INTRODUCTION

This manual provides general design and installation information for use of plastic leaching chambers in the state of Minnesota. The configurations presented in this document are common designs and are provided for illustrative purposes. They are not intended to restrict the use of other configurations, which may be utilized provided the design conforms with Minnesota Pollution Control Agency Individual Subsurface Sewage Treatment System Chapter 7080. Each revised version of this manual supersedes the previous version. The use of Infiltrator chambers in this manual at regulation sizing is authorized per product approval by the Minnesota Department of Health and allowed under Chapter 7080.

All chamber configurations and installations must comply with applicable state and local rules.

CAD details in DWG format may be found on the Infiltrator Water Technologies website at www.infiltratorwater.com.

For more detailed design and installation information, please contact Infiltrator Water Technologies at 1-800-221-4436

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### PRODUCT SPECIFICATIONS

<table>
<thead>
<tr>
<th>Chamber Type</th>
<th>Application</th>
<th>Size</th>
<th>Effective Length</th>
<th>Side Port Coupler</th>
<th>Additional Length per Pair of Endcaps</th>
<th>Invert Height</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Arc 18 Chamber</strong></td>
<td>18 or 24&quot; wide trench, curved, straight or side by side in beds</td>
<td>16&quot;W x 67&quot;L x 11&quot;H (406 mm x 1702 mm x 279 mm)</td>
<td>60&quot; (1524 mm)</td>
<td>five molded-in high and low inlets for mid-trench piping flexibility.</td>
<td></td>
<td>6&quot; (152 mm)</td>
</tr>
<tr>
<td><strong>Arc 24 Chamber</strong></td>
<td>24&quot; wide trench, curved, straight or side by side in beds</td>
<td>22&quot;W x 67&quot;L x 12&quot;H (559 mm x 1702 mm x 305 mm)</td>
<td>60&quot; (1524 mm)</td>
<td>five molded-in high and low inlets for mid-trench piping flexibility.</td>
<td>12&quot; (305 mm)</td>
<td>6.25&quot; (159 mm)</td>
</tr>
<tr>
<td><strong>Arc 36 Chamber</strong></td>
<td>36&quot; wide trench, curved, straight or side by side in beds</td>
<td>34&quot;W x 63&quot;L x 13&quot;H (864 mm x 1600 mm x 330 mm)</td>
<td>60&quot; (1524 mm)</td>
<td>five molded-in high and low inlets for mid-trench piping flexibility.</td>
<td>14&quot; (356 mm)</td>
<td>7.25&quot; (184 mm)</td>
</tr>
<tr>
<td><strong>Arc 36 High Capacity Chamber</strong></td>
<td>36&quot; wide trench, curved, straight or side by side in beds</td>
<td>34&quot;W x 63&quot;L x 16&quot;H (864 mm x 1600 mm x 406 mm)</td>
<td>60&quot; (1524 mm)</td>
<td>five molded-in high and low inlets for mid-trench piping flexibility.</td>
<td>14&quot; (356 mm)</td>
<td>10.5&quot; (267 mm)</td>
</tr>
<tr>
<td><strong>Arc 36 LP Chamber</strong></td>
<td>36&quot; wide trench, curved, straight or side by side in beds</td>
<td>34&quot;W x 64&quot;L x 8&quot;H (864 mm x 1626 mm x 203 mm)</td>
<td>60&quot; (1524 mm)</td>
<td>3.8&quot; (197 mm)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Other Approved Chambers**
- BioDiffuser – 11" Standard
- BioDiffuser – 16" High Capacity
Before beginning installation, please note the following engineered features of the Arc 18 model chambers and endcaps.

**Arc 18 System**
- Each chamber end is either marked “Dome” or “Post” on the round observation/vent knockout ports. These indicate direction of assembly, dome over post.

<table>
<thead>
<tr>
<th><strong>Arc 18 Chamber</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Length</strong></td>
</tr>
<tr>
<td><strong>Repeat Length</strong></td>
</tr>
<tr>
<td><strong>Overall Width</strong></td>
</tr>
<tr>
<td><strong>Ave. Open Bottom Width</strong></td>
</tr>
<tr>
<td><strong>Overall Height</strong></td>
</tr>
</tbody>
</table>

Calculations and dimensions are nominal

**Arc 18 Chamber — Top, Side, and End Views** (not to scale)

**Arc 18 Endcap — Side, and End Views** (not to scale)
**Arc 18 Features**

- Base flanges on the chambers ends over lock during final engagement to form a very strong joint.
- The Arc 18 chamber feet are designed with an extra large surface area to provide support particularly in sandy soils.
- Sidewall louvers are designed to allow effluent to exit the chamber sidewalls in high flow situations, while preventing soils from migrating into the chamber void.
- Observation/venting knockout ports provide for inspection of system performance as well as a convenient location for drain field ventilation pipes.
- Each chamber end has small knockouts on the roof positioned in the “Post” end joint. When removed, these knockouts are for the use of zip ties to support piping in dosing systems.

**Arc 18 Endcap**

- Upper and lower knockouts accommodate both Schedule 40 and SDR 35 piping. Dimples are also offered for the positioning of hole saw pilot drills.
- Endcaps are designed to attach the chamber’s dome or post end.

**Arc 18 Swivel Feature**

- Each chamber’s post end has swivel lockout tabs at either base flange. When removed, the incoming chamber will turn up to ten degrees in the direction of the removed lockout tab. Without removal of the swivel lockout tab, the chambers will align in a straight pattern.
- Swivel lockout tabs may be removed carefully with a utility knife.
Before beginning installation, please note the following engineered features of the Arc 24 model chambers and endcaps.

**Arc 24 System**

- Each chamber end is either marked “Dome” or “Post” on the round observation/vent knockout ports. These indicate direction of assembly, dome over post.

<table>
<thead>
<tr>
<th>Arc 24 Chamber</th>
</tr>
</thead>
<tbody>
<tr>
<td>Length</td>
</tr>
<tr>
<td>Repeat Length</td>
</tr>
<tr>
<td>Overall Width</td>
</tr>
<tr>
<td>Ave. Open Bottom Width</td>
</tr>
<tr>
<td>Overall Height</td>
</tr>
</tbody>
</table>

Calculations and dimensions are nominal

**Arc 24 Chamber — Top, Side, and End Views** (not to scale)

**Arc 24 Endcap — Side, and End Views** (not to scale)
**Arc 24 Features**

- Base flanges on the chambers ends over lock during final engagement to form a very strong joint.
- The Arc 24 chamber feet are designed with an extra large surface area to provide support particularly in sandy soils.
- Sidewall louvers are designed to allow effluent to exit the chamber sidewalls in high flow situations, while preventing soils from migrating into the chamber void.
- Observation/venting knockout ports provide for inspection of system performance as well as a convenient location for drain field ventilation pipes.
- Each chamber end has small knockouts on the roof positioned in the “Post” end joint. When removed, these knockouts allow for the use of zip ties to support piping in low pressure dosing systems.

**Arc 24 Endcap**

- Upper and lower knockouts expand to accommodate both Schedule 40 and SDR 35 piping in a single hole tap.
- Dimples are also offered for the positioning of 4.25” hole saw pilot drills.
- Endcaps are designed to attach the chamber’s dome or post end in the same fashion for each end with the Arc 24 logo facing outward.

**Arc 24 Swivel Feature**

- Each chamber’s post end has swivel lockout tabs at either base flange. When removed, the incoming chamber will turn up to ten degrees in the direction of the removed lockout tab. Without removal of the swivel lockout tab, the chambers will align in a straight pattern.
- Swivel lockout tabs may be removed with a striking blow to the tab and then peeling off the remaining piece of plastic.

**Arc 24 Side Port Coupler (SPC)**

- SPC component snaps in place to allow side entry at any joint throughout the trench line. This accessory provides a variety of design and installation options.
Before beginning installation, please note the following engineered features of the Arc 36 model chambers and endcaps.

Arc 36 System

- Each chamber end is either marked “Dome” or “Post” on the round observation/vent knockout ports. These indicate direction of assembly, dome over post.

**Arc 36 Chamber**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Length</td>
<td>63&quot;</td>
</tr>
<tr>
<td>Repeat Length</td>
<td>60&quot;</td>
</tr>
<tr>
<td>Overall Width</td>
<td>34&quot;</td>
</tr>
<tr>
<td>Ave. Open Bottom Width</td>
<td>2.39'</td>
</tr>
<tr>
<td>Overall Height</td>
<td>13&quot;</td>
</tr>
</tbody>
</table>

Calculations and dimensions are nominal

**Arc 36 Chamber—Top, Side, and End Views** (not to scale)

**Arc 36 Endcap Side, and End Views** (not to scale)

**Side Port Coupler (SPC)**

- 14" Installed Length
- 6.5" Post End Diameter
- 9" Side View Diameter
- 7" Invert Height
- 28.68" Effective Length
**Arc 36 Features**
- The post and dome creates a positive lock securing the chambers for final engagement. Lock and drop feature for faster installation.
- The Arc 36 chamber feet are designed with an extra large surface area to provide support, particularly in sandy soils.
- Sidewall louvers are designed to allow effluent to exit the chamber sidewalls in high flow situations, while preventing soils from migrating into the chamber void.
- Observation/venting knockout ports provide for inspection of system performance as well as a convenient location for drain field ventilation pipes.
- Each chamber end has small knockouts on the roof positioned in the “Post” end joint. When removed, these knockouts allow for the use of zip ties to support piping in dosing systems.

**Arc 36 Universal Endcap**
- Upper and lower knockouts accommodate both Schedule 40 and SDR 35 piping. Knockouts can be removed with a knife or hole saw. Dimples are also offered for the positioning of hole saw pilot drills.
- Endcaps are designed to attach to the chamber’s dome or post end in the same fashion for each end with the Arc 36 logo facing outward.

**Arc 36 Swivel Feature**
- The engagement mechanism of the Arc 36 chamber is designed to allow for a pivot between joined chambers of up to 10° in either direction.

**Arc 36 Side Port Coupler (SPC)**
- SPC component snaps in place to allow side entry at any joint throughout the trench line. This accessory provides a variety of design and installation options.
Before beginning installation, please note the following engineered features of the Arc 36 HC model chambers and endcaps.

**Arc 36 HC System**
- Each chamber end is either marked “Dome” or “Post” on the round observation/vent knockout ports. These indicate direction of assembly, dome over post.

**Arc 36 HC Chamber**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Length</td>
<td>63”</td>
</tr>
<tr>
<td>Repeat Length</td>
<td>60”</td>
</tr>
<tr>
<td>Overall Width</td>
<td>34”</td>
</tr>
<tr>
<td>Ave. Open Bottom Width</td>
<td>2.45’</td>
</tr>
<tr>
<td>Overall Height</td>
<td>16”</td>
</tr>
</tbody>
</table>

Calculations and dimensions are nominal

**Arc 36 HC Chamber — Top, Side, and End Views** (not to scale)

**Arc 36 HC Endcap**

**Side Port Coupler (SPC)**
ARC 36 HC SYSTEM

Arc 36 Features
• The post and dome creates a positive lock securing the chambers for final engagement. Lock and drop feature for faster installation.
• The Arc 36 chamber feet are designed with an extra large surface area to provide support, particularly in sandy soils.
• Sidewall louvers are designed to allow effluent to exit the chamber sidewalls in high flow situations, while preventing soils from migrating into the chamber void.
• Observation/venting knockout ports provide for inspection of system performance as well as a convenient location for drain field ventilation pipes.
• Each chamber end has small knockouts on the roof positioned in the “Post” end joint. When removed, these knockouts allow for the use of zip ties to support piping in dosing systems.

Arc 36 Universal Endcap
• Upper and lower knockouts accommodate both Schedule 40 and SDR 35 piping. Knockouts can be removed with a knife or hole saw. Dimples are also offered for the positioning of hole saw pilot drills.
• Endcaps are designed to attach to the chamber’s dome or post end in the same fashion for each end with the Arc 36 logo facing outward.

Arc 36 Swivel Feature
• The engagement mechanism of the Arc 36 chamber is designed to allow for a pivot between joined chambers of up to 10° in either direction.

Arc 36 Side Port Coupler (SPC)
• SPC component snaps in place to allow side entry at any joint throughout the trench line. This accessory provides a variety of design and installation options.
Before beginning installation, please note the following engineered features of the Arc 36 LP model chambers and endcaps.

**Arc 36 LP System**
- Each chamber end is either marked “Dome” or “Post” on the round observation/vent knockout ports. These indicate direction of assembly, dome over post.

<table>
<thead>
<tr>
<th>Arc 36 LP Chamber</th>
</tr>
</thead>
<tbody>
<tr>
<td>Length</td>
</tr>
<tr>
<td>63”</td>
</tr>
<tr>
<td>Repeat Length</td>
</tr>
<tr>
<td>60”</td>
</tr>
<tr>
<td>Overall Width</td>
</tr>
<tr>
<td>34”</td>
</tr>
<tr>
<td>Ave. Open Bottom Width</td>
</tr>
<tr>
<td>2.44’</td>
</tr>
<tr>
<td>Overall Height</td>
</tr>
<tr>
<td>8”</td>
</tr>
</tbody>
</table>

Calculations and dimensions are nominal

**Arc 36 LP Chamber—Top, Side, and End Views** (not to scale)
**ARC 36 LP SYSTEM**

**Arc 36 LP Features**
- The post and dome creates a positive lock securing the chambers for final engagement. Lock and drop feature for faster installation.
- The Arc 36 LP chamber feet are designed with an extra large surface area to provide support, particularly in sandy soils.
- Sidewall louvers are designed to allow effluent to exit the chamber sidewalls in high flow situations, while preventing soils from migrating into the chamber void.
- Observation/venting knockout ports provide for inspection of system performance as well as a convenient location for drain field ventilation pipes. These knockout ports also allow for introduction of inlet pipe through the roof of the Arc 36 LP chamber to achieve 8-inch invert height.

**Arc 36 LP Universal Endcap**
- Upper and lower knockouts accommodate both Schedule 40 and SDR 35 piping. Dimples are provided on interior aspect of endcap to direct positioning of hole saw pilot drills for pressure distribution (small diameter) pipe. Knockouts can be removed with a knife or hole saw.
- Endcaps are designed to attach to the chamber’s dome or post end in the same fashion for each end with the Arc 36 LP logo facing outward.

**Arc 36 LP Swivel Feature**
- The engagement mechanism of the Arc 36 LP chamber is designed to allow for a pivot between joined chambers of up to 10° in either direction.
Before beginning installation, please note the following engineered features of the 11" Standard model chambers and endcaps.

11" Standard System
• Each chamber end is either marked “Dome” or “Post” on the round observation/vent knockout ports. These indicate direction of assembly, dome over post.

<table>
<thead>
<tr>
<th>11&quot; Standard Chamber</th>
</tr>
</thead>
<tbody>
<tr>
<td>Length</td>
</tr>
<tr>
<td>Repeat Length</td>
</tr>
<tr>
<td>Overall Width</td>
</tr>
<tr>
<td>Ave. Open Bottom Width</td>
</tr>
<tr>
<td>Overall Height</td>
</tr>
</tbody>
</table>

Calculations and dimensions are nominal

11" Standard Chamber — Top, Side, and End Views (not to scale)

11" Standard Endcap — Side, and End Views (not to scale)
11" Standard Features

• The post and dome creates a positive lock securing the chambers for final engagement.
• The 11" Standard chamber feet are designed with an extra large surface area to provide support, particularly in sandy soils.
• Sidewall louvers are designed to allow effluent to exit the chamber sidewalls in high flow situations, while preventing soils from migrating into the chamber void.
• Observation/venting knockout ports provide for inspection of system performance as well as a convenient location for drain field ventilation pipes.
• Each chamber end has small knockouts on the roof positioned in the “Post” end joint. When removed, these knockouts all for the use of zip ties to support piping in dosing systems.

11" Standard Universal Endcap

• Upper and lower knockouts accommodate both Schedule 40 and SDR 35 piping. Dimples are also offered for the positioning of hole saw pilot drills.
• Endcaps are designed to attach the chamber’s dome or post end.
Before beginning installation, please note the following engineered features of the 16" High Capacity model chambers and endcaps.

16" High Capacity System

- Each chamber end is either marked “Dome” or “Post” on the round observation/vent knockout ports. These indicate direction of assembly, dome over post.

<table>
<thead>
<tr>
<th>16&quot; High Capacity</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Length</td>
<td>76&quot;</td>
</tr>
<tr>
<td>Repeat Length</td>
<td>75&quot;</td>
</tr>
<tr>
<td>Overall Width</td>
<td>34&quot;</td>
</tr>
<tr>
<td>Ave. Open Bottom Width</td>
<td>2.28'</td>
</tr>
<tr>
<td>Overall Height</td>
<td>16&quot;</td>
</tr>
</tbody>
</table>

Calculations and dimensions are nominal

16" High Capacity — Side, and End Views (not to scale)

16" High Capacity Endcap — Side View (not to scale)
16" High Capacity Features

- The post and dome creates a positive lock securing the chambers for final engagement.
- The 16" High Capacity chamber feet are designed with an extra large surface area to provide support, particularly in sandy soils.
- Sidewall louvers are designed to allow effluent to exit the chamber sidewalls in high flow situations, while preventing soils from migrating into the chamber void.
- Observation/venting knockout ports provide for inspection of system performance as well as a convenient location for drain field ventilation pipes.
- Each chamber end has small knockouts on the roof positioned in the “Post” end joint. When removed, these knockouts all for the use of zip ties to support piping in dosing systems.

16" High Capacity Universal Endcap

- Upper and lower knockouts accommodate both Schedule 40 and SDR 35 piping. Dimples are also offered for the positioning of hole saw pilot drills.
- Endcaps are designed to attach the chamber's dome or post end.
SIDE PORT COUPLER

Included in the Arc chamber line is an accessory called the Side Port Coupler (SPC). Each Arc chamber model has an accompanying SPC.

Function:

The SPC offers flexibility of pivoting when installed in series between two chambers within the chamber line to allow for increased turning capability.
INSTALLATION INSTRUCTIONS

Preparation
• Excavate to proper width and depth as described in the system design or permit and as required by state and local codes.
• Smooth irregularities in the excavation and clear any large rocks or debris from the bottom surface area. Slope of the bottom area shall be determined by the system design, as well as state and local codes.

Installation
• Installation of any Arc leaching system begins with laying the first chamber onto the prepared bottom surface area dome end first. Each additional chamber is then laid dome over post by raising the post end of the incoming chamber and slightly pulling the chamber back until the dome stops at the underlying post. As the incoming chamber is laid flat on the bottom, slide the lower base flanges under the raised base flanges of the previously installed chamber.
• As the incoming chamber is lowered down onto the excavation bottom, the two chambers fully engage in a straight-line pattern creating a very strong joint.

Note: If the following chamber is simply laid onto the preceding chamber the joint will not be fully engaged.

Installation of Endcaps & Pipe Connections
• Prior to installing endcaps, remove the appropriate knockout for pipe connections. Snap an endcap on each end of the drain lines with the product or company logo facing out (knockouts can be removed with a knife or a 4” hole saw).
• Upper endcap 4” knockouts — always used as inlet for each line. A four-inch hole saw may be used.

Splashes Plates
• Splash plates are mandatory on each inlet endcap for gravity delivery of effluent.
• Company provided splash plates are installed by simply aligning the holes on the splash plate with the corresponding dimples on the endcap and snapping into place.
• Splash plates are used separately.
• A custom “receiving area” is required on all chamber systems where effluent is provided to the system under pressure and splash plates are utilized.
• See page 14 for details.
INSTALLATION INSTRUCTIONS (Continued)

Filter Fabric
The use of filter fabric is recommended, and may be required, in certain soil conditions. If used, drape the fabric to completely cover the louvered sidewalls of the chambers to prevent soil intrusion, while allowing water and air to pass through.

The following single or combination of conditions warrant the use of filter fabric:
• The backfill material is fine or very fine uniform sand.
• The drainfield will be left uncovered.
• The drainfield will not be protected from surface drainage (i.e. downsputs, barrel-tile roofs, paved areas, and neighboring property).

Filter fabric should meet the following specifications and can be purchased from your Infiltrator Water Technologies distributors:
• Fabric: Spun bonded, made up of nylon fibers, hydrophilic in nature
• Weight: 0.35 – 1 oz/yd²

Ventilation
Drain field ventilation is recommended, but not required, to allow oxygen to access the drain field especially when cover soil quality is questionable.
• Knockouts are provided on the roof aspect of all Arc chambers. The dome/post feature of the Arc 24 chamber also acts as a knock-out for observation/vent ports. Here a PVC pipe may be introduced into the chamber and vented to atmosphere.
• Make certain the vent is assembled in such a fashion as to prevent rainwater from entering, effluent from exiting the chamber line.
• Several outlet products are available for this purpose.

Backfill
• Modestly compact the sidewall area backfill material by simply walking down the sides of the chambers. Sidewall compaction is important to begin the stabilization process of the soil, to support the chamber sidewalls, and help prevent fine sand migration into the chamber louvers. This procedure may be accomplished any time during the installation or covering process.

• All Arc chambers are AASHTO H-10 load rated. Where vehicular loading is anticipated during installation of the system or construction of the facility, AASHTO H-10 loading (16,000 lbs/axle) is achieved by backfilling with a minimum of 12” of properly compacted cover.
• Do not drive heavy equipment over a system comprised of non-compacted cover material without first bridging the excavation. Use lightweight or tracked equipment to push the soil onto the system to the proper height set forth by local and state codes.

Final Grade
• Make certain that storm water is diverted away from the drain field. System final grade should be crested or sloped, never left flat or concave. Channel water away from the drain field.
• Final grading subcontractors and landscapers should be alerted and instructed to proper covering procedures, cover materials, and finish contours and elevations.
• Final grade material should be slightly to moderately limited soil to help maintain an aerobic state in the drain field.
• Stabilize the drain field area with grass-type vegetation prior to heavy rains if possible.
SPECIAL PROCEDURES

Chamber Installations in
Ground Burrowing Animal Areas

Infiltrator Water Technologies suggests (non-mandatory) the installation of wire mesh netting under the chambers when installed in areas of significant ground burrowing animal activity and when confronted with the specific conditions as follows:

1. Drainfield area shows visible signs of ground burrowing animal activity.
2. Installations not put into service for an extended period after installation.
3. Drainfield designed using serial distribution in significant ground burrowing animal activity.

Wire Mesh Netting specifications:
- ½” – 1 ½” hexagon netting and or square netting
- 18” – 24” width
- 20 gage
- Galvanized wire
- Plastic fencing may be substituted with a minimum 1/16” strand width

Manufacturers included but not limited to:
Jackson-Wire International, Inc.

Please note the following supplemental Installation Instructions:
1. Refer to manufacturer’s chamber installation instructions.
2. After the excavation is prepared roll out chicken wire on the trench bottom for entire length of the trench (See Figure 1).
3. Install the chambers over the wire base (See Figure 2).
4. Complete remainder of installation per manufacturer’s chamber installation instructions.

Figure 1: Roll out chicken wire on trench bottom
Figure 2: Install chambers over the wire base
SYSTEM CONFIGURATIONS

TYPICAL INSTALLATIONS

Trench System (not to scale)

Seepage Bed System (not to scale)
TYPICAL INSTALLATIONS

At-Grade System (not to scale)

At-Grade System with Sand Base Layer: The contact surface between the chambers and native soil may be modified with the placement of washed sand to establish an even, consistent base for chamber installation. Placement of a sand base layer categorizes the system as a Type III system, in accordance with part 7080.2300. A sand base layer shall meet the following requirements:

1. Sand may not raise the bottom elevation of the chamber system from the existing ground surface elevation or change the slope of the bottom elevation of the chamber system compared to existing ground surface grade at a site.
2. Sand shall be spread over the disturbed soil surface to fill gaps between uneven, rutted surficial features to provide an even, consistent surface for chamber placement and support.
3. Sand shall be washed and meet the requirements of part 7080.2220, subpart 3, item C.
4. Chambers shall be installed on the native soil with base sand filling gaps, and at the gradient of the native soil in accordance with part 7080.2230.
5. System size shall be based upon the native soil hydraulic loading rate.

Mound System System (not to scale)
## CHAMBER SIZING

### A. Trench System Applications

Registered Arc chambers carry the following manufacturer’s recommended equivalencies in trench system applications (per linear foot):

- **Arc 18** = 18-inch wide stone and pipe trench
- **Arc 24** = 24-inch wide stone and pipe trench
- **Arc 36** = 36-inch wide stone and pipe trench
- **Arc 36HC** = 36-inch wide stone and pipe trench
- **Arc 36LP** = 36-inch wide stone and pipe trench
- **11" Standard** = 36-inch wide stone and pipe trench
- **16" High Capacity** = 36-inch wide stone and pipe trench

### Table 1: Arc 18

<table>
<thead>
<tr>
<th>Soil Loading Rate (gpd/sf²)</th>
<th>Number of Bedrooms</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number of Chambers</td>
<td>Linear Feet</td>
<td>Number of Chambers</td>
<td>Linear Feet</td>
<td>Number of Chambers</td>
</tr>
<tr>
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<td>68</td>
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### Table 2: Arc 24

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<th>Soil Loading Rate (gpd/sf²)</th>
<th>Number of Bedrooms</th>
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<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
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<td>Linear Feet</td>
<td>Number of Chambers</td>
<td>Linear Feet</td>
<td>Number of Chambers</td>
</tr>
<tr>
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### Table 3: Arc 36, Arc 36HC, Arc 36LP, 11" Standard and 16" High Capacity

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<tr>
<th>Soil Loading Rate (gpd/sf²)</th>
<th>Number of Bedrooms</th>
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<th>4</th>
<th>5</th>
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</thead>
<tbody>
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<td>Linear Feet</td>
<td>Number of Chambers</td>
<td>Linear Feet</td>
<td>Number of Chambers</td>
</tr>
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<td>195</td>
<td>52</td>
</tr>
<tr>
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<td>420</td>
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<td>630</td>
<td>167</td>
</tr>
</tbody>
</table>

Notes:

1. Soil loading rates are based on Section 7080.2150, Tables IX and IXa.
2. For Classification II & III Dwellings, reference Section 7080.1850, Table IV.
3. Rapidly permeable soil texture groups shall conform with Section 7080.2260, including but not limited to pressure distribution of the effluent.
B. At-Grade System Applications

Registered Arc chambers carry the following manufacturer’s recommended width equivalencies for at-grade system applications:

Arc 18 = each chamber row is equal to 1.5-feet of stone and pipe width
Arc 24 = each chamber row is equal to 2-feet of stone and pipe width
Arc 36 = each chamber row is equal to 3-feet of stone and pipe width
Arc 36HC = each chamber row is equal to 3-feet of stone and pipe width
Arc 36LP = each chamber row is equal to 3-feet of stone and pipe width
11” Standard = each chamber row is equal to 3-feet of stone and pipe width
16”High Capacity = each chamber row is equal to 3-feet of stone and pipe width

Notes:
1. At-grade systems utilizing Arc or Bio Diffuser chambers shall be designed in full accordance with Section 7080.2230.
2. Maximum allowable at-grade system bed width is 15 feet.

C. Mound System Applications

Registered Arc chambers carry the following manufacturer’s recommended width equivalencies for mound system applications:

Arc 18 = each chamber row is equal to 1.5-feet of stone and pipe width
Arc 24 = each chamber row is equal to 2-feet of stone and pipe width
Arc 36 = each chamber row is equal to 3-feet of stone and pipe width
Arc 36HC = each chamber row is equal to 3-feet of stone and pipe width
Arc 36LP = each chamber row is equal to 3-feet of stone and pipe width
11” Standard = each chamber row is equal to 3-feet of stone and pipe width
16”High Capacity = each chamber row is equal to 3-feet of stone and pipe width

Notes:
1. Mound systems utilizing Arc or Bio Diffuser chambers shall be designed in full accordance with Section 7080.2220.
2. The size of the mound distribution media area shall be calculated by dividing the design flow by the sand media loading rate, which is 1.2 gallons per day per square foot. Other factors shall be considered in sizing of mound systems.
3. Maximum allowable width for mound distribution beds is 9 feet.
CHAMBER SIZING

D. Seepage Bed System Applications

Registered Arc chambers carry the following manufacturer's recommended width equivalencies for seepage bed system applications:

Arc 18 = each chamber row is equal to 1.5-feet of stone and pipe width
Arc 24 = each chamber row is equal to 2-feet of stone and pipe width
Arc 36 = each chamber row is equal to 3-feet of stone and pipe width
Arc 36HC = each chamber row is equal to 3-feet of stone and pipe width
Arc 36LP = each chamber row is equal to 3-feet of stone and pipe width
11" Standard = each chamber row is equal to 3-feet of stone and pipe width
16" High Capacity = each chamber row is equal to 3-feet of stone and pipe width

Notes:
1. Seepage bed systems utilizing Arc or Bio Diffuser chambers shall be designed in full accordance with Section 7080.2210.
2. Design of seepage beds with widths up to 12 feet may utilize gravity distribution.
3. Design of seepage beds with widths greater than 12 feet shall utilize pressure distribution.

Side Port Coupler (SPC) Product Sizing

The following registered Arc chambers utilize a Side Port Coupler (SPC) attachment (see product specifications on pages 2-6). These SPC parts may be used as part of the requisite system design area for trench, at-grade, mound, and seepage bed system applications when approved by the local permitting authority. The manufacturer recommends the following equivalencies for these parts (per unit):

Arc 24 SPC = 1.5 ft² per unit
Arc 36 SPC = 3.5 ft² per unit
Arc 36HC SPC = 3.5 ft² per unit

Notes:
The Arc 24 SPC is 12" in length when engaged. Therefore we recommend that the per-unit rating be equivalent to that of the Arc 24 chamber (per-linear foot).

The Arc 36 SPC is 14" in length when engaged. Therefore we recommend that the per-unit rating be equivalent to 1.167 times that of the per-linear foot rating of the Arc 36 chamber (3 ft²).

The Arc 36HC SPC is 14" in length when engaged. Therefore we recommend that the per-unit rating be equivalent to 1.167 times that of the per linear foot rating of the Arc 36HC chamber (3 ft²).
(a) The structural integrity of each chamber, endcap and other accessory manufactured by Infiltrator (collectively referred to as “Units”), when installed and operated in a leachfield of an onsite septic system in accordance with Infiltrator’s installation instructions, is warranted to the original purchaser (“Holder”) against defective materials and workmanship for one year from the date upon which a septic permit is issued for the septic system containing the Units; provided, however, that if a septic permit is not required for the septic system by applicable law, the one (1) year warranty period will begin upon the date that installation of the septic system commences. In order to exercise its warranty rights, Holder must notify Infiltrator in writing at its corporate headquarters in Old Saybrook, Connecticut within fifteen (15) days of the alleged defect. Infiltrator will supply replacement Units for those Units determined by Infiltrator to be defective and covered by this Limited Warranty. Infiltrator’s liability specifically excludes the cost of removal and/or installation of the Units.

(b) THE LIMITED WARRANTY AND REMEDIES IN SUBPARAGRAPH (a) ARE EXCLUSIVE. THERE ARE NO OTHER WARRANTIES WITH RESPECT TO THE UNITS, INCLUDING NO IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

(c) This Limited Warranty shall be void if any part of the chamber system (chamber, endcap or other accessory) is manufactured by anyone other than Infiltrator. The Limited Warranty does not extend to incidental, consequential, special or indirect damages. Infiltrator shall not be liable for penalties or liquidated damages, including loss of production and profits, labor and materials, overhead costs, or other losses or expenses incurred by the Holder or any third party. Specifically excluded from Limited Warranty coverage are damage to the Units due to ordinary wear and tear, alteration, accident, misuse, abuse or neglect of the Units; the Units being subjected to vehicle traffic or other conditions which are not permitted by the installation instructions; failure to maintain the minimum ground covers set forth in the installation instructions; the placement of improper materials into the system containing the Units; failure of the Units or the septic system due to improper siting or improper sizing, excessive water usage, improper grease disposal, or improper operation; or any other event not caused by Infiltrator. This Limited Warranty shall be void if the Holder fails to comply with all of the terms set forth in this Limited Warranty.

Further, in no event shall Infiltrator be responsible for any loss or damage to the Holder, the Units, or any third party resulting from installation or shipment, or from any product liability claims of Holder or any third party. For this Limited Warranty to apply, the Units must be installed in accordance with all site conditions required by state and local codes; all other applicable laws; and Infiltrator’s installation instructions.

(d) No representative of Infiltrator has the authority to change this Limited Warranty in any manner whatsoever, or to extend this Limited Warranty. No warranty applies to any party other than the original Holder.

The above represents the standard Limited Warranty offered by Infiltrator. A limited number of states and counties have different warranty requirements. Any purchaser of Units should contact Infiltrator’s corporate headquarters in Old Saybrook, Connecticut, prior to such purchase, to obtain a copy of the applicable warranty, and should carefully read that warranty prior to the purchase of Units.