastructure, thus enhancing the performance and extending the service life of these practices.

The SC-160LP chamber was developed for infiltration and detention in shallow cover applications

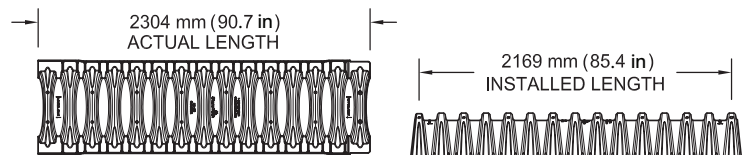
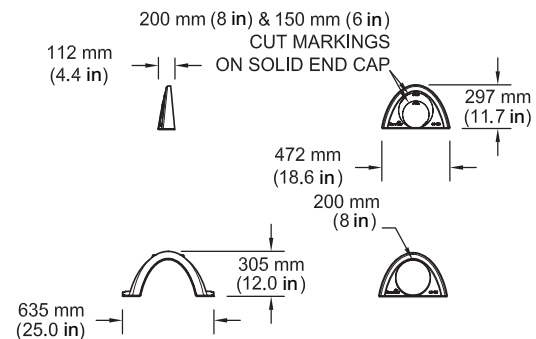
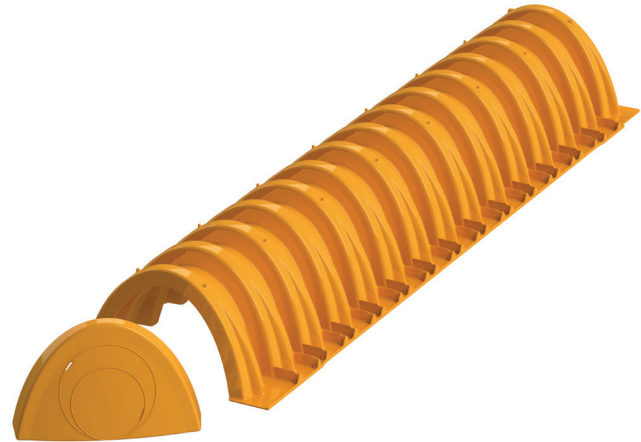
- Only 350 mm (14") required from top of chamber to bottom of pavement
- Only 300 mm (12") tall
- Installs toe to toe—no additional spacing between rows

## SC-160LP Chamber (not to scale)

Nominal Specifications

|                         |  |
|-------------------------|--|
| Size (LxWxH)            | 2170 x 635 x 305 mm<br>(85.4 x 25.0 x 12.0 in) |
| Chamber Storage         | 0.19 m <sup>3</sup> (6.85 ft <sup>3</sup> )    |
| Min. Installed Storage* | 0.42 m <sup>3</sup> (15.0 ft <sup>3</sup> )    |
| Weight                  | 10.9 kg (24.0 lbs)                             |

\*Assumes 150 mm (6 in) stone above, 100 mm (4 in) below and stone between chambers with 40% stone porosity

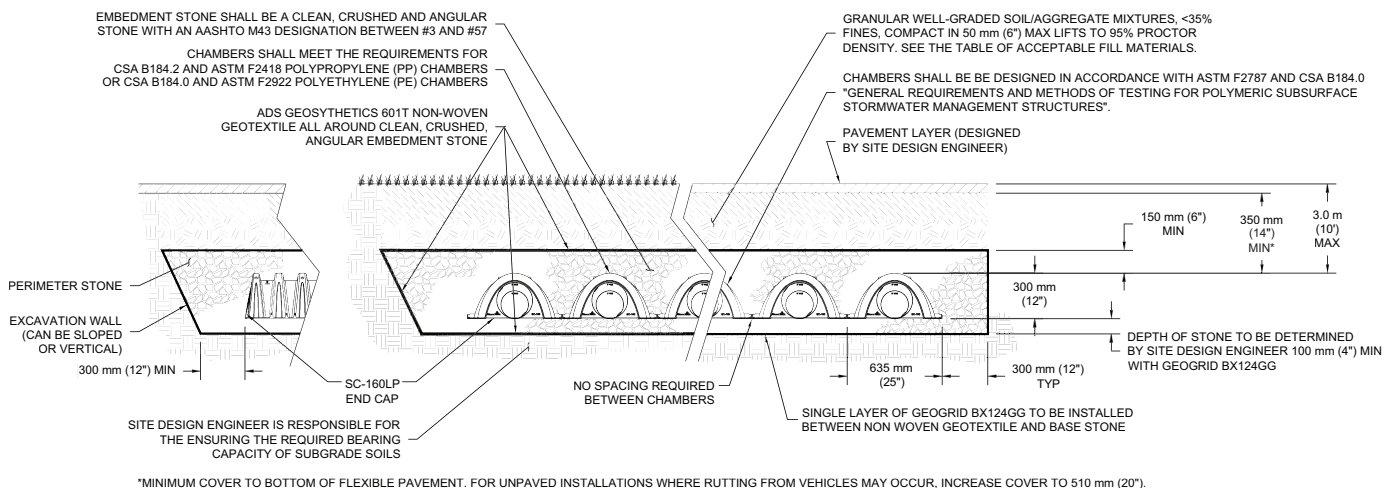


## Shipping

132 chambers/pallet

144 end caps/pallet

12 pallets/truck



The installed chamber system shall provide the load factors specified in the AASHTO LRFD Bridge Design Specifications section 12.12 for earth and live loads, with consideration for impact and multiple Vehicle presences.

**SC-160LP Cumulative Storage Volumes per chamber**  
Assumes 40% Stone Porosity. Calculations are based upon a 100 mm (4") Stone Base Under Chambers.

| Depth of Water in System mm (in.) | Cumulative Chamber Storage m <sup>3</sup> (ft <sup>3</sup> ) | Total System Cumulative Storage m <sup>3</sup> (ft <sup>3</sup> ) |
|-----------------------------------|--|---|
| 559 (22)                          | ↑ 0.194 (6.85)   | 0.424 (14.98)   |
| 533 (21)                          | 0.194 (6.85)   | 0.410 (14.49)   |
| 508 (20)                          | 0.194 (6.85)   | 0.396 (14.00)   |
| 483 (19)                          | Stone Cover ↑ 0.194 (6.85)                                   | 0.382 (13.50)   |
| 457 (18)                          | 0.194 (6.85)   | 0.368 (13.01)   |
| 432 (17)                          | ↓ 0.194 (6.85)   | 0.354 (12.51)   |
| 406 (16)                          | 0.194 (6.85)   | 0.340 (12.02)   |
| 381 (15)                          | 0.193 (6.80)   | 0.325 (11.49)   |
| 356 (14)                          | 0.189 (6.67)   | 0.309 (10.92)   |
| 330 (13)                          | 0.181 (6.38)   | 0.290 (10.25)   |
| 305 (12)                          | 0.168 (5.94)   | 0.269 (9.49)  |
| 279 (11)                          | 0.153 (5.40)   | 0.246 (8.67)  |
| 254 (10)                          | 0.135 (4.78)   | 0.221 (7.81)  |
| 229 (9)                           | 0.116 (4.10)   | 0.196 (6.91)  |
| 203 (8)                           | 0.095 (3.36)   | 0.169 (5.97)  |
| 178 (7)                           | 0.073 (2.58)   | 0.142 (5.01)  |
| 152 (6)                           | 0.050 (1.76)   | 0.114 (4.02)  |
| 127 (5)                           | 0.025 (0.89)   | 0.085 (3.01)  |
| 102 (4)                           | ↑ 0 (0)  | 0.056 (1.98)  |
| 76 (3)                            | Stone Foundation ↑ 0 (0)                                     | 0.042 (1.48)  |
| 51 (2)                            | 0 (0)  | 0.028 (0.99)  |
| 25 (1)                            | ↓ 0 (0)  | 0.014 (0.49)  |

**Note:** Add 0.014 m<sup>3</sup> (0.49 ft<sup>3</sup>) of storage for each additional inch (25 mm) of stone foundation.

**Amount of Stone Per Chamber**

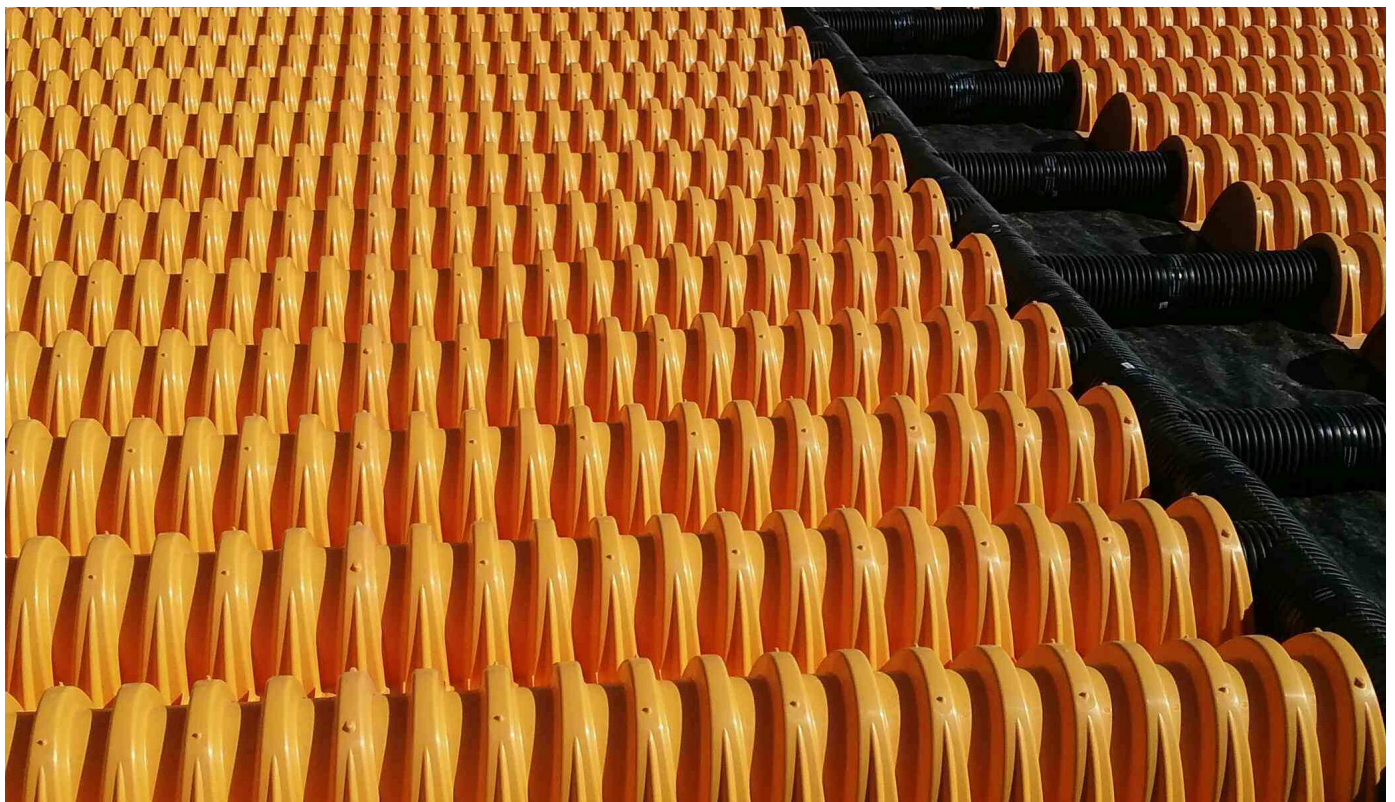
| m <sup>3</sup> (KILOGRAMS) | Stone Foundation Depth |             |             |
|----------------------------|------------------------|-------------|-------------|
|                            | 100 mm                 | 150 mm      | 200 mm      |
| SC-160LP                   | 0.7 (952)              | 0.8 (1.074) | 0.8 (1.197) |
| yds <sup>3</sup> (TONS)    | 4 in                   | 6 in        | 8 in        |
| SC-160LP                   | 0.8 (1.1)              | 0.9 (1.2)   | 0.9 (1.3)   |

**Note:** Assumes 150 mm (6 in) of stone above and only embedment stone between chambers.

**Volume Excavation Per Chamber m<sup>3</sup> (yd<sup>3</sup>)**

| m <sup>3</sup> (Yards <sup>3</sup> ) | Stone Foundation Depth mm (in) |           |           |
|--------------------------------------|--------------------------------|-----------|-----------|
|                                      | 100 (4)                        | 200 (8)   | 300 (12)  |
| SC-160LP                             | 1.1 (1.4)                      | 1.2 (1.6) | 1.3 (1.8) |

**Note:** Assumes no row separation and 350 mm (14 in) of cover. The volume of excavation will vary as depth of cover increases.



# StormTech SC-310 Chamber

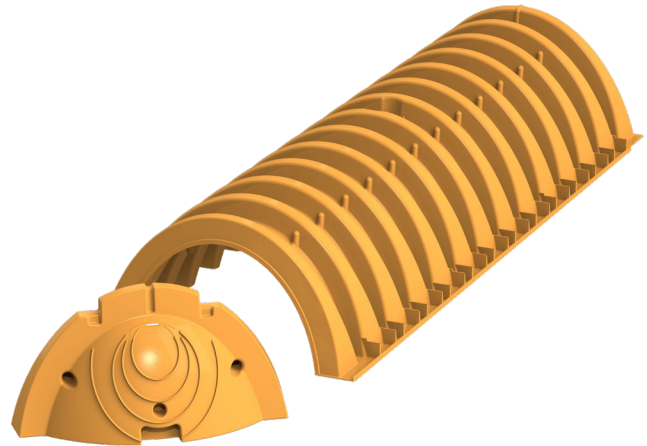
Designed to meet the most stringent industry performance standards for superior structural integrity while providing designers with a cost-effective method to save valuable land and protect water resources. The StormTech system is designed primarily to be used under parking lots, thus maximizing land usage for private (commercial) and public applications. StormTech chambers can also be used in conjunction with Green Infrastructure, thus enhancing the performance and extending the service life of these practices.

## SC-310 Chamber (not to scale)

### Nominal Specifications

|                         |  |
|-------------------------|--|
| Size (L x W x H)        | 2170 x 864 x 406 mm<br>(85.4 x 34.0 x 16.0 in) |
| Chamber Storage         | 0.42 m <sup>3</sup> (14.7 ft <sup>3</sup> )    |
| Min. Installed Storage* | 0.83 m <sup>3</sup> (29.3 ft <sup>3</sup> )    |
| Weight                  | 16.8 kg (37.0 lbs)                             |

\*Assumes 150 mm (6 in) stone above and below chambers, 76 mm (3 in) row spacing and 40% stone porosity.

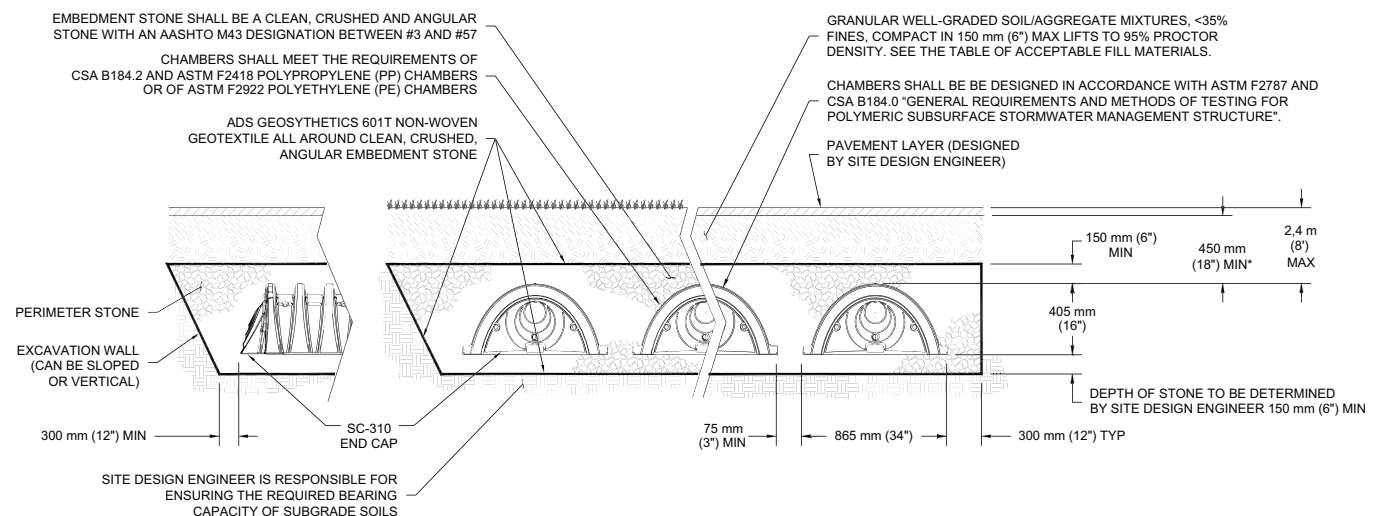
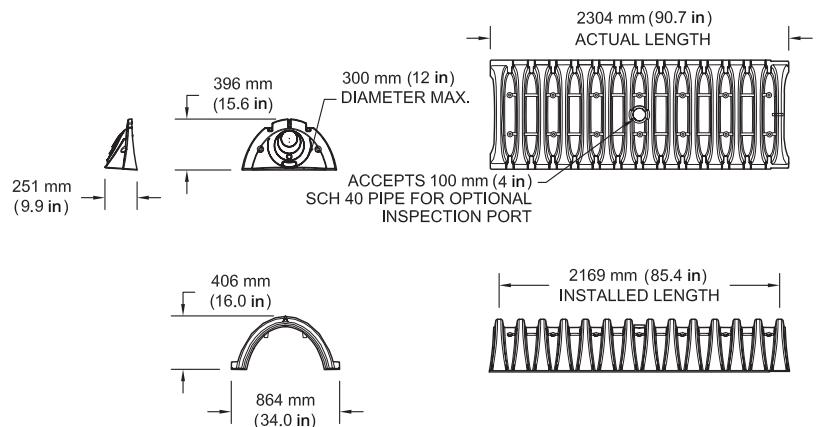


## Shipping

55 chambers/pallet

108 end caps/pallet

18 pallets/truck



The installed chamber system shall provide the load factors specified in the AASHTO LRFD Bridge Design Specifications section 12.12 for earth and live loads, with consideration for impact and multiple VEHICLE presences.

### SC-310 Cumulative Storage Volumes per Chamber

Assumes 40% Stone Porosity. Calculations are Based Upon a 150 mm (6 in) Stone Base Under Chambers.

| Depth of Water in System mm (in) | Cumulative Chamber Storage m <sup>3</sup> (ft <sup>3</sup> ) | Total System Cumulative Storage m <sup>3</sup> (ft <sup>3</sup> ) |
|----------------------------------|--|---|
| 711 (28)                         | 0.416 (14.70)  | 0.831 (29.34)   |
| 686 (27)                         | 0.416 (14.70)  | 0.810 (28.60)   |
| 660 (26)                         | 0.416 (14.70)  | 0.789 (27.87)   |
| 635 (25)                         | 0.416 (14.70)  | 0.769 (27.14)   |
| 610 (24)                         | 0.416 (14.70)  | 0.748 (26.41)   |
| 584 (23)                         | 0.416 (14.70)  | 0.727 (25.68)   |
| 559 (22)                         | 0.416 (14.70)  | 0.707 (24.95)   |
| 533 (21)                         | 0.415 (14.64)  | 0.685 (24.18)   |
| 508 (20)                         | 0.410 (14.49)  | 0.661 (23.36)   |
| 483 (19)                         | 0.403 (14.22)  | 0.636 (22.47)   |
| 457 (18)                         | 0.387 (13.68)  | 0.606 (21.41)   |
| 432 (17)                         | 0.368 (12.99)  | 0.573 (20.25)   |
| 406 (16)                         | 0.345 (12.17)  | 0.539 (19.03)   |
| 381 (15)                         | 0.319 (11.25)  | 0.502 (17.74)   |
| 356 (14)                         | 0.290 (10.23)  | 0.464 (16.40)   |
| 330 (13)                         | 0.260 (9.15)   | 0.425 (15.01)   |
| 305 (12)                         | 0.226 (7.99)   | 0.385 (13.59)   |
| 279 (11)                         | 0.192 (6.78)   | 0.343 (12.13)   |
| 254 (10)                         | 0.156 (5.51)   | 0.301 (10.63)   |
| 229 (9)                          | 0.119 (4.19)   | 0.258 (9.11)  |
| 203 (8)                          | 0.080 (2.83)   | 0.214 (7.56)  |
| 178 (7)                          | 0.041 (1.43)   | 0.169 (5.98)  |
| 152 (6)                          | 0 (0)  | 0.124 (4.39)  |
| 127 (5)                          | 0 (0)  | 0.104 (3.66)  |
| 102 (4)                          | 0 (0)  | 0.083 (2.93)  |
| 76 (3)                           | 0 (0)  | 0.062 (2.19)  |
| 51 (2)                           | 0 (0)  | 0.041 (1.46)  |
| 25 (1)                           | 0 (0)  | 0.021 (0.73)  |

**Note:** Add 0.021 m<sup>3</sup> (0.73 ft<sup>3</sup>) of storage for each additional 25 mm (1 in) of stone foundation.

### Storage Volume Per Chamber

| ft <sup>3</sup> (m <sup>3</sup> ) | Bare Chamber Storage m <sup>3</sup> (ft <sup>3</sup> ) | Chamber and Stone Foundation Depth in. (mm) |             |             |
|-----------------------------------|--|---|-------------|-------------|
|                                   |  | 150 (6)                                     | 300 (12)    | 450 (18)    |
| SC-310                            | 0.42 (14.7)  | 0.83 (29.3)                                 | 0.95 (33.7) | 1.08 (38.1) |

**Note:** Assumes 150 mm (6 in) of stone above chambers, 76 mm (3 in) row spacing and 40% stone porosity.

### Amount of Stone Per Chamber

| m <sup>3</sup> (KILOGRAMS) | Stone Foundation Depth |             |             |
|----------------------------|------------------------|-------------|-------------|
|                            | 150 mm                 | 300 mm      | 450 mm      |
| SC-310                     | 1.0 (1.724)            | 1.3 (2.268) | 1.7 (2.812) |
| yds <sup>3</sup> (TONS)    | 6 in                   | 12 in       | 18 in       |
| SC-310                     | 1.4 (1.9)              | 1.8 (2.5)   | 2.2 (3.1)   |

**Note:** Assumes 150 mm (6 in) of stone above and 76 mm (3 in) row spacing.

### Volume Excavation Per Chamber

| m <sup>3</sup> (yd <sup>3</sup> ) | Stone Foundation Depth mm (in) |           |           |
|-----------------------------------|--------------------------------|-----------|-----------|
|                                   | 150 (6)                        | 300 (12)  | 450 (18)  |
| SC-310                            | 2.0 (2.6)                      | 2.3 (3.0) | 2.6 (3.4) |

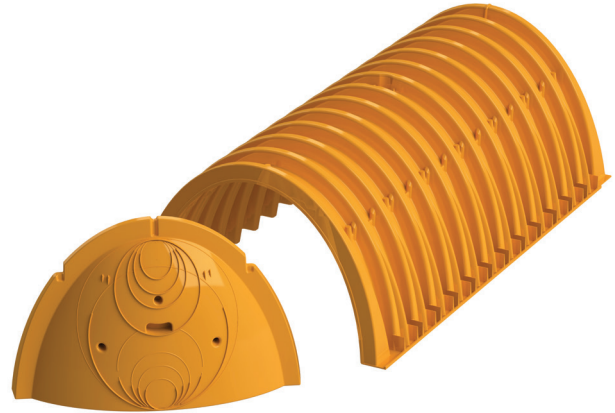
**Note:** Assumes 76 mm (3 in) of row separation and 150 mm (6 in) of stone above the chambers and 400 mm (16 in) of cover. The volume of excavation will vary as depth of cover increases.



# StormTech DC-780 Chamber

Designed to meet the most stringent industry performance standards for superior structural integrity while providing designers with a cost-effective method to save valuable land and protect water resources. The StormTech system is designed primarily to be used under parking lots, thus maximizing land usage for private (commercial) and public applications. StormTech chambers can also be used in conjunction with Green Infrastructure, thus enhancing the performance and extending the service life of these practices.

- 3,6 m (12 ft) Deep Cover Applications
- Designed in accordance with ASTM F2787 and produced to meet the ASTM 2418 product standard.
- AASHTO safety factors provided for AASHTO Design Truck (H20 and deep cover conditions.)



## DC-780 Chamber (not to scale)

### Nominal Specifications

Size (L x W x H) 2169 x 1295 x 762 mm  
(85.4 x 51.0 x 30.0 in)

Chamber Storage 1.30 m<sup>3</sup> (46.2 ft<sup>3</sup>)

Min. Installed Storage\* 2.2 m<sup>3</sup> (78.4 ft<sup>3</sup>)

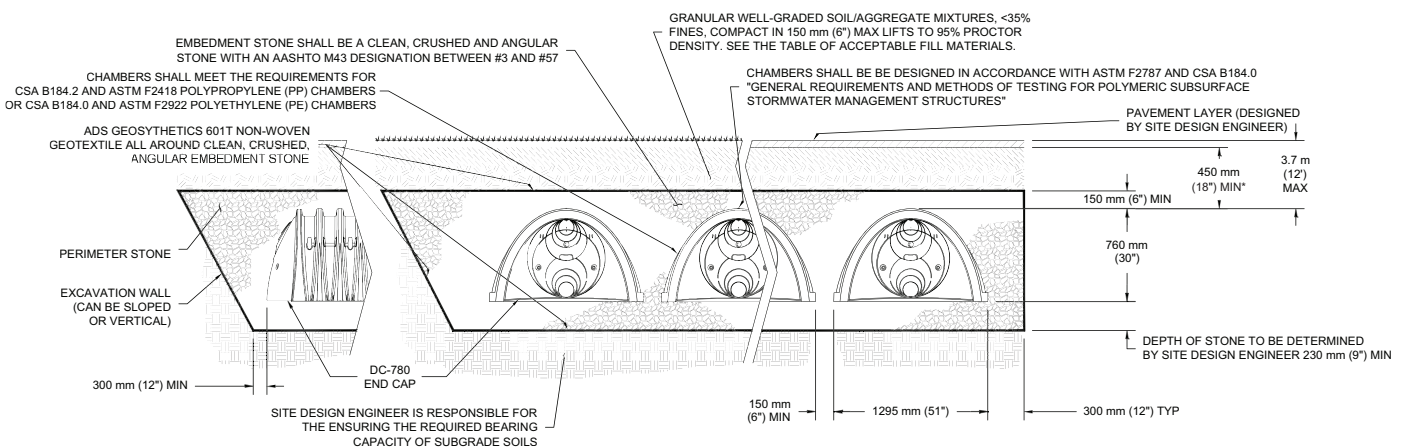
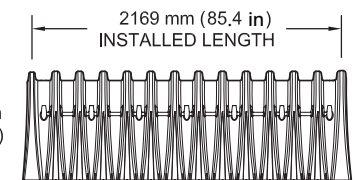
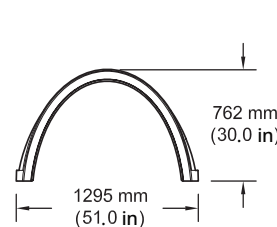
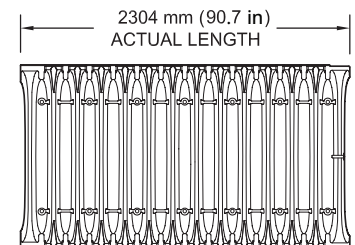
\*Assumes 230 mm (9 in) stone below, 150 mm (6 in) stone above. 150 mm (6 in) row spacing and 40% stone porosity.

## Shipping

25 chambers/pallet

60 end caps/pallet

12 pallets/truck



\*MINIMUM COVER TO BOTTOM OF FLEXIBLE PAVEMENT. FOR UNPAVED INSTALLATIONS WHERE RUTTING FROM VEHICLES MAY OCCUR, INCREASE COVER TO 600 mm (24").

The installed chamber system shall provide the load factors specified in the AASHTO LRFD Bridge Design Specifications section 12.12 for earth and live loads, with consideration for impact and multiple vehicle presences.

### DC-780 Cumulative Storage Volumes Per Chamber

Assumes 40% Stone Porosity. Calculations are Based Upon a 230 mm (9 in) Stone Base Under Chambers.

| Depth of Water in System mm (in) | Cumulative Chamber Storage m <sup>3</sup> (ft <sup>3</sup> ) | Total System Cumulative Storage m <sup>3</sup> (ft <sup>3</sup> ) |
|----------------------------------|--|---|
| 1.143 (45)                       | 1.310 (46.27)  | 2.222 (78.47)   |
| 1.118 (44)                       | 1.310 (46.27)  | 2.190 (77.34)   |
| 1.092 (43)                       | 1.310 (46.27)  | 2.158 (76.21)   |
| 1.067 (42)                       | 1.310 (46.27)  | 2.126 (75.09)   |
| 1.041 (41)                       | 1.310 (46.27)  | 2.094 (73.96)   |
| 1.016 (40)                       | 1.310 (46.27)  | 2.062 (72.83)   |
| 991 (39)                         | 1.310 (46.27)  | 2.030 (71.71)   |
| 965 (38)                         | 1.309 (46.21)  | 1.998 (70.54)   |
| 940 (37)                         | 1.304 (46.04)  | 1.963 (69.32)   |
| 914 (36)                         | 1.296 (45.76)  | 1.926 (68.02)   |
| 889 (35)                         | 1.278 (45.15)  | 1.884 (66.53)   |
| 864 (34)                         | 1.255 (44.34)  | 1.838 (64.91)   |
| 838 (33)                         | 1.228 (43.38)  | 1.790 (63.21)   |
| 813 (32)                         | 1.198 (42.29)  | 1.740 (61.43)   |
| 787 (31)                         | 1.164 (41.11)  | 1.688 (59.59)   |
| 762 (30)                         | 1.128 (39.83)  | 1.634 (57.70)   |
| 737 (29)                         | 1.089 (38.47)  | 1.579 (55.76)   |
| 711 (28)                         | 1.048 (37.01)  | 1.522 (53.76)   |
| 686 (27)                         | 1.005 (35.49)  | 1.464 (51.72)   |
| 660 (26)                         | 0.960 (33.90)  | 1.405 (49.63)   |
| 635 (25)                         | 0.913 (32.24)  | 1.346 (47.52)   |
| 610 (24)                         | 0.865 (30.54)  | 1.285 (45.36)   |
| 584 (23)                         | 0.815 (28.77)  | 1.223 (43.18)   |
| 559 (22)                         | 0.763 (26.96)  | 1,160 (40.97)   |
| 533 (21)                         | 0.711 (25.10)  | 1.096 (38.72)   |
| 508 (20)                         | 0.657 (23.19)  | 1.032 (36.45)   |
| 483 (19)                         | 0.602 (21.25)  | 0.967 (34.16)   |
| 457 (18)                         | 0.545 (19.26)  | 0.902 (31.84)   |
| 432 (17)                         | 0.488 (17.24)  | 0.835 (29.50)   |
| 406 (16)                         | 0.430 (15.19)  | 0.769 (27.14)   |
| 381 (15)                         | 0.371 (13.10)  | 0.701 (24.76)   |
| 356 (14)                         | 0.311 (10.98)  | 0.633 (22.36)   |
| 330 (13)                         | 0.250 (8.83)   | 0.565 (19.95)   |
| 305 (12)                         | 0.189 (6.66)   | 0.496 (17.52)   |
| 279 (11)                         | 0.126 (4.46)   | 0.427 (15.07)   |
| 254 (10)                         | 0.064 (2.24)   | 0.357 (12.61)   |
| 229 (9)                          | 0 (0)  | 0.287 (10.14)   |
| 203 (8)                          | 0 (0)  | 0.255 (9.01)  |
| 178 (7)                          | 0 (0)  | 0.223 (7.89)  |
| 152 (6)                          | 0 (0)  | 0.191 (6.76)  |
| 127 (5)                          | 0 (0)  | 0.160 (5.63)  |
| 102 (4)                          | 0 (0)  | 0.128 (4.51)  |
| 76 (3)                           | 0 (0)  | 0.096 (3.38)  |
| 51 (2)                           | 0 (0)  | 0.064 (2.25)  |
| 25 (1)                           | 0 (0)  | 0.032 (1.13)  |

**Note:** Add 0.032 m<sup>3</sup> (1.13 ft<sup>3</sup>) of storage for each additional 25 mm (1 in) of stone foundation.

### Storage Volume Per Chamber

| m <sup>3</sup> (ft <sup>3</sup> ) | Bare Chamber Storage m <sup>3</sup> (ft <sup>3</sup> ) | Chamber and Stone Foundation Depth mm (in.) |            |            |
|-----------------------------------|--|---|------------|------------|
|                                   |  | 230 (9)                                     | 300 (12)   | 450 (18)   |
| DC-780                            | 1.3 (46.2)   | 2.2 (78.4)                                  | 2.3 (81.8) | 2.5 (88.6) |

**Note:** Assumes 40% porosity for the stone, the bare chamber volume, 150 mm (6 in) of stone above, and 150 mm (6 in) row spacing.

### Amount of Stone Per Chamber

| m <sup>3</sup> (KILOGRAMS) | Stone Foundation Depth |             |             |
|----------------------------|------------------------|-------------|-------------|
|                            | 230 mm                 | 300 mm      | 450 mm      |
| DC-780                     | 2.3 (3.810)            | 2.5 (4.264) | 3.0 (5.080) |
| yd <sup>3</sup> (TONS)     | 9 in                   | 12 in       | 18 in       |
| DC-780                     | 3.0 (4.2)              | 3.3 (4.7)   | 3.9 (5.6)   |

**Note:** Assumes 150 mm (9 in) of stone above, and between chambers.

### Volume Excavation Per Chamber

| m <sup>3</sup> (yd <sup>3</sup> ) | Stone Foundation Depth mm (in.) |           |           |
|-----------------------------------|---------------------------------|-----------|-----------|
|                                   | 230 (9)                         | 300 (12)  | 450 (18)  |
| DC-780                            | 4.5 (5.9)                       | 4.8 (6.3) | 5.3 (6.9) |

**Note:** Assumes 150 mm (6 in) separation between chamber rows and 450 mm (18 in) of cover. The volume of excavation will vary as depth of cover increases.



# StormTech SC-800 Chamber

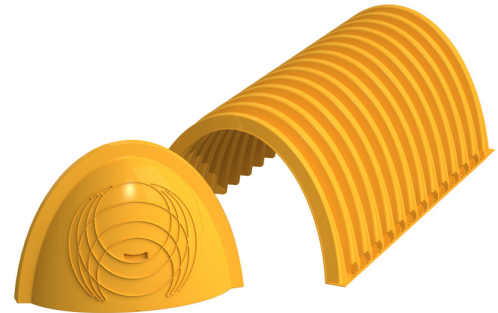
Designed to meet the most stringent industry performance standards for superior structural integrity while providing designers with a cost-effective method to save valuable land and protect water resources. The StormTech system is designed primarily to be used under parking lots, thus maximizing land usage for private (commercial) and public applications. StormTech chambers can also be used in conjunction with Green Infrastructure, thus enhancing the performance and extending the service life of these practices.

## StormTech SC-800 Chamber (not to scale)

### Nominal Specifications

|                         |   |
|-------------------------|---|
| Size (L x W x H)        | 2169 x 1295 x 838 mm<br>(85.4 x 51 x 33 in) |
| Chamber Storage         | 1.43 m <sup>3</sup> (50.6 ft <sup>3</sup> ) |
| Min. Installed Storage* | 2.29 m <sup>3</sup> (81.0 ft <sup>3</sup> ) |
| Weight                  | 37.1 kg (81.8 lbs)                          |

\*Assumes 150 mm (6 in) stone above, below and between chambers and 40% stone porosity.

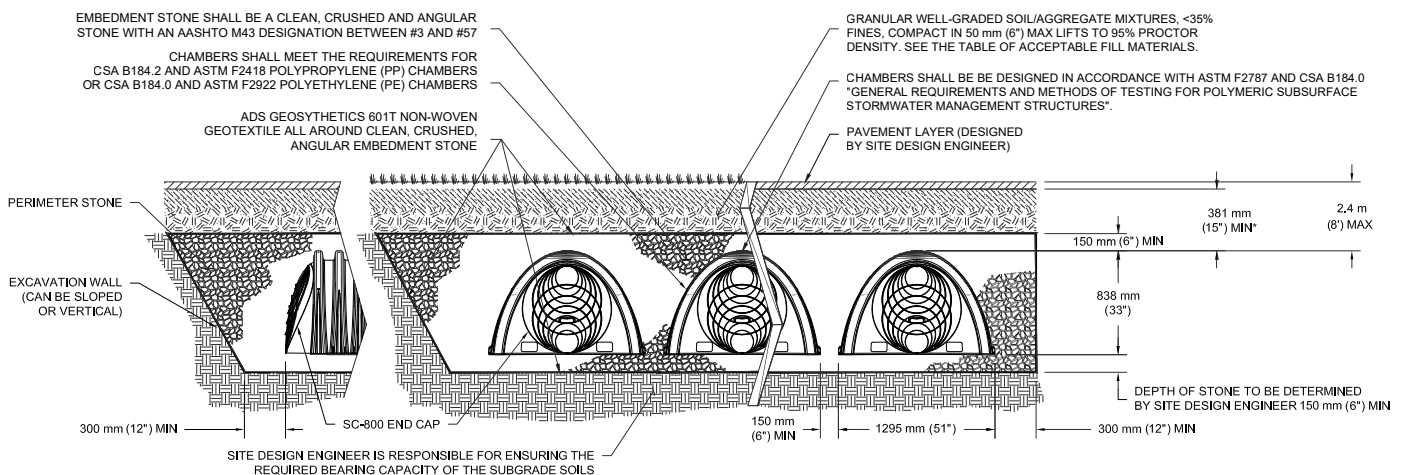
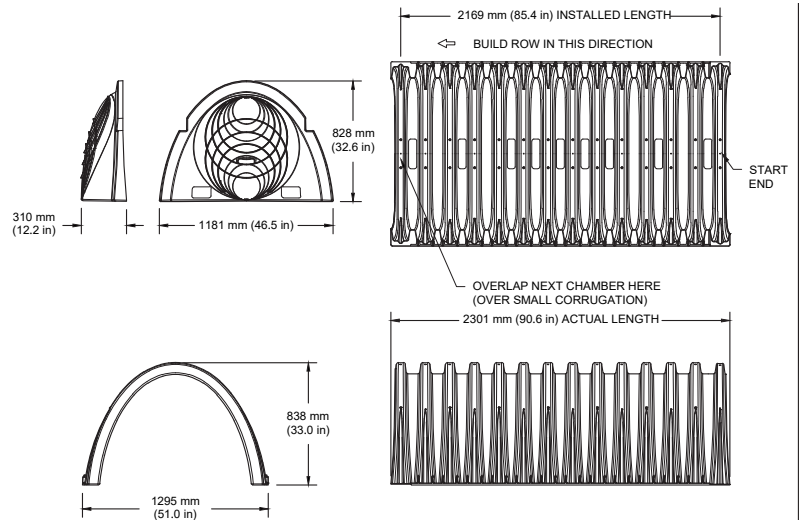


## Shipping

30 chambers/pallet

60 end caps/pallet

12 pallets/truck



\*MINIMUM COVER TO BOTTOM OF FLEXIBLE PAVEMENT. FOR UNPAVED INSTALLATIONS WHERE RUTTING FROM VEHICLES MAY OCCUR, INCREASE COVER TO 533 mm (21").

The installed chamber system shall provide the load factors specified in the AASHTO LRFD Bridge Design Specifications section 12.12 for earth and live loads, with consideration for impact and multiple vehicle presences.

### Cumulative Storage Volumes Per Chamber

Assumes 40% Stone Porosity. Calculations are Based Upon a 150 mm (6 in) Stone Base Under Chambers.

| Depth of Water in System mm (in) | Cumulative Chamber Storage m <sup>3</sup> (ft <sup>3</sup> ) | Total System Cumulative Storage m <sup>3</sup> (ft <sup>3</sup> ) |
|----------------------------------|--|---|
| 1143 (45)                        | ↑ 1.433 (50.62)  | 2.296 (81.08)   |
| 1118 (44)                        | 1.433 (50.62)  | 2.264 (79.96)   |
| 1092 (43)                        | Stone Cover ↑ 1.433 (50.62)                                  | 2.232 (78.83)   |
| 1067 (42)                        | 1.433 (50.62)  | 2.200 (77.70)   |
| 1041 (41)                        | ↓ 1.433 (50.62)  | 2.168 (76.57)   |
| 1016 (40)                        | 1.433 (50.62)  | 2.136 (75.44)   |
| 991 (39)                         | 1.433 (50.62)  | 2,104 (74.31)   |
| 965 (38)                         | 1.431 (50.55)  | 2.071 (73.14)   |
| 940 (37)                         | 1.426 (50.35)  | 2.036 (71.90)   |
| 914 (36)                         | 1.418 (50.07)  | 1.999 (70.60)   |
| 889 (35)                         | 1.403 (49.56)  | 1.959 (69.17)   |
| 864 (34)                         | 1.382 (48.82)  | 1.914 (67.60)   |
| 838 (33)                         | 1.357 (47.93)  | 1.867 (65.94)   |
| 813 (32)                         | 1.328 (46.91)  | 1.818 (64.20)   |
| 787 (31)                         | 1.297 (45.79)  | 1.767 (62.40)   |
| 762 (30)                         | 1.262 (44.58)  | 1.715 (60.55)   |
| 737 (29)                         | 1.226 (43.28)  | 1.661 (58.65)   |
| 711 (28)                         | 1.187 (41.91)  | 1.606 (56.70)   |
| 686 (27)                         | 1.146 (40.47)  | 1.549 (54.71)   |
| 660 (26)                         | 1.103 (38.96)  | 1.492 (52.68)   |
| 635 (25)                         | 1.059 (37.40)  | 1.433 (50.61)   |
| 610 (24)                         | 1.013 (35.78)  | 1.374 (48.51)   |
| 584 (23)                         | 0.966 (34.10)  | 1.313 (46.38)   |
| 559 (22)                         | 0.917 (32.38)  | 1.252 (44.22)   |
| 533 (21)                         | 0.867 (30.61)  | 1.190 (42.03)   |
| 508 (20)                         | 0.816 (28.80)  | 1.128 (39.82)   |
| 483 (19)                         | 0.763 (26.95)  | 1.064 (37.58)   |
| 457 (18)                         | 0.710 (25.06)  | 1.000 (35.32)   |
| 432 (17)                         | 0.655 (23.13)  | 0.936 (33.04)   |
| 406 (16)                         | 0.599 (21.17)  | 0.870 (30.74)   |
| 381 (15)                         | 0.543 (19.17)  | 0.805 (28.42)   |
| 356 (14)                         | 0.485 (17.14)  | 0.739 (26.08)   |
| 330 (13)                         | 0.427 (15.09)  | 0.672 (23.72)   |
| 305 (12)                         | 0.368 (13.00)  | 0.604 (21.34)   |
| 279 (11)                         | 0.308 (10.89)  | 0.537 (18.95)   |
| 254 (10)                         | 0.248 (8.76)   | 0.468 (16.54)   |
| 229 (9)                          | 0.187 (6.60)   | 0.400 (14.12)   |
| 203 (8)                          | 0.125 (4.42)   | 0.331 (11.69)   |
| 178 (7)                          | 0.063 (2.22)   | 0.262 (9.24)  |
| 152 (6)                          | ↑ 0 (0)  | 0.192 (6.78)  |
| 127 (5)                          | 0 (0)  | 0.160 (5.65)  |
| 102 (4)                          | Stone Foundation ↑ 0 (0)                                     | 0.128 (4.52)  |
| 76 (3)                           | 0 (0)  | 0.096 (3.39)  |
| 51 (2)                           | ↓ 0 (0)  | 0.064 (2.26)  |
| 25 (1)                           | 0 (0)  | 0.032 (1.13)  |

**Note:** Add 0.032 m<sup>3</sup> (1.13 ft<sup>3</sup>) of storage for each additional inch (25 mm) of stone foundation.

### Storage Volume Per Chamber m<sup>3</sup> (ft<sup>3</sup>)

|                | Bare Chamber Storage m <sup>3</sup> (ft <sup>3</sup> ) | Chamber and Stone Foundation Depth mm (in) |             |            |
|----------------|--|--|-------------|------------|
|                |  | 6 (150)                                    | 12 (300)    | 18 (450)   |
| SC-800 Chamber | 50.6 (1.43)  | 81.0 (2.29)                                | 87.8 (2.48) | 94.6 (2.6) |

**Note:** Assumes 150 mm (6 in) stone above chambers, 150 mm (6 in) row spacing and 40% stone porosity.

### Amount of Stone Per Chamber

| m <sup>3</sup> (KILOGRAMS) | Stone Foundation Depth |            |            |
|----------------------------|------------------------|------------|------------|
|                            | 150 mm                 | 300 mm     | 450 mm     |
| SC-800                     | 2.2 (3580)             | 2.6 (4380) | 3.1 (5170) |
| yds <sup>3</sup> (TONS)    | 150 mm                 | 300 mm     | 450 mm     |
| SC-800                     | 2.8 (3.9)              | 3.4 (4.8)  | 4.1 (5.7)  |

**Note:** Assumes 150 mm (6 in) of stone above and between chambers.

### Volume Excavation Per Chamber m<sup>3</sup> (yd<sup>3</sup>)

|        | Stone Foundation Depth mm (in) |           |           |
|--------|--------------------------------|-----------|-----------|
|        | 150 (6)                        | 300 (12)  | 450 (18)  |
| SC-800 | 4.3 (5.6)                      | 4.8 (6.3) | 5.3 (6.9) |

**Note:** Assumes 150 mm (6 in) of row separation and 375 mm (15 in) of cover. The volume of excavation will vary as depth of cover increases.

# StormTech MC-3500 Chamber

Designed to meet the most stringent industry performance standards for superior structural integrity while providing designers with a cost-effective method to save valuable land and protect water resources. The StormTech system is designed primarily to be used under parking lots, thus maximizing land usage for private (commercial) and public applications. StormTech chambers can also be used in conjunction with Green Infrastructure, thus enhancing the performance and extending the service life of these practices.

## MC-3500 Chamber (not to scale)

Nominal Specifications

|                         |  |
|-------------------------|--|
| Size (LxWxH)            | 2286 x 1956 x 1143 mm<br>(90 x 77 x 45 in)   |
| Chamber Storage         | 3.11 m <sup>3</sup> (109.9 ft <sup>3</sup> ) |
| Min. Installed Storage* | 4.96 m <sup>3</sup> (175.0 ft <sup>3</sup> ) |
| Weight                  | 60.8 kg (134 lbs)                            |

\*Assumes a minimum of 300 mm (12 in) of stone above, 230 mm (9 in) of stone below, 150 mm (6 in) of stone between chambers/end caps and 40% stone porosity.

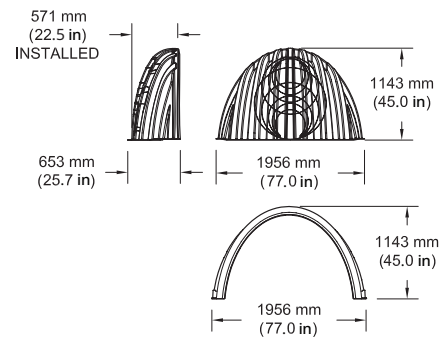


## MC-3500 End Cap (not to scale)

Nominal Specifications

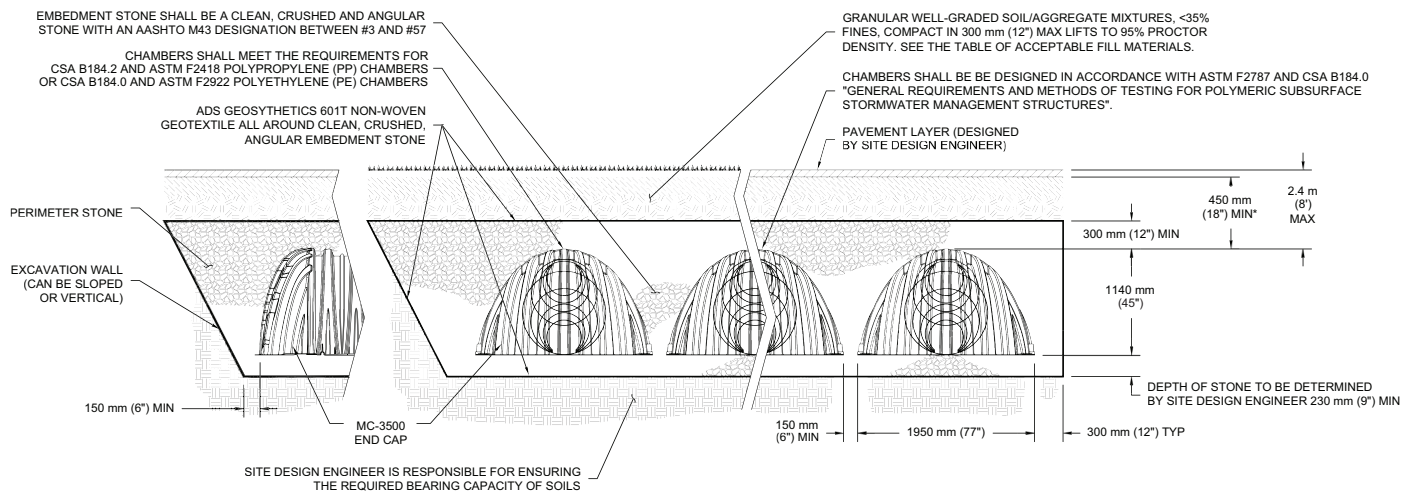
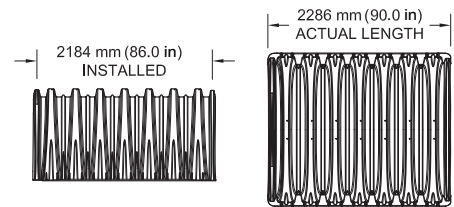
|                         |   |
|-------------------------|---|
| Size (LxWxH)            | 673 x 1803 x 1145 mm<br>(26.5 x 71 x 45.1 in) |
| End Cap Storage         | 0.42 m <sup>3</sup> (14.9 ft <sup>3</sup> )   |
| Min. Installed Storage* | 1.28 m <sup>3</sup> (45.1 ft <sup>3</sup> )   |
| Weight                  | 22.2 kg (49 lbs)                              |

\*Assumes a minimum of 300 mm (12 in) of stone above, 230 mm (9 in) of stone below, 150 mm (6 in) of stone perimeter, 150 mm (6 in) of stone between chambers/end caps and 40% stone porosity.



## Shipping

- 15 chambers/pallet
- 7 end caps/pallet
- 7 pallets/truck



\*MINIMUM COVER TO BOTTOM OF FLEXIBLE PAVEMENT. FOR UNPAVED INSTALLATIONS WHERE RUTTING FROM VEHICLES MAY OCCUR, INCREASE COVER TO 750 mm (30").

### Storage Volume Per Chamber/End Cap m<sup>3</sup> (ft<sup>3</sup>)

|         | Bare Unit Storage m <sup>3</sup> (ft <sup>3</sup> ) | Chamber/End Cap and Stone Volume — Stone Foundation Depth mm (in) |              |              |              |
|---------|---|---|--------------|--------------|--------------|
|         |   | 230 (9)   | 300 (12)     | 375 (15)     | 450 (18)     |
| Chamber | 109.9 (3.11)  | 4.96 (175.0)  | 5.09 (179.9) | 5.24 (184.9) | 5.38 (189.9) |
| End Cap | 0.42 (14.9)   | 1.28 (45.1)   | 1.32 (46.6)  | 1.37 (48.3)  | 1.41 (49.9)  |

**Note:** Assumes 150 mm (6 in) row spacing, 40% stone porosity, 300 mm (12 in) stone above and includes the bare chamber/end cap volume.

### Amount of Stone Per Chamber

| m <sup>3</sup> (KILOGRAMS) | Stone Foundation Depth |             |             |             |
|----------------------------|------------------------|-------------|-------------|-------------|
|                            | 230 mm                 | 300 mm      | 375 mm      | 450 mm      |
| Chamber                    | 4.6 (7 711)            | 5.0 (8 255) | 5.3 (8 800) | 5.7 (9 435) |
| End Cap                    | 2.1 (3 538)            | 2.2 (3 719) | 2.4 (3 901) | 2.5 (4 082) |
| yds <sup>3</sup> (TONS)    | 9 in                   | 12 in       | 15 in       | 18 in       |
| Chamber                    | 6.0 (8.5)              | 6.5 (9.1)   | 6.9 (9.7)   | 7.4 (10.4)  |
| End Cap                    | 2.8 (3.9)              | 2.9 (4.1)   | 3.1 (4.3)   | 3.2 (4.5)   |

**Note:** Assumes 300 mm (12 in) of stone above and 150 mm (6 in) row spacing and 150 mm (6 in) of perimeter stone in front of end caps.

### Volume of Excavation Per Chamber/End Cap m<sup>3</sup> (yd<sup>3</sup>)

|         | Stone Foundation Depth |                |                |                |
|---------|------------------------|----------------|----------------|----------------|
|         | 230 mm (9 in)          | 300 mm (12 in) | 375 mm (15 in) | 450 mm (18 in) |
| Chamber | 9.1 (11.9)             | 9.5 (12.4)     | 9.8 (12.8)     | 10.2 (13.3)    |
| End Cap | 3.1 (4.0)              | 3.2 (4.1)      | 3.3 (4.3)      | 3.4 (4.4)      |

**Note:** Assumes 150 mm (6 in) of separation between chamber rows and 600 mm (24 in) of cover. The volume of excavation will vary as depth of cover increases.



*Special applications will be considered on a project by project basis. Please contact our application department should you have a unique application for our team to evaluate.*



# StormTech MC-4500 Chamber

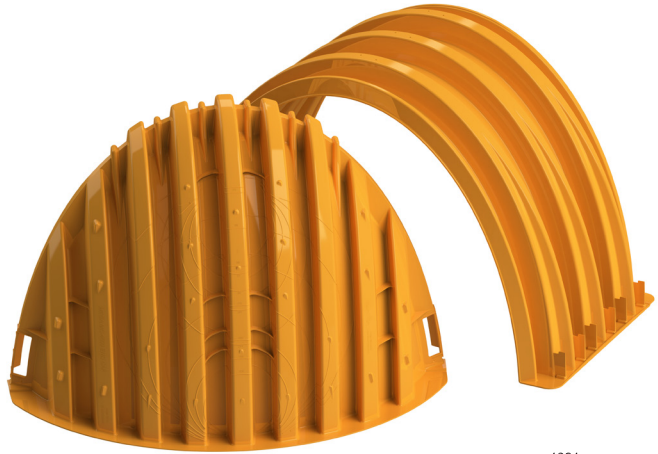
Designed to meet the most stringent industry performance standards for superior structural integrity while providing designers with a cost-effective method to save valuable land and protect water resources. The StormTech system is designed primarily to be used under parking lots, thus maximizing land usage for private (commercial) and public applications. StormTech chambers can also be used in conjunction with Green Infrastructure, thus enhancing the performance and extending the service life of these practices.

## MC-4500 Chamber (not to scale)

Nominal Specifications

|                         |  |
|-------------------------|--|
| Size (LxWxH)            | 1321 x 2540 x 1524 mm<br>(52 x 100 x 60 in)  |
| Chamber Storage         | 3.01 m <sup>3</sup> (106.5 ft <sup>3</sup> ) |
| Min. Installed Storage* | 4.60 m <sup>3</sup> (162.6 ft <sup>3</sup> ) |
| Weight                  | 56.7 kg (125 lbs)                            |

\*Assumes a minimum of 300 mm (12 in) of stone above, 230 mm (9 in) of stone below chambers, 230 mm (9 in) of stone between chambers/end caps and 40% stone porosity.

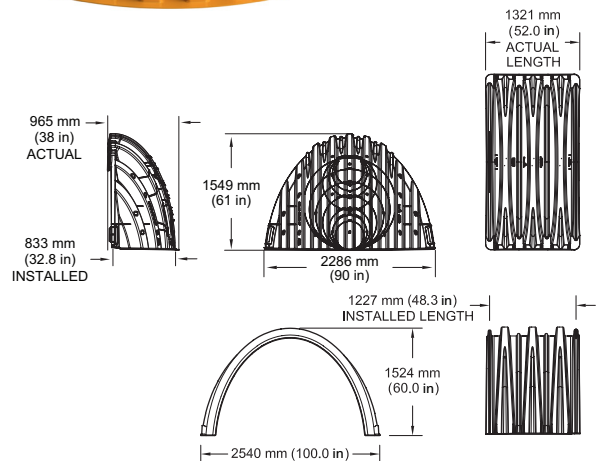


## MC-4500 End Cap (not to scale)

Nominal Specifications

|                         |  |
|-------------------------|--|
| Size (LxWxH)            | 965 x 2 286 x 1 549 mm<br>(38 x 90 x 61 in)  |
| End Cap Storage         | 1.12 m <sup>3</sup> (39.5 ft <sup>3</sup> )  |
| Min. Installed Storage* | 3.26 m <sup>3</sup> (115.3 ft <sup>3</sup> ) |
| Weight                  | 40.8 kg (90.0 lbs)                           |

\*Assumes a minimum of 300 mm (12 in) of stone above, 230 mm (9 in) of stone below, 300 mm (12 in) of stone perimeter, 230 mm (9 in) of stone between chambers/end caps and 40% stone porosity.

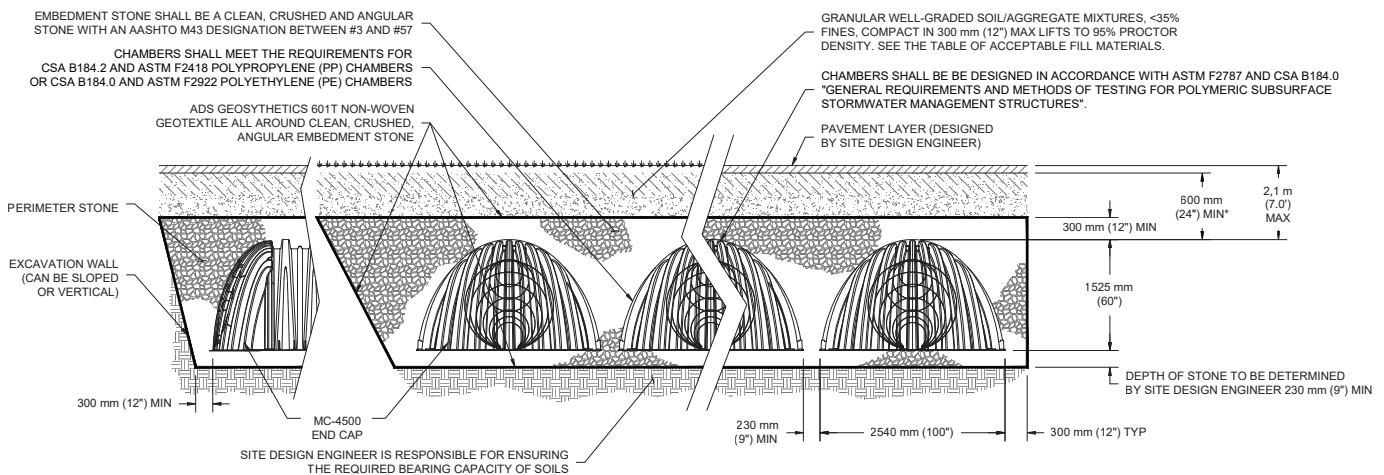


## Shipping

7 chambers/pallet

5 end caps/pallet

11 pallets/truck



\*MINIMUM COVER TO BOTTOM OF FLEXIBLE PAVEMENT. FOR UNPAVED INSTALLATIONS WHERE RUTTING FROM VEHICLES MAY OCCUR, INCREASE COVER TO 750 mm (30").

### Storage Volume Per Chamber/End Cap m<sup>3</sup> (ft<sup>3</sup>)

|         | Bare Unit Storage m <sup>3</sup> (ft <sup>3</sup> ) | Chamber/End Cap and Stone Volume — Stone Foundation Depth mm (in) |              |              |              |
|---------|---|---|--------------|--------------|--------------|
|         |   | 230 (9)   | 300 (12)     | 375 (15)     | 18 (450)     |
| Chamber | 3.02 (106.5)  | 4.60 (162.6)  | 4.71 (166.3) | 4.71 (169.9) | 4.91 (173.6) |
| End Cap | 1.12 (39.5)   | 3.26 (115.3)  | 3.17 (111.9) | 3.45 (121.9) | 3.54 (125.2) |

**Note:** Assumes 230 mm (9 in) row spacing, 40% stone porosity, 300 mm (12 in) stone above and includes the bare chamber/end cap volume. End cap volume assumes 300 mm (12 in) stone perimeter in front of end cap.

### Amount of Stone Per Chamber

| m <sup>3</sup> (KILOGRAMS) | Stone Foundation Depth |             |             |              |
|----------------------------|------------------------|-------------|-------------|--------------|
|                            | 230 mm                 | 300 mm      | 375 mm      | 450 mm       |
| Chamber                    | 4.0 (6 713)            | 4.2 (7 076) | 4.5 (7 529) | 4.7 (7 983)  |
| End Cap                    | 5.3 (8 890)            | 5.5 (9253)  | 5.8 (9 616) | 6.0 (10 069) |
| yd <sup>3</sup> (TONS)     | 9 in                   | 12 in       | 15 in       | 18 in        |
| Chamber                    | 5.2 (7.4)              | 5.5 (7.8)   | 5.9 (8.3)   | 6.2 (8.8)    |
| End Cap                    | 7.0 (9.8)              | 7.3 (10.2)  | 7.6 (10.6)  | 7.9 (11.1)   |

**Note:** Assumes 300 mm (12 in) of stone above and 230 mm (9 in) row spacing and 300 mm (12 in) of perimeter stone in front of end caps.

### Volume of Excavation Per Chamber/End Cap m<sup>3</sup> (yd<sup>3</sup>)

|         | Stone Foundation Depth |                |                |                |
|---------|------------------------|----------------|----------------|----------------|
|         | 230 mm (9 in)          | 300 mm (12 in) | 375 mm (15 in) | 450 mm (18 in) |
| Chamber | 8.0 (10.5)             | 8.3 (10.8)     | 8.5 (11.2)     | 8.8 (11.5)     |
| End Cap | 7.4 (9.7)              | 7.6 (10.0)     | 7.9 (10.3)     | 8.1 (10.6)     |

**Note:** Assumes 230 mm (9 in) of separation between chamber rows, 300 mm (12 in) of perimeter in front of the end caps, and 600 mm (24 in) of cover. The volume of excavation will vary as depth of cover increases.



**Special applications will be considered on a project by project basis. Please contact our application department should you have a unique application for our team to evaluate.**



# StormTech MC-7200 Chamber

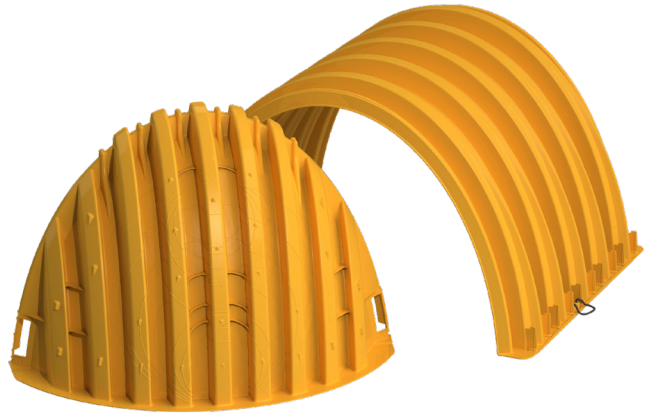
Designed to meet the most stringent industry performance standards for superior structural integrity while providing designers with a cost-effective method to save valuable land and protect water resources. The StormTech system is designed primarily to be used under parking lots, thus maximizing land usage for private (commercial) and public applications. StormTech chambers can also be used in conjunction with Green Infrastructure, thus enhancing the performance and extending the service life of these practices.

## MC-7200 Chamber (not to scale)

Nominal Specifications

|                         |  |
|-------------------------|--|
| Size (LxWxH)            | 2108 x 2540 x 1524 mm<br>(83 x 100 x 60 in)  |
| Chamber Storage         | 4.98 m <sup>3</sup> (175.9 ft <sup>3</sup> ) |
| Min. Installed Storage* | 7.57 m <sup>3</sup> (267.3 ft <sup>3</sup> ) |
| Weight                  | 91.6 kg (202 lbs)                            |

\*Assumes a minimum of 300 mm (12 in) of stone above, 230 mm (9 in) of stone below chambers, 230 mm (9 in) of stone between chambers/end caps and 40% stone porosity.

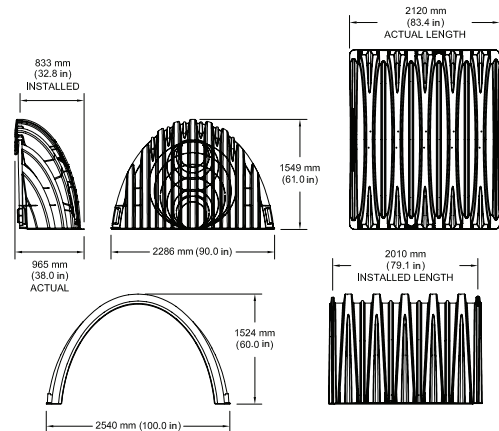


## MC-7200 End Cap (not to scale)

Nominal Specifications

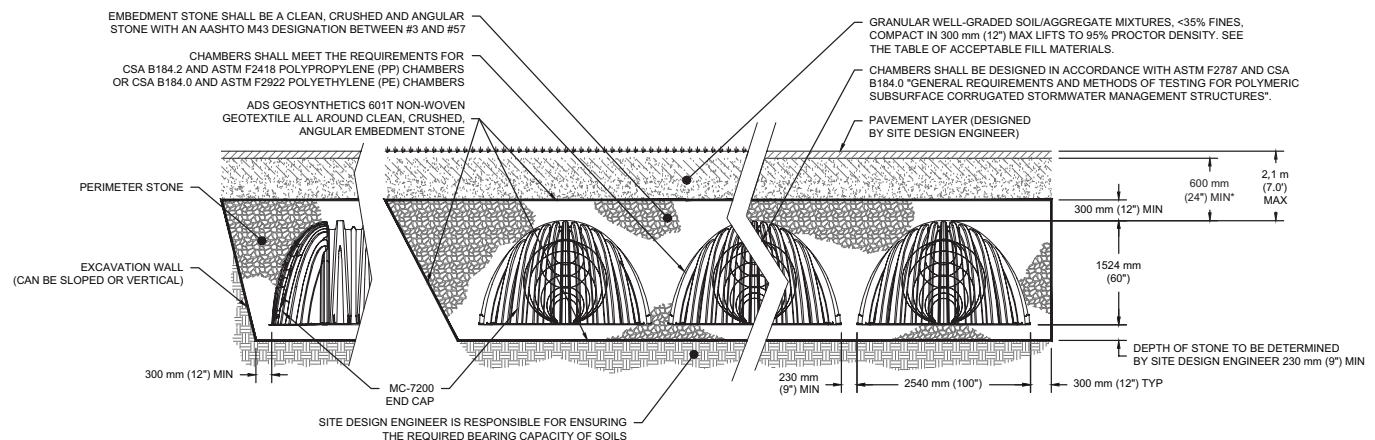
|                         |  |
|-------------------------|--|
| Size (LxWxH)            | 965 x 2 286 x 1 549 mm<br>(38 x 90 x 61 in)  |
| End Cap Storage         | 1.12 m <sup>3</sup> (39.5 ft <sup>3</sup> )  |
| Min. Installed Storage* | 3.26 m <sup>3</sup> (115.3 ft <sup>3</sup> ) |
| Weight                  | 40.8 kg (90.0 lbs)                           |

\*Assumes a minimum of 300 mm (12 in) of stone above, 230 mm (9 in) of stone below, 300 mm (12") of stone perimeter, 230 mm (9 in) of stone between chambers/end caps and 40% stone porosity.



## Shipping

- 7 chambers/pallet
- 5 end caps/pallet
- 6 pallets/truck



\*MINIMUM COVER TO BOTTOM OF FLEXIBLE PAVEMENT. FOR UNPAVED INSTALLATIONS WHERE RUTTING FROM VEHICLES MAY OCCUR, INCREASE COVER TO 750 mm (30").

### Storage Volume Per Chamber

|         | Bare Chamber Storage<br>m <sup>3</sup> (ft <sup>3</sup> ) | Chamber and Stone Foundation Depth |                |                |                |
|---------|---|------------------------------------|----------------|----------------|----------------|
|         |   | 230 mm (9 in)                      | 300 mm (12 in) | 375 mm (15 in) | 450 mm (18 in) |
| Chamber | 4.98 (175.9)  | 7.57 (267.3)                       | 7.74 (273.3)   | 7.91 (279.3)   | 8.08 (285.3)   |
| End Cap | 1.12 (39.5)   | 3.26 (115.3)                       | 3.36 (118.6)   | 3.45 (121.9)   | 3.54 (125.2)   |

**Note:** Assumes 230 mm (9 in) row spacing, 40% stone porosity, 300 mm (12 in) stone above and includes the bare chamber/end cap volume. End cap volume assumes 300 mm (12 in) stone perimeter in front of end cap.

### Amount of Stone Per Chamber

| m <sup>3</sup> (KILOGRAMS) | Stone Foundation Depth |              |              |              |
|----------------------------|------------------------|--------------|--------------|--------------|
|                            | 230 mm                 | 300 mm       | 375 mm       | 450 mm       |
| Chamber                    | 6.5 (10 977)           | 6.9 (11 703) | 7.3 (12 338) | 7.7 (12 973) |
| End Cap                    | 5.3 (8 890)            | 5.5 (9 253)  | 5.8 (9 616)  | 6.0 (10 069) |
| yds <sup>3</sup> (TONS)    | 9 in                   | 12 in        | 15 in        | 18 in        |
| Chamber                    | 8.5 (12.1)             | 9.0 (12.9)   | 9.6 (13.6)   | 10.1 (14.3)  |
| End Cap                    | 7.0 (9.8)              | 7.3 (10.2)   | 7.6 (10.6)   | 7.9 (11.1)   |

**Note:** Assumes 300 mm (12 in) of stone above and 230 mm (9 in) row spacing and 300 mm (12 in) of perimeter stone in front of end caps. 1.42 english tons = 1 yd<sup>3</sup>.

### Volume Excavation Per Chamber m<sup>3</sup> (yd<sup>3</sup>)

|         | Stone Foundation Depth |                |               |                |
|---------|------------------------|----------------|---------------|----------------|
|         | 230 mm (9 in)          | 300 mm (12 in) | 375mm (15 in) | 450 mm (18 in) |
| Chamber | 13.2 (17.2)            | 13.5 (17.7)    | 14.0 (18.3)   | 14.4 (18.8)    |
| End Cap | 7.4 (9.7)              | 7.6 (10.0)     | 7.9 (10.3)    | 8.1 (10.6)     |

**Note:** Assumes 230 mm (9 in) of separation between chamber rows, 300 mm (12 in) of perimeter in front of the end caps, and 600 mm (24 in) of cover. The volume of excavation will vary as depth of cover increases.



# StormTech Isolator Row® Plus

An important component of any Stormwater Pollution Prevention Plan is inspection and maintenance. The StormTech Isolator Row Plus is a technique to inexpensively enhance Total Suspended Solids (TSS) and Total Phosphorus (TP) removal with easy access for inspection and maintenance.

The Isolator Row Plus is a row of StormTech chambers, either SC-160, SC-310, DC-780, SC-800, MC-3500, MC-4500 or MC-7200 models, that has a continuous layer of ADS Plus fabric between the foundation stone and the chambers and is connected to a closely located manhole for easy access. The chambers provide for sediment settling and filtration as stormwater rises in the Isolator Row Plus and passes through the filter fabric. The open bottom chambers allow stormwater to flow out of the chambers. Sediments are captured in the Isolator Row Plus protecting the adjacent stone and chambers storage areas from sediment accumulation.

ADS geotextile fabric is placed between the stone and the Isolator Row Plus chambers. The woven geotextile provides a media for stormwater filtration, a durable surface for maintenance, prevents scour of the underlying stone and remains intact during high pressure jetting.



The Isolator Row Plus is designed to capture the “first flush” runoff and offers the versatility to be sized on a volume basis or a flow-rate basis. An upstream manhole provides access to the Isolator Row Plus and includes a high/low concept such that stormwater flow rates or volumes that exceed the capacity of the Isolator Row Plus bypass through a manifold to the other chambers. This is achieved with an elevated bypass manifold or a high-flow weir. This creates a differential between the Isolator Row Plus row of chambers and the manifold to the rest of the system, thus allowing for settlement time in the Isolator Row Plus. After Stormwater flows through the Isolator Row Plus and into the rest of the chamber system it is either exfiltrated into the soils below or passed at a controlled rate through an outlet manifold and outlet control structure.

The Isolator Row Plus FLAMP™ (patent pending) is a flared end ramp apparatus attached to the inlet pipe on the inside of the chamber end cap. The FLAMP provides a smooth transition from pipe invert to fabric bottom. It is configured to improve chamber function performance by enhancing outflow of solid debris that would otherwise collect at the chamber’s end. It also serves to improve the fluid and solid flow into the access pipe during maintenance and cleaning and to guide cleaning and inspection equipment back into the inlet pipe when complete.

The Isolator Row Plus may be part of a treatment train system. The treatment train design and pretreatment device selection by the design engineer is often driven by regulatory requirements. Whether pretreatment is used or not, StormTech recommend using the Isolator Row Plus to minimize maintenance requirements and maintenance costs.

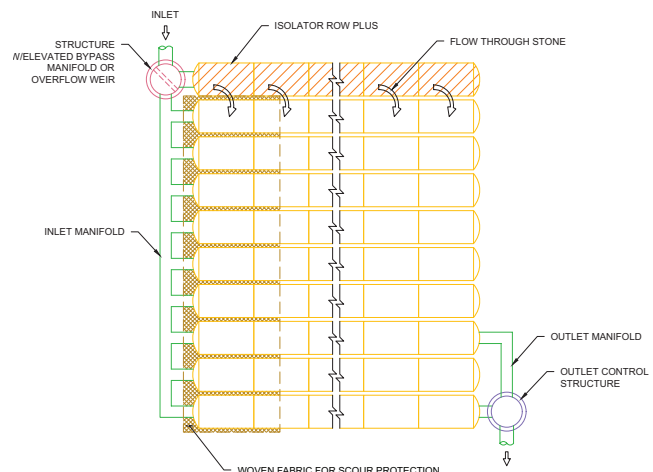
**Note:** See the StormTech Design Manual for detailed information on designing inlets for a StormTech system, including the Isolator Row Plus.

## Inspection

The frequency of inspection and maintenance varies by location. A routine inspection schedule needs to be established for each individual location based upon site specific variables. The type of land use (i.e. industrial, commercial, residential), anticipated pollutant load, percent imperviousness, climate, etc. all play a critical role in determining the actual frequency of inspection and maintenance practices.

At a minimum, StormTech recommends annual inspections. Initially, the Isolator Row Plus should be inspected every 6 months for the first year of operation. For subsequent years, the inspection should be adjusted based upon previous observation of sediment deposition.

## StormTech Isolator Row Plus Schematic (not to scale)



The Isolator Row Plus incorporates a combination of standard manhole(s) and strategically located inspection ports (as needed). The inspection ports allow for easy access to the system from the surface, eliminating the need to perform a confined space entry for inspection purposes.

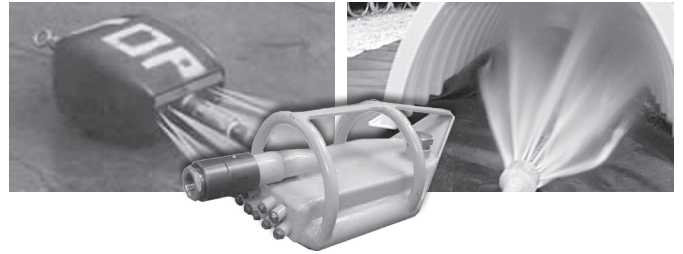
If upon visual inspection it is found that sediment has accumulated, a stadia rod should be inserted to determine the depth of sediment. When the average depth of sediment exceeds 75 mm (3 in) throughout the length of the Isolator Row Plus, clean-out should be performed.

### Maintenance

The Isolator Row Plus was designed to reduce the cost of periodic maintenance. By “isolating” sediments to just one row, costs are dramatically reduced by eliminating the need to clean out each row of the entire storage bed. If inspection indicates the potential need for maintenance, access is provided via a manhole(s) located on the end(s) of the row for cleanout. If entry into the manhole is required, please follow local and OSHA rules for a confined space entries.

Maintenance is accomplished with the JetVac process. The JetVac process utilizes a high pressure water nozzle to propel itself down the Isolator Row Plus while scouring and suspending sediments. As the nozzle is retrieved, the captured pollutants are flushed back into the manhole for vacuuming. Most sewer and pipe maintenance companies have vacuum/JetVac combination vehicles. Selection of an appropriate JetVac nozzle will improve maintenance efficiency. Fixed nozzles designed for culverts or large diameter pipe cleaning are preferable. Rear facing jets with an effective spread of at least 1145 mm (45 in) are best. StormTech recommends a maximum nozzle pressure of 95.7 kPa (200 psi) be utilized during cleaning. JetVac reels

can vary in length. For ease of maintenance, ADS recommends Isolator Row Plus lengths up to 61 m (200 ft). The JetVac process shall only be performed on StormTech Isolator Row Plus that have ADS Plus Fabric (as specified by StormTech) over their angular base



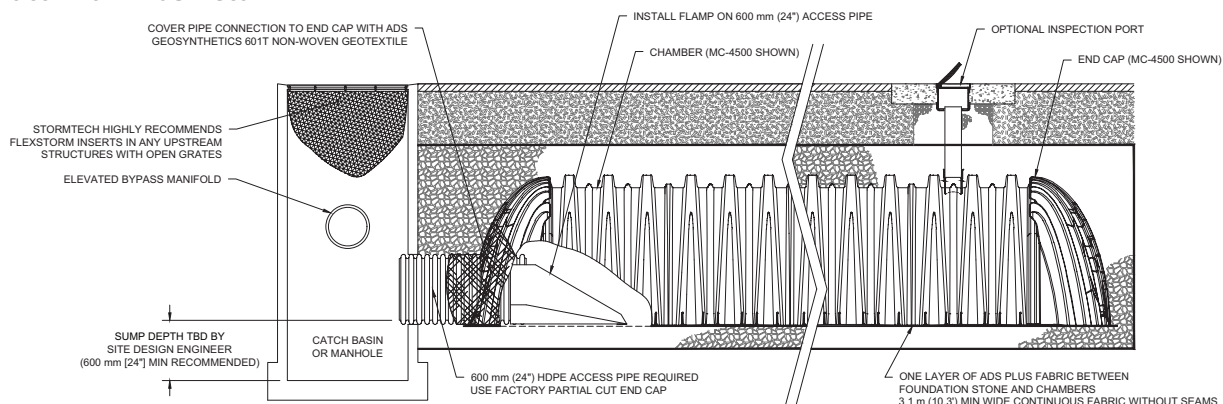
**Examples of culvert cleaning nozzles appropriate for Isolator Row PLUS maintenance. (These are not StormTech products.)**

stone.

A Flamp (fared end ramp) is attached to the inlet pipe on the inside of the chamber end cap to provide a smooth transition from pipe invert to fabric bottom. It is configured to improve chamber function performance over time by distributing sediment and debris that would otherwise collect at the inlet. It also serves to improve the fluid and solid flow back into the inlet pipe during maintenance and cleaning, and to guide cleaning and inspection equipment back into the inlet pipe when complete.



### Isolator Row Plus Detail



**Note:** Non-woven fabric is only required over the inlet pipe connection into the end cap for SC-160LP, DC-780, MC-3500, MC-4500 and MC-7200 chamber models and is not required over the entire Isolator Row PLUS.

# StormTech Design Tool

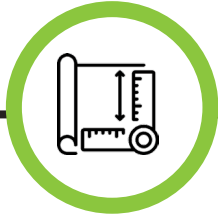
Initial layouts and reports provide a visual understanding of various options and is the first step to choosing the design direction and evaluating potential cost.



Generate quick layouts



Import site plans & maps



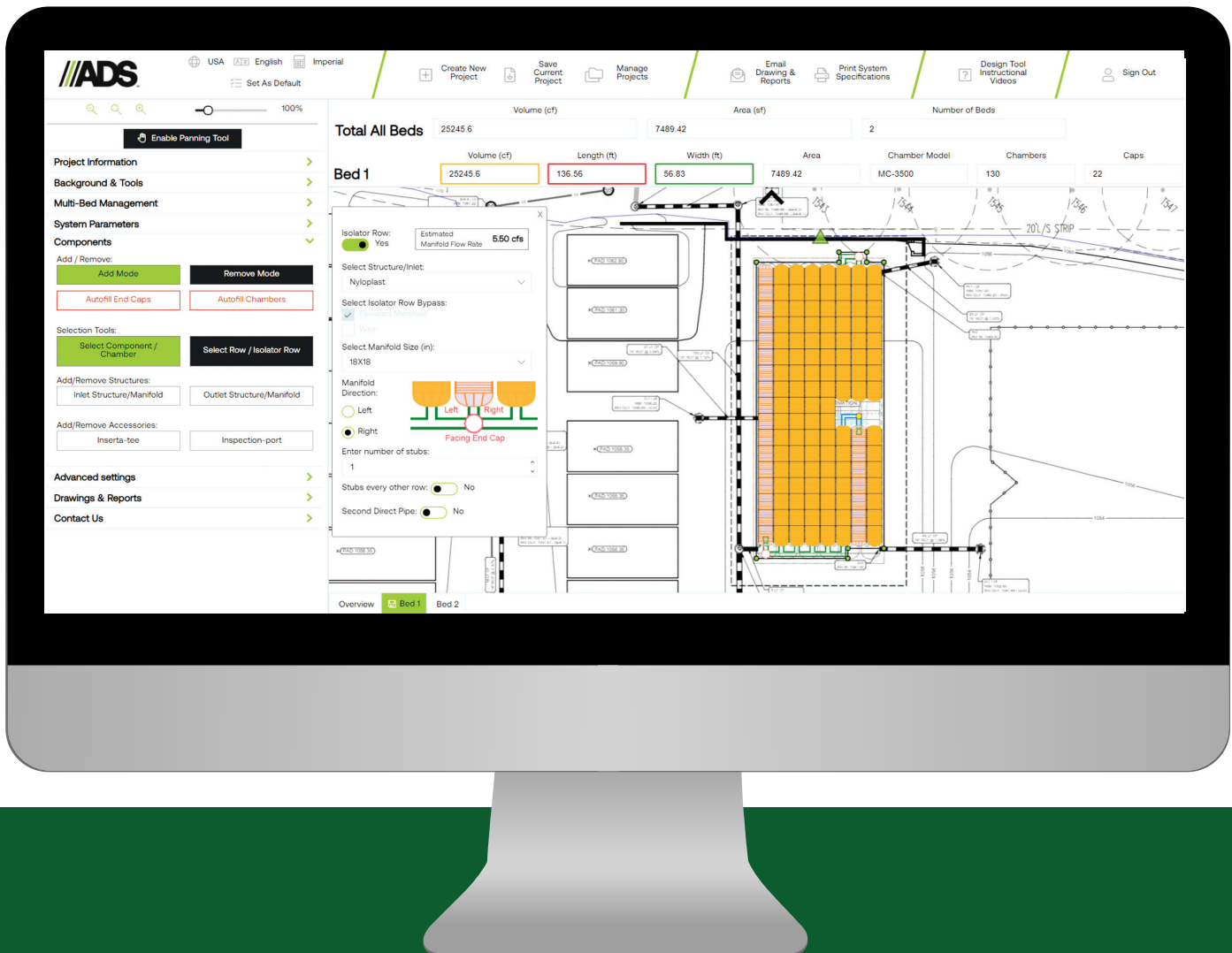
Customize layouts



Save, manage, revise



Multi-bed system design



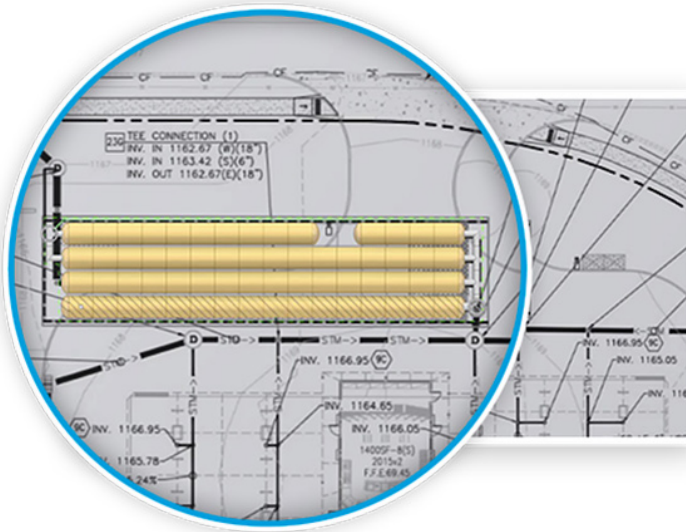
## Features

- Provides project data reports & plan layouts quickly
- The plans are produced in both PDF and CAD format
- Data provided in the detailed report is extensive enough to estimate installed cost
- Tool provides a design starting point that can be site customized by the ADS Technical Services team to fit site specific applications as directed by the Engineer
- An ADS team of inside and outside representatives are available to offer assistance
- ADS StormTech Design Tool can be viewed in several platforms, including tablets and smart phones

| PART TYPE                 | ITEM ON LAYOUT |                                    |
|---------------------------|----------------|------------------------------------|
| PREFABRICATED END CAP     | A              | 24" BOTTOM CORED END CAP ROWS      |
| PREFABRICATED END CAP     | B              | 18" BOTTOM CORED END CAP ROWS      |
| MANIFOLD                  | C              | 18" X 18" BOTTOM, ADS N-12         |
| MANIFOLD                  | D              | 18" X 16" BOTTOM, ADS N-12         |
| PIPE CONNECTION           | E              | 18" BOTTOM CONNECTION              |
| INSERTA TEE               | F              | 4" DIAMETER                        |
| CONCRETE STRUCTURE        | G              | OCS (DESIGN BY ENGINEER / PROJECT) |
| CONCRETE STRUCTURE W/WEIR | H              | (DESIGN BY ENGINEER / PROJECT)     |
| UNDERDRAIN                | I              | 6" ADS N-12 DUAL WALL PERFORATED   |
| INSPECTION PORT           | J              | 6" SEE DETAIL                      |

## Benefits

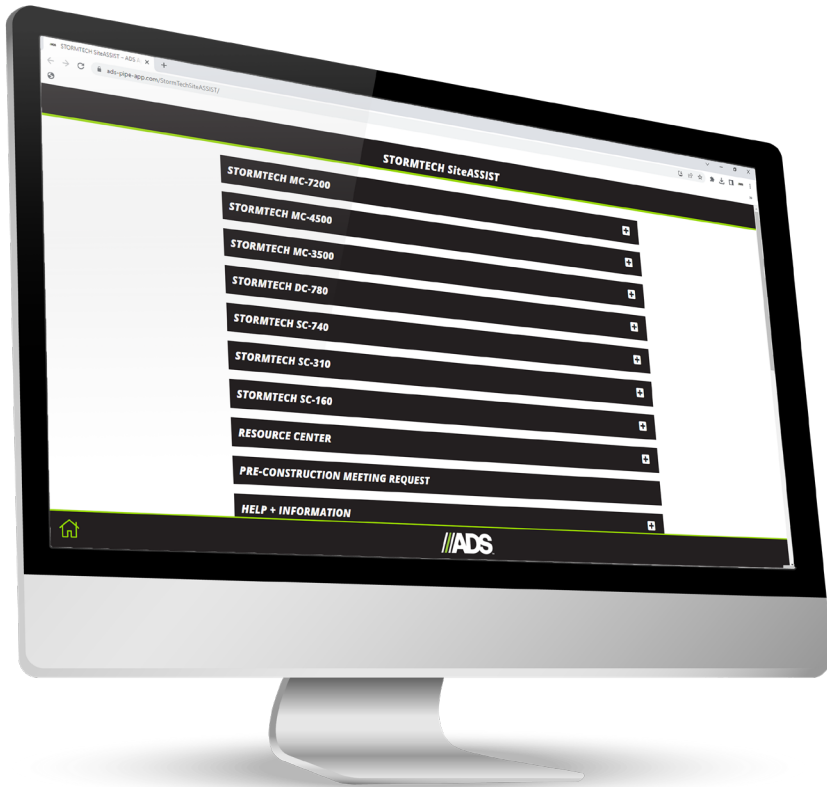
- Helps designers in their evaluation efforts and response time
- Allows the engineer to customize layout by modifying the CAD layout, view a PDF version if needed, and to redline revisions to be sent to ADS Technical Services
- Allows the engineer to provide a detailed explanation of conceptual estimated installed system cost to clients
- Service is provided to designer at no cost and enables engineer to use internal resources for increased productivity
- Designer has a local and national resource for advice and follow-up as the design progresses
- Enables a designer or client to view and originate a project using the most convenient and readily available platform



# StormTech SiteASSIST

The SiteASSIST by StormTech App enables ADS to take customer service and field support to unprecedented levels. With detailed instructions on proper installation techniques for StormTech chambers and supporting video animations, this tool is designed to insure installed performance. The animations can be played individually, or played together to provide a visual representation of a StormTech chamber system install from excavation to final backfill.

For sections that are frequently referred to, they can be saved to your favorites section for easy reference. SiteAssist is available in both English and Spanish.



Submit questions with specific jobsite pictures



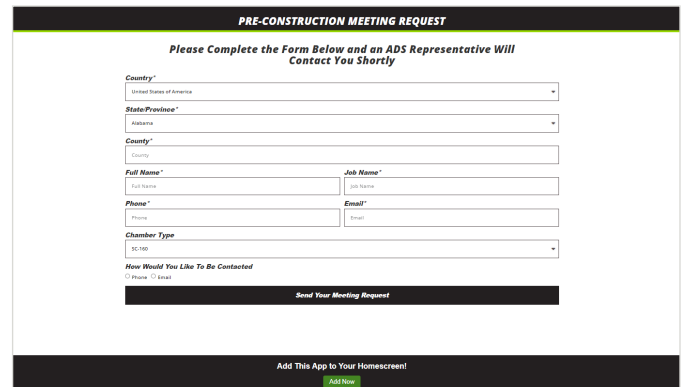
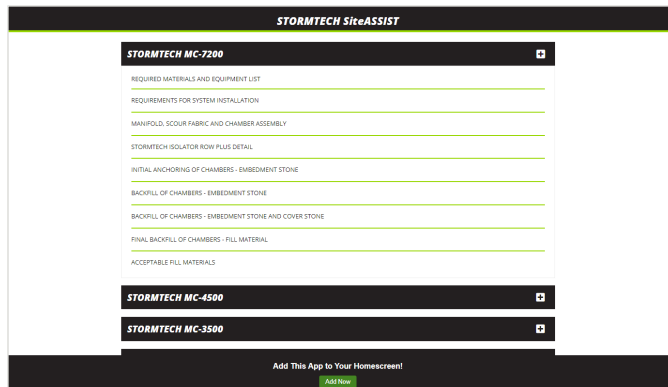
Utilize geo location services to notify the appropriate ADS team members



Response within an hour from StormTech support



Schedule a pre-construction meeting



[ads-pipe-app.com/StormTechSiteASSIST](https://ads-pipe-app.com/StormTechSiteASSIST)

# A Family of Products and Services

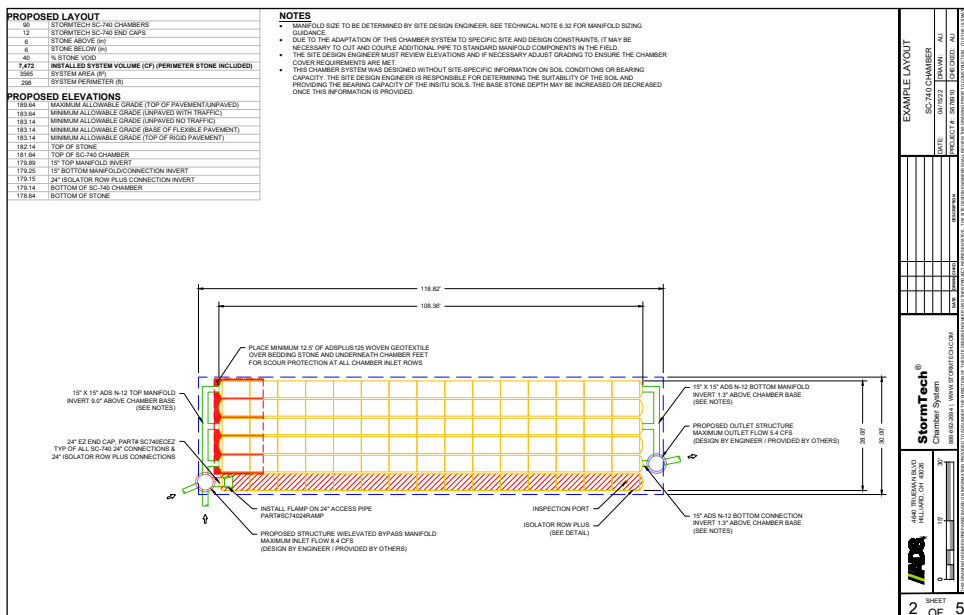
- MC-7200 Chambers and End Caps
- MC-4500 Chambers and End Caps
- MC-3500 Chambers and End Caps
- SC-800 Chambers and End Caps
- SC-310 Chambers and End Caps
- DC-780 Chambers and End Caps
- SC-160LP Chambers and End Caps
- SC, DC and MC Fabricated End Caps
- Fabricated Manifold Fittings
- Patented Isolator Row Plus for Maintenance and Water Quality
- Inserta Tee® Connections
- Nyloplast® Basins and Inline Drains
- Inlet Filters
- In-House System Layout Assistance
- On-Site Educational Seminars
- Worldwide Technical Sales Group
- Centralized Product Applications Department
- Research and Development Team
- Technical Literature, O&M Manuals and Detailed CAD drawings all downloadable via our Web Site
- StormTech Design Tool



**StormTech provides state-of-the-art products and services that meet or exceed industry performance standards and expectations. We offer designers, regulators, owners and contractors the highest quality products and services for stormwater management that saves valuable land and protects water resources."**

Please contact one of our inside Technical Service professionals or Engineered Product Managers (EPMs) to discuss your particular application. A wide variety of technical support material is available from our website at [adspipe.ca](http://adspipe.ca).

For any questions, please call StormTech at **800-821-6710**.





**MC-7200**

**MC-4500**

**MC-3500**

**SC-800**

**DC-780**

**SC-310**

**SC-160LP**

## Save Valuable Land and Protect Water Resources

This catalog is not intended to provide requirements for design or installation of StormTech chambers. Refer to the appropriate "StormTech Design Manual" and "StormTech Construction Guide" for design and installation specifications.

[adspipe.ca](http://adspipe.ca)