

# Septic System Installation Instructions



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**INFILTRATOR<sup>®</sup>**  
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**Bed Systems**

## Before You Begin

This document provides septic installation instructions for Quick4 chambers in bed systems. These chambers may only be installed according to state and local regulations. If unsure of the installation requirements, contact your state or local regulators.

Like conventional systems, the soil and site conditions must be approved prior to installation. Be sure that a thorough site evaluation is conducted to determine the proper size and location of the system before proceeding with the installation.

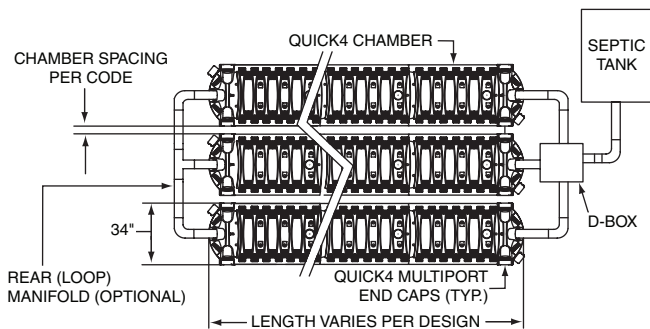
### Materials and Equipment Needed

- Quick4 Chambers
  - MultiPort End Caps
  - Backhoe/Bulldozer
  - 4-inch PVC Pipe and Couplings
  - Laser, Transit, or Level
  - Shovel and Rake
  - Tape Measure
  - Utility Knife
  - Hole Saw/Router Bit\*
  - D-Box\*
- \* 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 H-10 AASHTO load rating.
- Only drive across the bed when necessary. Never drive down the length of the bed system.
- Prior to compaction and during backfill, only use tracked vehicles. Always keep 6 inches of soil between tracks and chambers.

### TYPICAL BED SYSTEM (plan view)



## Excavating and Preparing the Site

*Note: It is not recommended to install systems in wet conditions or in overly moist soils, as this causes machinery to smear the soil interface which can affect system performance.*

1. Stake out the location of the bed and set the elevations of the tanks, pump chamber (if required), pre-treatment devices (if required), piping, and bed bottom. Install sedimentation and erosion control barriers as necessary.

2. Excavate and level the designated area. Be sure to excavate at least one extra foot around perimeter to allow for proper fit and ease installation.

3. If required, be sure to dig through any restrictive layer to the more suitable soils. Remove any debris from the bed walls. Prepare the chamber bed's sub grade soil as outlined in the designer's plans.

4. Rake the bottom and sides if smearing has occurred while excavating. Verify the bottom of the bed is level using a transit, laser or level.

## Preparing the End Caps

1. With a utility knife start the tear-out seal at the appropriate diameter for the inlet pipe. The seal allows for a tight fit for 3-inch, 4-inch SDR35 and 4-inch SCH40 pipe. A 2-inch line can be installed by using an appropriately sized hole saw to cut an opening in the end cap.



Start tear-out seal.

*Note: Pipe size may vary according to state/county regulations or designer specifications.*

2. Pull the tab on the tear-out seal to create an opening on the end cap.



Pull tab on tear-out seal.

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

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

5. Construct a manifold to inlet each row of chambers. A d-box may be used if required by code or designer preference.



Install splash plate.

*Note: It is sometimes easier to install the chamber bed before constructing the manifold. If installing the chambers first in a gravity fed system, it is critical to ensure there is proper fall from the tank to accommodate a manifold.*

6. Once piping network is complete, insert pipe into the end cap at the beginning of each row of the bed.

7. Attach a closed end cap onto the outlet end of the chamber. Do not create an opening on the closed or outlet end cap.

## Installing the Quick4 Chambers

**1.** Construct the chamber bed by joining chambers. Place the inlet end of the first chamber over the back edge of the end cap.



**1** Place first chamber onto end cap.

**2.** Lift and place the end of the next chamber on to the previous chamber by holding it at a 90-degree angle. Line up the chamber end between the connector hook and locking pin at the top of the first chamber. Lower to the ground to connect the chambers.



**2** Connect the chambers.

*Note: When the chamber end is placed between the connector hook and locking pin at a 90-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 the chamber joint. Broken hooks will not affect the structure nor void the warranty.*

**3.** Continue connecting the chambers until the first row is completed.

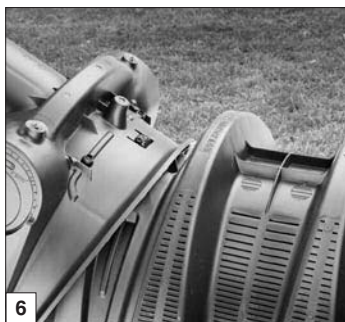
**4.** Check the first row of chambers to be sure that it is level.

**5.** Continue connecting chambers until the bed is complete. As the chambers are installed, verify that they are level, straight and maintain the required separation distance between each row of chambers.

*Note: Separation distance between chamber rows varies per code. Infiltrator recommends 0-6" spacing for bed systems.*

*Note: After installing chambers edge to edge or with up to 6" of spacing, it is important to properly backfill per current installation instructions so as to not compromise the integrity of the product.*

**6.** The last chamber in the row requires an end cap. Lift the end cap at a 45-degree angle and insert the connector hook through the opening on the top of the end cap. Applying firm pressure, lower the end cap to the ground to snap it into place. Do not remove the tear out seal if ends are not to be connected. Repeat this step for each row in the bed.



**6** Attach end cap to chamber.

*Note: Looping the outlet end of the bed may be required by state/local code or specified by design. Infiltrator Systems recommends creating a hole in the end cap at the specified invert height.*

**7.** Insert the loop manifold through the end cap and determine that the manifold is level before backfilling.

**8.** To ensure structural stability, fill the sidewall area by pulling soil in from the sides of the bed with a shovel or by placing fill material with a backhoe or excavator bucket.

**9.** Continue to carefully anchor chambers by ladling fill material between the chamber rows making sure not to dislodge the units. Be sure the fill extends above the louvers a minimum of two inches.

*Note: Only drive over the system with a tracked vehicle.*

*Note: Do not drive over the chambers until a minimum of 12" of fill is placed above the chambers. For rows not accessible from the edge of the bed, wait until a majority of the chambers are covered with 6" of fill before stabilizing middle rows (for tracked vehicles only).*

**10.** Pack down the fill by walking along the sidewalls of the chambers as this helps to give better structural support. In wet conditions, silty or clay soils, do not walk in the sidewalls.

## Covering the System

**Before backfilling, the system must be inspected by a health official or as state and local codes require.**

**1.** Backfill the chamber system by pushing or lading the fill material onto the units with a backhoe or bulldozer. Be sure to avoid having large rocks in backfill.



**1** Ladle the fill.

*Note: For large bed systems that cannot be filled from the sides, use a light tracked vehicle making sure to maintain a minimum of cover of 6" between the chambers and tracks at all times.*

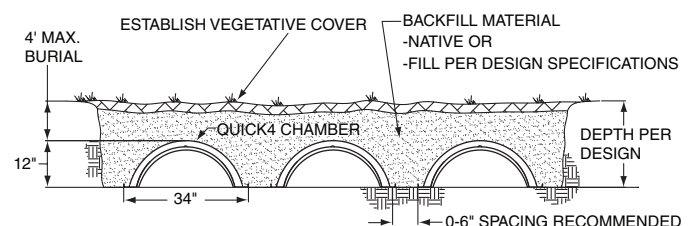
**2.** Do not drive wheeled vehicles across the system when applying cover material.

*Note: If allowed by code, chambers can be installed with a minimum of 6 inches of cover using light tracked vehicles. A maximum of 4 feet of cover is allowed for bed systems.*

**3.** Leave several inches of soil above the required amount for settling and to divert runoff water from the system.

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

### TYPICAL STANDARD BED SYSTEM (side view)



*Note: All Infiltrator chambers are allowed for use in bed systems.*

# Infiltrator Systems, Inc. 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.

\* \* \* \* \*

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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