

# Quick4<sup>®</sup> Plus Low Profile Chamber Installation Instructions



**Note:** When installing in sandy soil conditions, wheeled construction equipment is prohibited over the top of system. Tracked equipment can be used over top of system with a minimum of 6" of soil cover.

## Before You Begin

This document addresses the installation of Quick4 Plus Standard Low Profile (LP) and Quick4 Plus Equalizer 36 Low Profile (LP) chambers. The Quick4 Plus Standard LP and the Quick4 Equalizer 36 LP chambers are designed for shallow placement applications. All 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.

### Materials and Equipment Needed

- |   |   |
|---|---|
| <input type="checkbox"/> Quick4 Plus Standard Low Profile (LP) Chambers     | <input type="checkbox"/> Utility Knife                  |
| <input type="checkbox"/> Quick4 Plus Equalizer 36 Low Profile (LP) Chambers | <input type="checkbox"/> 1 1/4-inch Drywall Screws*     |
| <input type="checkbox"/> Quick4 Plus 8 Endcaps                              | <input type="checkbox"/> Drill                          |
| <input type="checkbox"/> Quick4 Plus All-in-One 8 Endcaps                   | <input type="checkbox"/> Hole Saw                       |
| <input type="checkbox"/> PVC Pipe and Couplings                             | <input type="checkbox"/> Screw Gun*                     |
| <input type="checkbox"/> Backhoe  | <input type="checkbox"/> Small Valve-cover Box*         |
| <input type="checkbox"/> Laser, Transit or Level                            | <input type="checkbox"/> 4-inch Cap for Inspection Port |
| <input type="checkbox"/> Tape Measure                                       |   |
| <input type="checkbox"/> Shovel and Rake                                    | <i>* Optional</i>                                       |

### 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.
- When installing in sandy soil conditions, wheeled construction equipment is prohibited over top of system. Tracked equipment can be used over top of system with a minimum of 6" of soil cover.**
- Avoid stones larger than 3 inches in diameter in backfill. Remove stones this size or larger that are in contact with chambers.

## Excavating and Preparing the Site

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

1. Stake out location of all trenches and lines. Set elevations of tank, pipe, and trench bottom.
2. Install sedimentation and erosion control measures. Temporary drainage swales/berms may be installed to protect site during rainfall.
3. Excavate and level trenches with proper width and center-to-center separation. Verify that trenches are level or have the prescribed slope.

Note: Over excavate 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 bucket teeth to rake trench bottom.

Note: Raking to eliminate smearing is not necessary in sandy soils. In fine textured soils (silts and clays), avoid walking in the trench to prevent compaction and loss of soil structure.

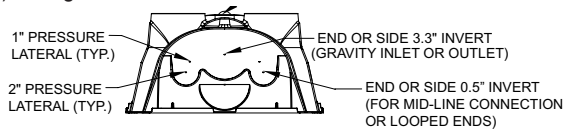
## Preparing the End Cap

Note: Quick4 Plus 8 and Quick4 Plus All-in-One 8 Endcaps are available for use with the Quick4 Plus Standard LP and 36LP chambers on either end of the trench, depending upon the installer's preference and configuration requirements.

1. With a hole saw drill an opening appropriate for pipe diameter being used (normally 3 - 4 inches) on front or side of end cap using center point marking (see illustration) as a guide.



*Drill end cap.*



2. Snap off the molded splash plate located on the bottom front of the end cap.
3. Install splash plate into the appropriate slots below the inlet to prevent trench bottom erosion.

## Installing the Quick4 Plus Periscope

Note: Available for use with Quick4 Plus 8 or Quick4 Plus All-in-One 8 Endcaps only. Invert options based on system design.

1. With a hole saw drill the pre-marked area on top of the Quick4 Plus 8 or Quick4 Plus All-in-One 8 Endcap.



*Drill Quick4 Plus Periscope.*

2. Insert the Quick4 Plus Periscope into the top of the Quick4 Plus 8 or Quick4 Plus All-in-One 8 Endcap. Insert the Quick4 Plus Periscope until it snaps into place.



*Insert Quick4 Plus Periscope.*

3. Insert a 4" Schedule 40 PVC pipe into the Quick4 Plus Periscope at the appropriate locations for the system design.



*Connect inlet pipe.*

4. Rotate Quick4 Plus Periscope to desired angle.

## 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 end cap over the inlet end of the first chamber. Be sure to line up the locking pins on the top of both the chamber and end cap.



*Place end cap inlet end.*

*Optional: Fasten the end cap to the chamber with a screw at the top of the end cap.*

5. Insert the inlet pipe 2.5 inches into the opening on the front of the end cap. Insert fully to the internal pipe stop.



*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.

Note: The connector hook serves as a guide to ensure proper connection and does not add structural integrity to the 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 the trench layout.



*Swivel chambers.*

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

8. Continue connecting chambers until the trench is completed.

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

9. The last chamber in the trench requires an end cap. Lift the end cap 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 end cap. Lower the end cap to the ground and into place.



Place end cap outlet end.

Note: Place a few shovels of soil around the end cap 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 8 Endcap as a Mid-line Connection

Note: See mid-line piping options on the back of this document.

1. With a hole saw drill the opening appropriate for the pipe diameter being used on the side (3.3" invert) or on top (9.0" invert) of the Quick4 Plus All-in-One 8 Endcap.



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 an opening on the end of the Quick4 Plus All-in-One 8 Endcap to create an invert at 0.5 inches. This will allow effluent to fill both sides of the chamber line.



Drill endcap on end.

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

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

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

Optional: Fasten end cap to chamber with a screw at the top of endcap.

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

6. Repeat Steps 1 through 5 for additional trenches.



All-in-One 8 as mid-line connection.

## Installing Optional Inspection Ports

Inspection ports may be installed on the chamber or the Quick4 Plus All-in-One 8 Endcap. The Quick4 Plus 8 Endcap does not allow inspection port construction.

### Quick4 Plus All-in-One 8 Inspection Port

1. With a hole saw drill the pre-marked area in the top of the Quick4 Plus All-in-One 8 Endcap to create a 4 1/3 to 4 1/2-inch opening based on type of pipe.



All-in-One 8 inspection port.

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

Note: The sleeve will accommodate up to a 4-inch Schedule 40 pipe.

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

### Chamber Inspection Port

1. With a hole saw drill the pre-marked area in the top of the chamber to create a 2.5-inch opening.



Chamber inspection port.

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

Note: The sleeve will accommodate up to a 2.5-inch Schedule 40 pipe.

3. Use two screws to fasten the pipe to the chamber dome adjacent to the 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 system by pushing fill material over the chambers. Keep a minimum of 12 inches of compacted cover over the chambers before driving over the system with wheeled construction equipment.

Note: Do not drive over the system while backfilling in sandy soil.

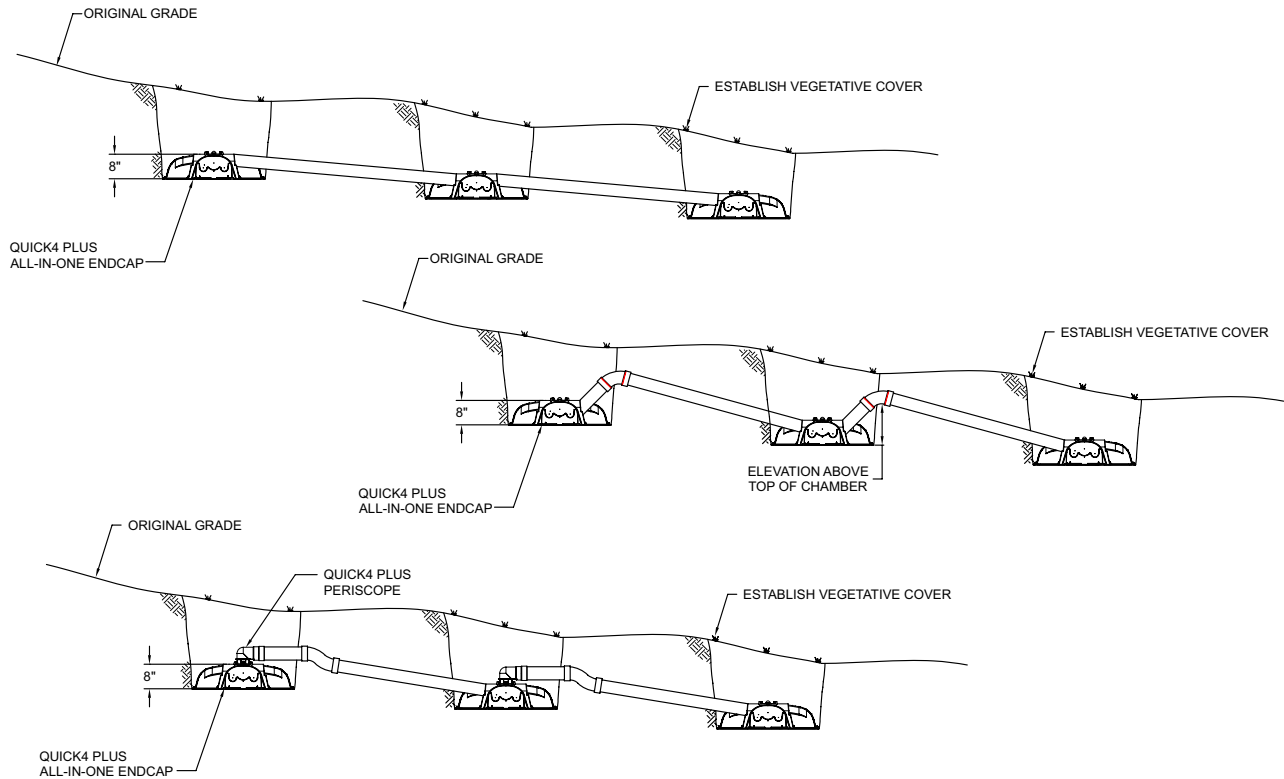
Note: For shallow cover, sand fill, and sandy soil applications, tracked construction equipment must be used. You must mound 12 inches of soil over the system before driving over it with wheeled construction equipment, then grade it back a minimum 6 inches upon completion.

2. It is best to mound several inches of soil over the finished grade to allow for settling. A slight crown also ensures that runoff water is diverted away from the system trench.

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

Note: If system is for new home construction, it is important to leave marking stakes along the boundary of the system. This will notify contractors of the system location so they will not cross it with equipment or vehicles.

# Serial Trench System Configuration Options



## Infiltrator Water Technologies Limited Warranty

(a) The structural integrity of each chamber, end cap and other accessory manufactured by Infiltrator ("Units"), when installed and operated in a leachfield of an onsite septic system in accordance with Infiltrator's instructions, is warranted to the original purchaser ("Holder") against defective materials and workmanship for one year from the date that the septic permit is issued for the septic system containing the Units; provided, however, that if a septic permit is not required by applicable law, the warranty period will begin upon the date that installation of the septic system commences. 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 Units determined by Infiltrator to be 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 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 or extend this Limited Warranty. No warranty applies to any party other than the original Holder.

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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.



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