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.

**STORMTECH MC-4500 CHAMBER**

*Nominal Chamber Specifications*

- **Size (L x W x H)**
  52" x 100" x 60"
  1,321 mm x 2,540 mm x 1,524 mm

- **Chamber Storage**
  106.5 ft³ (3.01 m³)

- **Min. Installed Storage**
  162.6 ft³ (4.60 m³)

- **Weight**
  120 lbs (54.4 kg)

- **Shipping**
  7 chambers/pallet
  11 pallets/truck

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

**STORMTECH MC-4500 END CAP**

*Nominal End Cap Specifications*

- **Size (L x W x H)**
  35.1" x 90.2" x 59.4"
  891 mm x 2,291 mm x 1,509 mm

- **End Cap Storage**
  35.7 ft³ (1.01 m³)

- **Min. Installed Storage**
  108.7 ft³ (3.08 m³)

- **Weight**
  120 lbs (54.4 kg)

- **Shipping**
  7 end caps/pallet
  11 pallets/truck

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

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**EMBEDMENT STONE SHALL BE A CLEAN, CRUSHED AND ANGULAR STONE WITH AN AASHTO M43 DESIGNATION BETWEEN #3 AND #4.
CHAMBERS SHALL MEET ASTM F2418 “STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS”.
ADS GEOSYNTHETICS 601T NON-WOVEN GEOTEXTILE ALL AROUND CLEAN, CRUSHED, ANGULAR EMBEDMENT STONE.
PERIMETER STONE’ (CAN BE SLOPED OR VERTICAL).
EXCAVATION WALL — GRANULAR WELL-GRATED SOIL/AGGREGATE MIXTURES, <35% FINES, COMPACT IN 12” (300 mm) MAX LIFTS TO 95% PROCTOR DENSITY. SEE THE TABLE OF ACCEPTABLE FILL MATERIALS.
CHAMBERS SHALL BE BE DESIGNED IN ACCORDANCE WITH ASTM F2378 “STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS”.
PAVEMENT LAYER (DESIGNED BY SITE DESIGN ENGINEER).
SITE DESIGN ENGINEER IS RESPONSIBLE FOR ENSURING THE REQUIRED BEARING CAPACITY OF SOILS.
DEPTH OF STONE TO BE DETERMINED BY SITE DESIGN ENGINEER 9” (230 mm) MIN.
MINIMUM COVER TO BOTTOM OF FLEXIBLE PAVEMENT. FOR UNPAVED INSTALLATIONS WHERE RUTTING FROM VEHICLES MAY OCCUR, INCREASE COVER TO 30” (750 mm).
# MC-4500 Chamber Specifications

## Storage Volume Per Chamber ft³ (m³)

<table>
<thead>
<tr>
<th></th>
<th>Bare Chamber Storage ft³ (m³)</th>
<th>Chamber and Stone Foundation Depth in. (mm)</th>
<th>9” (230 mm)</th>
<th>12” (300 mm)</th>
<th>15” (375 mm)</th>
<th>18” (450 mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>MC-4500 Chamber</td>
<td>106.5 (3.02)</td>
<td></td>
<td>162.6 (4.60)</td>
<td>166.3 (4.71)</td>
<td>169.6 (4.81)</td>
<td>173.6 (4.91)</td>
</tr>
<tr>
<td>MC-4500 End Cap</td>
<td>35.7 (1.0)</td>
<td></td>
<td>108.7 (3.08)</td>
<td>111.9 (3.17)</td>
<td>115.2 (3.26)</td>
<td>118.4 (3.35)</td>
</tr>
</tbody>
</table>

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

## Amount of Stone Per Chamber

**ENGLISH TONS (yds³)**

<table>
<thead>
<tr>
<th></th>
<th>Stone Foundation Depth</th>
<th>9”</th>
<th>12”</th>
<th>15”</th>
<th>18”</th>
</tr>
</thead>
<tbody>
<tr>
<td>MC-4500 Chamber</td>
<td></td>
<td>7.4</td>
<td>7.8</td>
<td>8.3</td>
<td>8.8</td>
</tr>
<tr>
<td>MC-4500 End Cap</td>
<td></td>
<td>9.6</td>
<td>10.0</td>
<td>10.4</td>
<td>10.9</td>
</tr>
</tbody>
</table>

**METRIC KILOGRAMS (m³)**

<table>
<thead>
<tr>
<th></th>
<th>230 mm</th>
<th>300 mm</th>
<th>375 mm</th>
<th>450 mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>MC-4500 Chamber</td>
<td>6.681</td>
<td>7.117</td>
<td>7.552</td>
<td>7.987</td>
</tr>
</tbody>
</table>

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

## Volume Excavation Per Chamber Yd³ (m³)

<table>
<thead>
<tr>
<th></th>
<th>Stone Foundation Depth</th>
<th>9” (230 mm)</th>
<th>12” (300 mm)</th>
<th>15” (375 mm)</th>
<th>18” (450 mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>MC-4500 Chamber</td>
<td></td>
<td>10.5 (8.0)</td>
<td>10.8 (8.3)</td>
<td>11.2 (8.5)</td>
<td>11.5 (8.8)</td>
</tr>
<tr>
<td>MC-4500 End Cap</td>
<td></td>
<td>9.3 (7.1)</td>
<td>9.6 (7.3)</td>
<td>9.9 (7.6)</td>
<td>10.2 (7.8)</td>
</tr>
</tbody>
</table>

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

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For more information on the StormTech MC-4500 Chamber and other ADS products, please contact our Customer Service Representatives at 1-800-821-6710

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