Example: Footprint Comparison - 100,000 CF (2832 m³) Project

<table>
<thead>
<tr>
<th>Product Specifications</th>
<th>MC-5750</th>
<th>MC-3500</th>
<th>DC-780</th>
<th>SC-740</th>
<th>SC-310</th>
<th>SC-160LP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Height, in. (mm)</td>
<td>60 (1524)</td>
<td>45 (1143)</td>
<td>30 (762)</td>
<td>30 (762)</td>
<td>16 (406)</td>
<td>12 (305)</td>
</tr>
<tr>
<td>Width, in. (mm)</td>
<td>77 (1956)</td>
<td>51 (1295)</td>
<td>51 (1295)</td>
<td>34 (864)</td>
<td>25 (635)</td>
<td></td>
</tr>
<tr>
<td>Length, in. (mm)</td>
<td>90 (2286)</td>
<td>90.7 (2300)</td>
<td>90.7 (2300)</td>
<td>90.7 (2300)</td>
<td>90.7 (2300)</td>
<td>90.7 (2300)</td>
</tr>
<tr>
<td>Installed length, in. (mm)</td>
<td>86.0 (2184)</td>
<td>85.4 (2170)</td>
<td>85.4 (2170)</td>
<td>85.4 (2170)</td>
<td>85.4 (2170)</td>
<td>85.4 (2170)</td>
</tr>
<tr>
<td>Bare Chamber Storage, cf (cm)</td>
<td>109.9 (3.11)</td>
<td>46.2 (1.30)</td>
<td>45.9 (1.30)</td>
<td>14.7 (0.42)</td>
<td>6.85 (0.19)</td>
<td></td>
</tr>
<tr>
<td>Stone above, in. (mm)</td>
<td>12 (305)</td>
<td>12 (305)</td>
<td>6 (152)</td>
<td>6 (152)</td>
<td>6 (152)</td>
<td>6 (152)</td>
</tr>
<tr>
<td>Minimum stone below, in. (mm)</td>
<td>9 (229)</td>
<td>9 (229)</td>
<td>6 (152)</td>
<td>4 (100)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Row spacing, in. (mm)</td>
<td>9 (229)</td>
<td>6 (152)</td>
<td>6 (152)</td>
<td>6 (152)</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>Minimum installed storage, cf (cm)</td>
<td>178.9 (5.06)</td>
<td>78.4 (2.22)</td>
<td>74.9 (2.12)</td>
<td>31.0 (0.39)</td>
<td>15.0 (0.42)</td>
<td></td>
</tr>
<tr>
<td>Storage per unit area, cf/sf (cm/sm)</td>
<td>3.48 (1.06)</td>
<td>2.32 (0.70)</td>
<td>2.21 (0.67)</td>
<td>1.31 (0.39)</td>
<td>1.01 (0.30)</td>
<td></td>
</tr>
</tbody>
</table>

Save Valuable Land and Protect Water Resources

This brochure 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.

70 Irwood Road, Suite 2, Rocky Hill, CT 06067 • 888-892-2694
www.stormtech.com
StromTech Subsurface Sport Field Turf Applications

The increasing popularity of sports fields for both indoor and outdoor events places growing demands and opportunities on turf design and maintenance. Proper drainage is perhaps the most productive investment in the long-term health and playability of all natural surfaces. Innovation in the water management industry over the last few decades has allowed us to regulate the drainage of a field from below the surface. The StromTech Chamber product line was originally developed for commercial and residential applications. Our proven performance makes it more than structurally qualified for all types of turf applications. StromTech has over 27,000 systems in service worldwide since 2002.

In many of our project designs the use of chambers increases the available capacity for storm water runoff not just from the field itself but from adjacent non-porous surfaces such as stadium seating, running tracks, adjacent buildings, roof drains and parking surfaces. Chamber size and capacity is one of the biggest advantages to using chambers on a complete stadium complex design. StromTech can be designed with direct connections of manifold pipes and catch basins so storm water can be collected at various non-porous locations thus avoiding sheet flow of storm water runoff directly on to the playing surface.

Consider the following benefits of a well-designed and maintained drainage system:

1. Healthier Natural Playing Surfaces: Good drainage promotes deeper root growth and the “kicking” effect of the roots, which stabilizes the playing surface. Turf that has good drainage will be more resistant to fungus, disease and increases long-term performance making it more than structurally qualified for all types of turf applications. StromTech has over 27,000 systems in service worldwide since 2002.
2. StormTech Chambers: The StormTech Chamber product line was originally developed for commercial and residential applications. Our proven performance makes it more than structurally qualified for all types of turf applications. StromTech has over 27,000 systems in service worldwide since 2002.
3. Maximum Playability: Fewer games and events will be cancelled or delayed due to heavy rain. Games are able to resume play faster, with less damage to the playing surface.
4. Safer Surfaces: Good drainage reduces field deformation and turf instability, providing players with better footing and less chance of injury. This is true for both natural and synthetic playing surfaces.
5. Major Features and Benefits of StromTech:
   - Complete Line of Chambers: All StromTech chambers are designed with an optimized joining system. The height and width of the end connections have been designed to provide the required structural safety factors while providing an unobstructed flow path down each row.
   - StormTech Chambers: All StromTech Chambers are designed to the full scope of ASTM Standards to ensure a 2 to 1 safety factor for both live and long-term dead loads. StromTech’s continuously curved, elliptical arch, elliptical skew rib and the surrounding angular backfill are the key components of the structural system to assure a long, safe service life.
   - How it Works: As it rains, water is sealed into the field and flows through the various layers of cover with the run off flowing into the chambers and filter fabric protected aggregate. The StormTech chambers and aggregate serve to store the water mitigating surface ponding of rainwater. Depending on the design, rainwater can infiltrate into the soil or flow to an outlet structure to be released downstream per regulatory requirements. Additionally, many applications have a combination of both retention and detention designs. Any application or design methodology is subject to specific site conditions and/or regulations.

StromTech Engineering Services Department: The StromTech Engineering Services Department is available to assist the designer with the layout of all of the chamber sizes and answer questions regarding layout and design of all the StromTech chamber models. Call the Engineering Services Department at 1.888.892.2694 or email us at info@stormtech.com and we will put you in touch with our local StromTech representative.
StormTech Subsurface Sport Field Turf Applications

The increasing popularity of sports fields for both indoor and outdoor events places growing demands and opportunities on turf design and maintenance. Proper drainage is perhaps the most productive investment in the long-term health and playability of all recreational surfaces. Innovation in the water management industry over the past few decades has allowed us to regulate the drainage of a field from below the surface. The StormTech Chamber product line was originally developed for commercial and roadway applications. Our proven performance makes it more than structurally qualified for all types of turf applications. StormTech has over 20,000 systems in service worldwide since 2002.

In many of our project designs the use of chambers increases the available capacity for storm water runoff not just from the field itself but from adjacent non-porous surfaces such as stadium seating, running tracks, adjacent buildings, roof drain and parking surfaces. Chamber size and capacity is one of the biggest advantages to using chambers on a complete stadium complex design. StormTech can be designed with direct connections of manifold inverts, deep and shallow cover. In many of our project designs the use of chambers increases the available capacity for storm water runoff not directly on to the playing surface. Consider the following benefits of a well-designed and maintained drainage system:

- Healthier Natural Playing Surfaces
- Good drainage promotes deeper root growth and the “knitting” effect of the roots, which stabilizes the playing surface. Turf that has good drainage will be more resistant to fungus, disease and increases long-term playability and reduces recovery time.

- Maximum playability
- Fewer games and events will be cancelled or delayed due to heavy rain. Games are able to resume play faster, with less damage to the playing surface.

- Safer surfaces
- Good drainage reduces field deformation and turf instability, providing players with better footing and less chance of injury. This is true for both natural and synthetic playing surfaces.

Our chambers are designed to meet the most stringent industry performance standards for superior structural integrity while providing designers with a cost-effective method to provide advanced drainage to address today’s increasing demand for sports fields ranging from elementary schools to the professional sports field.

StormTech Chambers

All StormTech chambers are designed with an optimized joining system. The height and width of the end corrugations have been designed to provide the required structural safety factors while providing an unobstructed flow path down each row.

All StormTech chambers are designed to the full scope of ASTM Standards to assure 2-to-1 safety factors for both live and long-term dead loads. StormTech’s continuously curved, elliptical arch, elliptic shallow ribs and the surrounding angular flanks are the key components of the structural system to assure a long, service life mechanical properties.

The chambers are produced using high-pressure injection molding which creates a product with consistent wall thickness and are produced from high-quality, impact-modified resins which are tested for short-term and long-term mechanical properties.

The chambers and filter fabric protected aggregate. The StormTech chambers and aggregate serve to store the water and mitigate ponding of rainwater. Depending on the design, rainwater can infiltrate into the soil or flow to an outlet structure to be released downstream per regulatory requirements. Additionally, many applications have a combination of both retention and detention designs. Any application or design methodology is subject to specific site conditions and/or regulations.

StormTech patented Isolator Row to Protect the Chamber System Performance

• Allows the designer to use conventional hydraulic equations to verify flow equalization
• Consolidates maintenance into designated rows – Less frequent maintenance for the owner

Patented Isolator Row to Protect the Chamber System Performance

• Consolidates maintenance into designated rows – Less frequent maintenance for the owner
• Recognized by regulators worldwide as a water quality device

Synthetic Turf Application

As it rains, water is soaked into the field and flows through the various layers of cover with the run off flowing into the chambers and fibre fabric protected aggregate. The StormTech chambers and aggregate serve to store live water mitigating surface ponding of rainwater. Depending on the design, rainwater can infiltrate into the soil or flow to an outlet structure to be released downstream per regulatory requirements. Additionally, many applications have a combination of both retention and detention designs. Any application or design methodology is subject to specific site conditions and/or regulations.

ADS offers a variety of related products that provide solutions for specific project applications and regulatory requirements.

- Solid and perforated HDPE or PP pipe for conveyance, manifolds and drainage applications
- Full line of high performance ADS Geosynthetics
- Nyloplast® PVC beams are a better solution to all applications from the field to the parking lot
- Beesaver and ADS Water Quality Products

The StormTech patented isolation row to minimize maintenance intervals.

FlecStrom® catch basin inserts.

Durastorm® is another surface product that can easily be integrated as a part of the complete design

Major Features and Benefits of StormTech

Complete Line of Chambers

• All chambers are designed with the system footprint, avoiding SPW, Infiltration (UD), matching existing inserts, deep and shallow cover.

Meets or Exceeds AASHTO LRFD & ASTM F-2767 Structural Design Specifications, F-2418 PP & F-2922 PP

• 2-to-1 safety factors for live and dead loads providing a service life of 75 years
• Easy installation for the contractor and assured design service life for the owner and engineer

Patented Isolator Row to Protect the Chamber System Performance

• Consolidates maintenance into designated rows – Less frequent maintenance for the owner
• Recognized by regulators worldwide as a water quality design

Injection Molded

• Uniform wall thickness and repeatable quality which assures performance for the owner

Traditional Manifold / Open Design

• Allows the designer to use conventional hydraulic equations to verify flow equalization
• Open Design – no repeating and wide enable uniform flow

Owners are assured that standing water is mitigated in large rain events

StormTech Engineering Services Department: The StormTech Engineering Services Department is available to assist the designer with the layout of all of the chamber sizes and answer questions regarding layout and design of all the StormTech chamber models. Call the Engineering Services Department at 1.888.892.1904 or email us at info@stormtech.com and we will put you in touch with our local StormTech representative.
The increasing popularity of sports fields for both indoor and outdoor events places growing demands and opportunities on turf design and maintenance. Proper drainage is perhaps the most productive investment in the long-term health and playability of all recreational soils. Innovation in the water management industry over the last few decades has allowed us to regulate the drainage of a field from below the surface.

StormTech is pleased to announce our latest development for commercial and residential applications. Our proven performance makes it more than structurally qualified for all types of turf applications. StormTech has over 27,000 installations in service worldwide since 2002. In many of our project designs the use of chambers increases the available capacity for storm water runoff not just from the field itself but from adjacent non- porous surfaces such as sidewalk, seating, running tracks, adjacent buildings, roof drainage and parking surfaces. Chamber size and capacity is one of the biggest advantages to using chambers on a complete stadium complex design. StormTech can be designed with direct connections of manifold and catch basins so storm water can be collected at various non-porous locations thus avoiding sheet flow of storm water runoff directly on to the playing surface.

Consider the following benefits of a well-designed and maintained drainage system:

- **Safer surfaces**
  - Good drainage promotes deeper root growth and the “knitting” effect of the roots, which stabilizes the playing surface and minimizes recovery time. These surfaces depend on proper subsurface drainage systems to maintain playability.
  - It promotes greater root growth, which leads to a greater health, faster playability, and minimizes recovery time. These surfaces depend on proper subsurface drainage systems to maintain playability.
  - Games are able to resume quickly after the storm water has been safely drained away.
- **Healthier Natural Playing Surfaces**
  - Good drainage reduces field deformation and improves turf appearance.
  -.game play faster, with less damage to the playing surface.
- **Fewer games and events will be cancelled or extensively delayed due to heavy rain.**
  - Games are able to resume quickly after the storm water has been safely drained away.
- **Increased safety**
  - Safer surfaces reduce the chance of injury. This is true for both natural and synthetic playing surfaces.
- **Advanced Name In Water Management Solutions**
  - Recognized by regulators worldwide as a water quality device
  - Easy installation for the contractor and assured design service life for the owner and engineer.

### StormTech Chambers

All StormTech chambers are designed with an optimized joining system. The height and width of the end corrugations have been designed to provide the required structural safety factors while providing an unobstructed flow path down each row.

- **Complete Line of Chambers**
  - Recognized by regulators worldwide as a water quality device
  - Easy installation for the contractor and assured design service life for the owner and engineer.

- **How it Works**
  - As rainwater is drained into the field and flows through the various layers of cover with the run off flowing into the chambers and flow through the drainage aggregate. The chambers and aggregate serve to store water thereby mitigating surface ponding of rainwater. Depending on the design, rainwater can infiltrate into the soil or flow to an outlet structure to be released downstream per regulatory requirements. Additionally, many applications have a combination of both retention and detention designs. Any application or design methodology is subject to specific site conditions and / or regulations.
  - ADS offers a variety of related products that provide solutions for specific project applications and regulatory requirements.

- **Solid and perforated HDPE or PP pipe for conveyance, manifolds and drainage applications**
- **PolySol® PVC manifolds are a better solution to all applications from the field to the parking lot**
- **BaseSave and ADS Water Quality Products**
- **StormTech patented Isolator Row to Protect the Chamber System Performance**
  - Recognized by regulators worldwide as a water quality device

### Major Features and Benefits of StormTech

- **Complete Line of Chambers**
  - Allows the designer to use conventional hydraulic equations to verify flow equalization
  - Allows the designer to use conventional hydraulic equations to verify flow equalization
  - Allows the designer to use conventional hydraulic equations to verify flow equalization

- **Easy installation for the contractor and assured design service life for the owner and engineer.**
- **Patented isolator Row to Protect the Chamber System Performance**
  - Consulates maintenance into designated rows – Less frequent maintenance for the owner
  - Consulates maintenance into designated rows – Less frequent maintenance for the owner

- **Injection Molded**
  - Uniform wall thickness and repeatability which assures performance for the owner

- **Traditional Manifold / Open Design**
  - Bushy Shrubbery and White Bud, grasses, and cut grass etc. are available to assist the designer with the layout of all of the chamber sizes and answer questions regarding layout and design of all of the StormTech chamber models. Call the Engineering Services Department at 1.888.392.5914 or email us at info@stormtech.com and we will put you in touch with our local StormTech representative.

---

**THE MOST ADVANCED NAME IN WATER MANAGEMENT SOLUTIONS**

**DESIGN MANUAL FOR AASHTO MATERIAL CLASSIFICATIONS**

**SYNTHETIC TURF APPLICATION**

**Traditional Manifold / Open Design**

**How to Work**

**Patented Isolator Row to Protect the Chamber System Performance**

**Complete Line of Chambers**

**Major Features and Benefits of StormTech**

**Synthetic Turf Application**

**Traditional Manifold / Open Design**

**Patented Isolator Row to Protect the Chamber System Performance**

**Complete Line of Chambers**

**Major Features and Benefits of StormTech**

*Note: Site specific & Chamber type cross sections available upon request.*
### Subsurface Sport Turf Applications

Save Valuable Land and Protect Water Resources

This brochure 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.

#### Example: Footprint Comparison - 100,000 CF (2832 m³) Project

<table>
<thead>
<tr>
<th>Product Specifications</th>
<th>MC-4500</th>
<th>MC-3500</th>
<th>DC-780</th>
<th>SC-740</th>
<th>SC-310</th>
<th>SC-160LP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Height, in. (mm)</td>
<td>60 (1524)</td>
<td>45 (1143)</td>
<td>30 (762)</td>
<td>30 (762)</td>
<td>16 (406)</td>
<td>12 (305)</td>
</tr>
<tr>
<td>Width, in. (mm)</td>
<td>100 (2540)</td>
<td>77 (1956)</td>
<td>51 (1295)</td>
<td>51 (1295)</td>
<td>34 (864)</td>
<td>25 (635)</td>
</tr>
<tr>
<td>Lenth, in. (mm)</td>
<td>52 (1321)</td>
<td>90 (2286)</td>
<td>90.7 (2300)</td>
<td>90.7 (2300)</td>
<td>90.7 (2300)</td>
<td>90.7 (2300)</td>
</tr>
<tr>
<td>Installed length, in. (mm)</td>
<td>48.3 (1227)</td>
<td>86.0 (2184)</td>
<td>85.4 (2170)</td>
<td>85.4 (2170)</td>
<td>85.4 (2170)</td>
<td>85.4 (2170)</td>
</tr>
<tr>
<td>Stone above, in. (mm)</td>
<td>12 (305)</td>
<td>12 (305)</td>
<td>6 (152)</td>
<td>6 (152)</td>
<td>6 (152)</td>
<td>6 (152)</td>
</tr>
<tr>
<td>Minimum stone below, in. (mm)</td>
<td>9 (229)</td>
<td>9 (229)</td>
<td>9 (229)</td>
<td>6 (152)</td>
<td>6 (152)</td>
<td>4 (100)</td>
</tr>
<tr>
<td>Row spacing, in. (mm)</td>
<td>9 (229)</td>
<td>9 (229)</td>
<td>6 (152)</td>
<td>6 (152)</td>
<td>6 (152)</td>
<td>N/A</td>
</tr>
<tr>
<td>Minimum installed storage, cf (cm)</td>
<td>162.6 (4.60)</td>
<td>178.9 (5.06)</td>
<td>78.4 (2.22)</td>
<td>74.9 (2.12)</td>
<td>31.0 (0.39)</td>
<td>15.0 (0.42)</td>
</tr>
<tr>
<td>Storage per unit area, cf/sf (cm/sm)</td>
<td>4.45 (1.35)</td>
<td>3.48 (1.06)</td>
<td>2.32 (0.70)</td>
<td>2.21 (0.67)</td>
<td>1.31 (0.39)</td>
<td>1.01 (0.30)</td>
</tr>
</tbody>
</table>

©2018 Advanced Drainage Systems, Inc.  #11063 04/18 CS

The MosT Advanced Name in Drainage Systems®

70 Irwood Road, Suite 3, Rocky Hill, CT 06067 • 888-892-2694

www.stormtech.com

70 Irwood Road, Suite 3, Rocky Hill, CT 06067 • 888-892-2694

www.adp-pipe.com

ADS "Terms and Conditions of Sale" are available on the ADS website, www.ads-pipe.com

Advanced Drainage Systems, the ADS logo, and the Green Stripe, are registered trademarks of Advanced Drainage Systems, Inc. StormTech and Isolator Row are registered trademark of StormTech, Inc. Nyloplast® is a registered trademark of Nyloplast. FLEXSTORM ® is a registered trademark of Inlet & Pipe Protection, Inc. Duraslot ® is a registered trademark of Hall Construction Products, Inc.
## Product Specifications

<table>
<thead>
<tr>
<th>Product</th>
<th>MC-4500</th>
<th>MC-3500</th>
<th>DC-780</th>
<th>SC-740</th>
<th>SC-310</th>
<th>SC-160LP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Height, in. (mm)</td>
<td>60 (1524)</td>
<td>45 (1143)</td>
<td>30 (762)</td>
<td>30 (762)</td>
<td>16 (406)</td>
<td>12 (305)</td>
</tr>
<tr>
<td>Width, in. (mm)</td>
<td>100 (2540)</td>
<td>77 (1956)</td>
<td>51 (1295)</td>
<td>51 (1295)</td>
<td>34 (864)</td>
<td>25 (635)</td>
</tr>
<tr>
<td>Length, in. (mm)</td>
<td>52 (1321)</td>
<td>90 (2286)</td>
<td>90.7 (2300)</td>
<td>90.7 (2300)</td>
<td>90.7 (2300)</td>
<td>90.7 (2300)</td>
</tr>
<tr>
<td>Installed length, in. (mm)</td>
<td>48.3 (1227)</td>
<td>86.0 (2184)</td>
<td>85.4 (2170)</td>
<td>85.4 (2170)</td>
<td>85.4 (2170)</td>
<td>85.4 (2170)</td>
</tr>
<tr>
<td>Bare Chamber Storage, cf (cm)</td>
<td>106.5 (3.01)</td>
<td>109.9 (3.11)</td>
<td>46.2 (1.30)</td>
<td>45.9 (1.30)</td>
<td>14.7 (0.42)</td>
<td>6.85 (0.19)</td>
</tr>
<tr>
<td>Stone above, in. (mm)</td>
<td>12 (305)</td>
<td>12 (305)</td>
<td>6 (152)</td>
<td>6 (152)</td>
<td>6 (152)</td>
<td>6 (152)</td>
</tr>
<tr>
<td>Minimum stone below, in. (mm)</td>
<td>9 (229)</td>
<td>9 (229)</td>
<td>6 (152)</td>
<td>6 (152)</td>
<td>4 (100)</td>
<td></td>
</tr>
<tr>
<td>Row spacing, in. (mm)</td>
<td>9 (229)</td>
<td>9 (229)</td>
<td>6 (152)</td>
<td>6 (152)</td>
<td>6 (152)</td>
<td>N/A</td>
</tr>
<tr>
<td>Minimum installed depth of stone</td>
<td>16 (406)</td>
<td>25 (635)</td>
<td>10 (254)</td>
<td>10 (254)</td>
<td>10 (254)</td>
<td>10 (254)</td>
</tr>
</tbody>
</table>

### Save Valuable Land and Protect Water Resources

This brochure 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.