Materials and Equipment Needed

- ☐ Quick4 Plus chambers
- ☐ Quick4 Plus All-In-One 12 Endcaps
- ☐ PVC pipe and couplings
- ☐ Backhoe
- ☐ Laser, transit or level
- ☐ Shovel and rake
- ☐ Tape measure
- ☐ Screwdriver or utility knife
- ☐ Hole saw
- ☐ 2-inch drywall screws*
- ☐ Screw gun*
- ☐ Small valve-cover box*
- ☐ 4-inch cap for Inspection port*

*Optional

These guidelines for construction machinery must be followed during installation.

- ☐ Avoid direct contact with chambers when using construction equipment. Chambers require a 12-inch minimum of compacted cover to support a wheel load rating of 16,000 lbs/axle or equivalent to an AASHTO H-10 load rating.
- ☐ Only drive across the trenches when necessary. Never drive down the length of the trenches.
- ☐ To avoid additional soil compaction, never drive heavy vehicles over the completed system.

Iowa Environmental Code Chapter 69 Onsite Wastewater Treaatment and Disposal Systems Regulations requires the following:

69.6(6) Chamber Systems

a. Application. Chamber systems may be used as an alternative to conventional 4-inch pipe placed in gravel-filled trenches. However, chamber systems shall not be used in areas where conventional systems would not be allowed due to poor permeability, high groundwater, or insufficient depth to bedrock.

b. Installation. The manufacturer's specifications and installation procedures shall be adhered to.

c. Length of trench. The total length of soil absorption trench for chambers 15 to 22 inches wide shall be the same as given in Table IIIc for a 2-foot-wide conventional soil absorption trench. Chambers 33 inches wide or greater shall be sized as given in Table IIIc for a 3-foot-wide conventional soil absorption trench.

d. Sidewall. The chambers shall have at least 6 inches of sidewall effluent soil exposure height below the invert of the inlet.

EXCAVATING AND PREPARING THE SITE

NOTE: As is the case with conventional systems, do not install the systems in wet conditions or in overly moist soils, as this causes machinery to smear the soil.

1. Stake out location of trenches and lines. Set elevations of the tank, pipe, and trench bottom.

2. Install sedimentation and erosion control measures. Temporary drainage swales/berms may be installed to protect the site during rainfall events.

3. Excavate and level 3-foot-wide trenches with proper center-to-center separation. Verify trenches are level or have prescribed slope.

NOTE: Over excavate the trench width in areas where you are planning to contour.

4. Rake bottom and sides if smearing has occurred while excavating. Remove any large stones and other debris. Do not use the bucket teeth to rake the trench bottom.

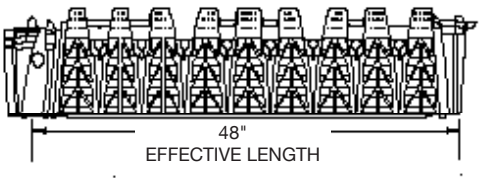
5. Verify that each trench is level using a level, transit, or laser.

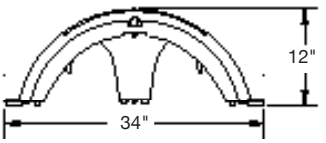
Infiltrator Part of ADS — Quick4 Plus Standard Installation Instructions — IOWA

Quick4 Plus Standard chambers may only be installed according to State and/or local regulations. If unsure of the installation requirements for a particular site, contact the local health department.

Like conventional systems, the soil and site conditions must be approved prior to installation. Conduct a thorough site evaluation to determine the proper sizing and siting of the system before installation.

Quick4 Plus Standard





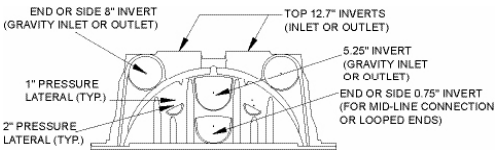
PREPARING THE QUICK4 PLUS ALL-IN-ONE 12 ENDCAPS

NOTE: The Quick4 Plus All-in-One 12 Endcap is compatible with the Quick4 Plus Standard chambers, and can be used on either end of the trench, depending upon the installer's preference and configuration requirements.

1. With a hole saw drill a 4½-inch opening on front or side of endcap using center point marking (see illustration) as a guide.

1. Drill endcap.

QUICK4 PLUS ALL-IN-ONE 12 ENDCAP DRILL LOCATIONS:



2. Snap off the molded splash plate located on the bottom front of the endcap.

3. Install splash plate into the appropriate slots below inlet to prevent trench bottom erosion.

INSTALLING THE SYSTEM

1. Check the header pipe to be sure it is level or has the prescribed slope.

2. Set the invert height as specified in the design from the bottom of the inlet.

3. Place the first chamber in the trench.

4. Place the back edge of the endcap over the inlet end of the first chamber. Be sure to line up the locking pins on the top of both the chamber and endcap.

4. Place endcap inlet end.

5. Insert the inlet pipe 2.5 inches into the opening on the endcap.

5. Insert inlet pipe.

6. Lift and place the end of the next chamber onto the previous chamber by holding it at a 45-degree angle. Line up the chamber end between the connector hook and locking pin at the top of the first chamber. Lower the chamber to the ground to connect the chambers.

6. Connect chambers.

NOTE: When the chamber end is placed between the connector hook and locking pin at a 45-degree angle, the pin will be visible from the back side of the chamber.

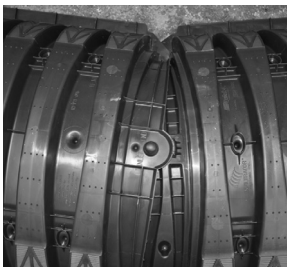
NOTE: The connector hook serves as a guide to ensure proper connection and does not add structural integrity to chamber joint. Broken hooks will not affect the structure or void the warranty.

7. Swivel the chamber on the pin to achieve the

proper direction for trench layout.

NOTE: The chamber allows up to 10-degree swivel in either direction at each joint.

8. Continue connecting chambers until the trench is completed.



7. Swivel chambers.

NOTE: As chambers are installed, verify they are level or have the prescribed slope.

9. The last chamber in the trench requires an endcap. Lift the endcap at a 45-degree angle and align the connector hook on the top of the chamber with the raised slot on the top of the endcap. Lower the endcap to the ground and into place.

9. Place endcap outlet end.

NOTE: Place a few shovels of soil around the endcap to secure it during backfill.

10. To ensure structural stability, fill the sidewall area by pulling soil from the sides of the trench with a shovel. Start at the joints where the chambers connect. Continue backfilling the entire sidewall area, making sure the fill covers the louvers.

11. Pack down fill by walking along the edges of trench and chambers.

NOTE: In wet or clay soils, do not walk in the sidewalls.

12. Proceed to the next trench and begin with Step 1.

INSTALLING QUICK4 PLUS ALL-IN-ONE 12 ENDCAPS AS A MID-LINE CONNECTION

1. With a hole saw drill an opening appropriate for the pipe diameter being used on the side (3.3" invert) or on top (9.0" invert) of endcap.

1. Drill endcap on side or top.

NOTE: Piping configurations are determined by the preference of the installer or designer.

2. With a hole saw, drill a 4½-inch opening on the end of the Quick4 Plus All-in-One 12 Endcap to create an invert at 0.5 inches. This will allow effluent to fill both sides of the chamber line.

2. Drill endcap on end.

3. Snap off the molded splash plate located on the bottom front of the endcap.

4. Install splash plate into the appropriate slots below the inlet to prevent trench bottom erosion.

5. Place the back edge of the endcap over the inlet end of the first chamber. Be sure to line up the locking pins on the top of both chamber and endcap.

6. Insert connection pipe 2.5 inches into opening on endcap.

6. Insert connection pipe.

INSTALLING INSPECTION PORTS

Inspection ports may be installed on each of the chamber tops or on top of the Quick4 Plus All-in-One 12 Endcap.

Endcap Inspection Port

1. With a hole saw drill the premarked area in the top of the chamber or endcap to create an opening based on pipe type.

1. Drill endcap on top.

NOTE: Drill a 4½-inch opening on the Quick4 Plus High Capacity chamber and All-in-One Endcap to accommodate a 4-inch Schedule 40 pipe. Drill a 2½-inch opening on the Quick4 Plus Standard chamber to accommodate a 2-inch Schedule 40 pipe.

2. Set a cut piece of pipe of the appropriate length into the corresponding endcap's inspection port sleeve.

3. Use two screws to fasten the pipe to the sleeve around the inspection port.

2. Pipe in endcap inspection port.

4. Attach a threaded cap or cleanout assembly onto the protruding pipe at the appropriate height.

5. A small valve cover box may be used if the inspection port is below the desired grade.

COVERING THE SYSTEM

Before backfilling, the system must be inspected by a health officer or other official as required by State and local codes. Create an as-built drawing at this time for future records.

1. Backfill the trench by pushing fill material over the chambers with a backhoe. Keep a minimum of 12 inches of compacted cover over the chambers before driving over the system.

NOTE: Do not drive over system while backfilling in sand.

NOTE: For shallow cover applications, you must mound 12 inches of soil over the system before driving over it, and then grade it back to 6 inches upon completion.

2. It is best to mound several inches of soil over the finish grade to allow for settling. This also ensures that runoff water is diverted away from the system.

3. After the system is covered, the site should be seeded or sodded to prevent erosion.

NOTE: If the system is for new home construction, it is important to leave marking stakes along the boundary of the system. This will show contractors where the site is located so they will not cross it with equipment or vehicles.

Infiltrator™ Water Technologies
Part of ADS

4 Business Park Road
P.O. Box 768
Old Saybrook, CT 06475
860-577-7000 • Fax 860-577-7001
1-800-221-4436
www.infiltratorwater.com

Infiltrator Water Technologies Limited Warranty
Available at: www.infiltratorwater.com
or call 1-800-221-4436

PLUS09IOWA 0616ISI

Contact Infiltrator Water Technologies' Technical Services Department for assistance at 1-800-221-4436