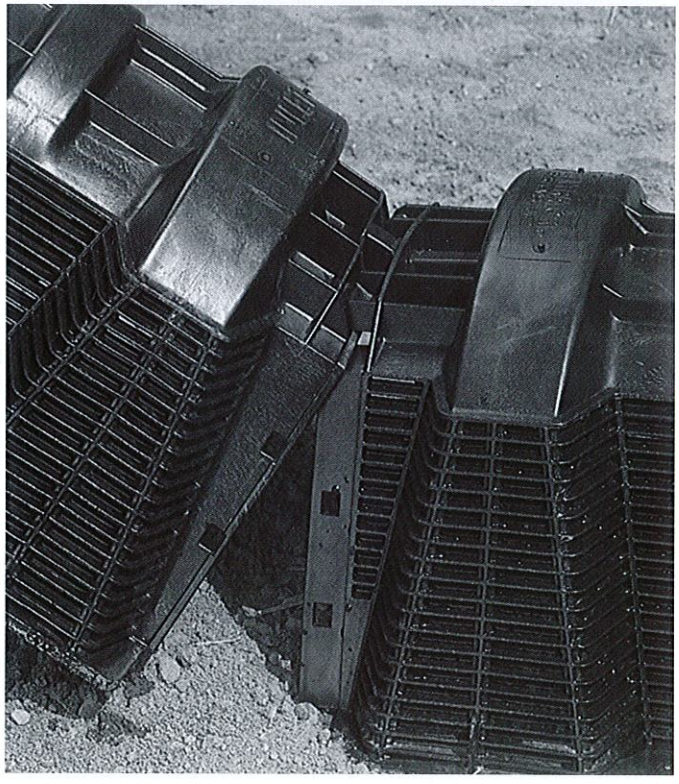
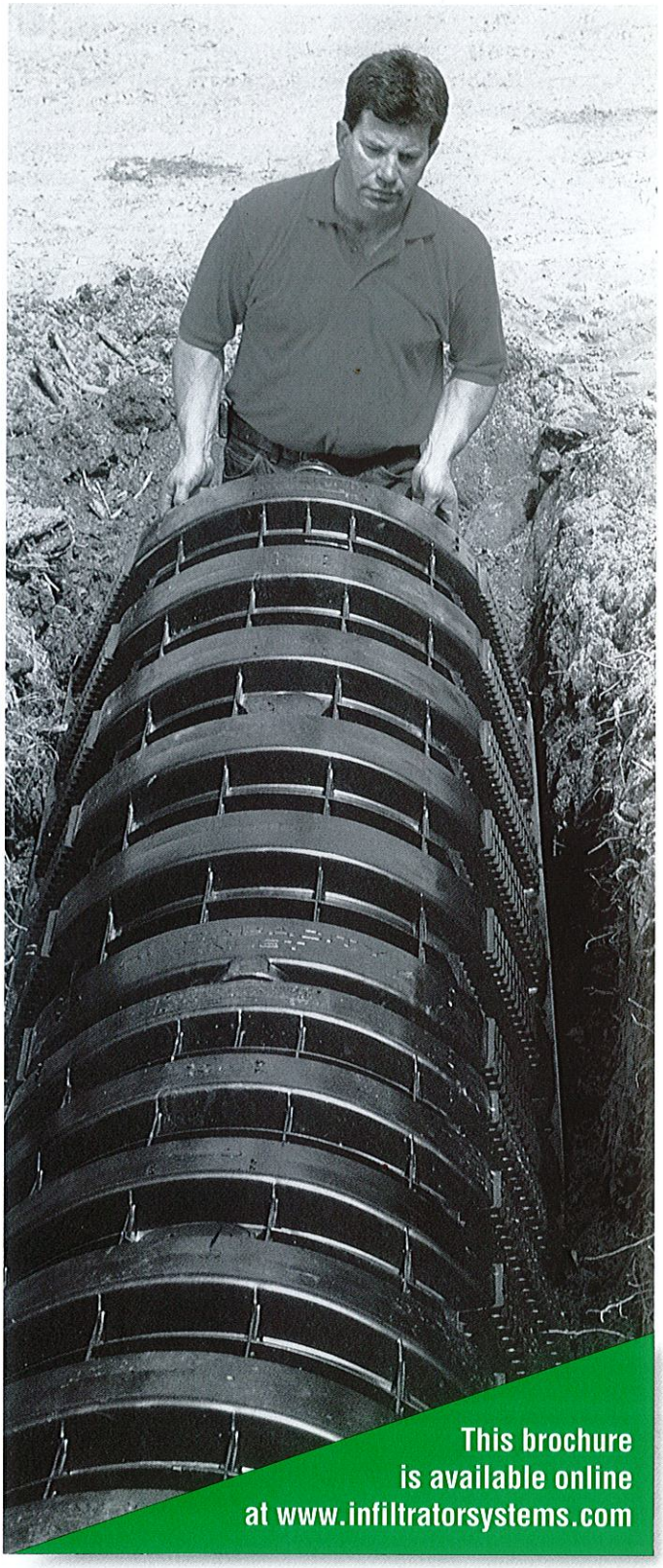
Septic System Installation Instructions

INFILTRATOR® SYSTEMS INC





This brochure is available online at www.infiltratorsystems.com

Standard and High Capacity Chambers
Standard and High Capacity SideWinder® Chambers

Before You Begin.

This document is designed to provide installation instructions for Standard and High Capacity chambers. 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 should be approved prior to installation. Be sure that a thorough site evaluation is conducted to determine the proper sizing and siting of the system before proceeding with the installation.

Materials and Equipment Needed

- ❑ Infiltrator Chambers
- ❑ End Plates
- ❑ Backhoe
- ❑ PVC Pipe and Couplings (4-inch in diameter for the header, inlet, and inspection port)
- ❑ Laser, Transit, or Level
- ❑ Shovel
- ❑ Rake
- ❑ Tape Measure
- ❑ Utility Knife
- ❑ Hole Saw/Router Bit
- ❑ 2-inch Drywall Screws
- ❑ Stakes (4)*
- ❑ String Line*
- ❑ Spray Paint (for marking the trench lines)*
- ❑ Threaded Cleanout Assembly*
- ❑ Small Valve-Cover Box*
- ❑ Glue*
- ❑ Bull Dozer*
- ❑ Screw Gun*

* Optional

These guidelines must be followed when using construction machinery on an Infiltrator septic installation site.

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

Requirements for Excavating and Preparing the Site.

NOTE: As is the case with conventional systems, do not install the system in wet conditions or if the soil is too moist, which will cause machinery to smear the soil.

1 Stake out the location of all trenches and lines. Set the 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. Make sure the trenches are level or have the prescribed slope.

4 Rake the bottom and sides of the trench if smearing has occurred while excavating. Remove any large stones and other debris. Do not use the teeth of the bucket to rake the 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 in order to prevent compacting and loss of soil structure.

5 Verify that the trench is level using a level, transit, or laser. Use care not to compact the trench bottom.

Requirements for Attaching PosiLock™ End Plates.

1 With a hole-saw, cut an opening for the inlet pipe using one of the pre-marked circles on the end plate as a guide. Pre-marked circles allow for 4" SDR35, 4" SCH40 and 2" pressure dosing pipe.

2 Attach the end plate to the inlet end of the chamber by lining up the locking hubs with the corresponding chamber end. Applying firm pressure, lock the hubs in place on one side of the chamber and then the other.

NOTE: The end plate is clearly marked "INLET SIDE TOWARD CHAMBER."

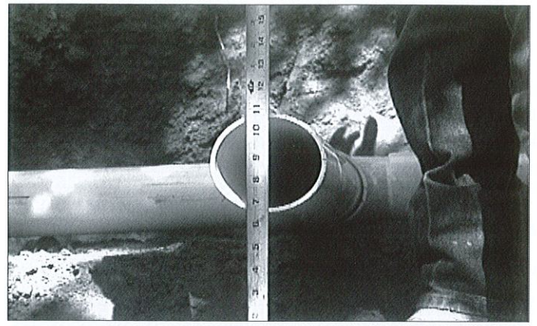
3 In the inlet end of the end plate, insert the appropriate-diameter inlet pipe into the previously drilled hole. Fasten the pipe in place with a screw to secure it to the end plate.

NOTE: The end plate is designed so that effluent will flow in through the pipe and corresponding inlet hole and spill out the opening on the other side. When inserting the inlet pipe, the pipe will only extend into the plate one inch before it reaches a stop.

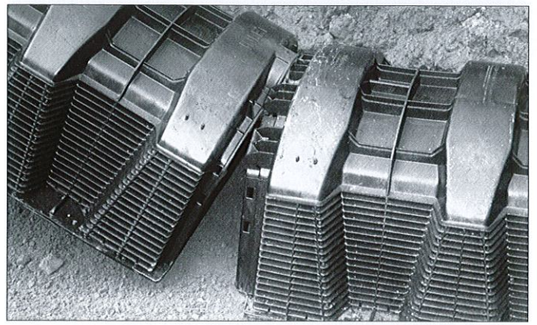
4 Attach a closed end plate onto the outlet end of the chamber by snapping the end plate's locking hubs onto the chamber end. Do not cut an opening on the closed outlet end plate.

NOTE: The existing opening on the end plate must face outward when installed on the closed/outlet end of the chamber. The opening is designed to fill with soil during system installation.

Requirements for Installing the Chambers.



Set the inlet pipe invert at 6½ inches for Standard chambers.



Engage the chamber interlocks by placing one chamber onto another at a 45-degree angle.

Pack down the fill by walking along the edges of the trench.

1. Check the header pipe to be sure that it is level.
2. Set the inlet pipe invert at the appropriate height from the bottom of the trench to the bottom of the inlet.

NOTE: For Standard chambers, set the pipe invert at 6½ inches. When using High Capacity chambers, set the pipe invert at 10¼ inches.

3. Place the first chamber with the end plate at the beginning of the trench.
4. Insert the inlet pipe into the prepared opening (as described in Step 3 on previous page) in the PosiLock end plate. The pipe will only go into the unit one inch before it reaches a stop.
5. Check the first-installed chamber to be sure that it is level or has the prescribed slope.
6. Secure the inlet pipe to the chamber with a screw at the 12 o'clock position.
7. Install the remaining chambers; lift the end of second chamber onto the first chamber at a 45-degree angle, lining up the notches on the center end of the chamber and lowering it to the ground to engage the patented interlocks.
8. Continue interlocking additional chambers until the trench is completed. The last chamber in the trench typically has an end plate that has not been drilled. As the chambers are installed, verify that they are level or have the prescribed slope.
9. Fill the sidewall area starting at the joints where the chambers interlock by pulling soil from the sides of the trench with a shovel. Continue backfilling the remainder of the sidewall area. Be sure the fill extends above the louvers 1-2 inches.
10. Pack down the fill by walking along the edges of the trench and chambers. Only compact enough to match the natural in-place density of the surrounding native soils. Do not backfill in wet conditions.This step is important to assure structural support. In wet or clay soil, do not walk in the sidewalls.
11. Proceed to the next trench and begin with Step 1.

Installing Optional Inspection Ports.

1. Using a hole saw or router, cut an opening in the premarked area located in the center of the chamber. Be sure to use a hole saw that matches the size and type of pipe that is being installed.
2. Glue a 6-inch long piece of pipe into a coupling.
3. Insert the 6-inch piece of pipe into the opening at the top of the chamber so the coupling sits on top of the chamber.
4. Insert another piece of pipe into the coupling and cut it at or above grade.
5. Attach a cap or threaded cleanout assembly onto the protruding pipe.
6. A small valve-cover box may be used if the inspection port is below the desired grade.

NOTE: Inspection ports can also be used for venting.

Requirements for Covering the System.

Backfill the trenches.

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

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

NOTE: Do not drive over the system while backfilling in sand, since sand does not give adequate structural support.

2 It is best to mound several extra inches of soil over the finished grade to allow for settling. This also ensures that runoff water is diverted away from the system. After the system is covered, the site should be seeded or sodded to prevent erosion.

Infiltrator Systems, Inc. Limited Warranty.

(a) The structural integrity of each chamber and end plate 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 (1) 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 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) 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 is 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, 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.

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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.

For specific information on bed, mound, serial, pressure-dosed, or sandy-soils installations, call Infiltrator Systems Inc. at 1-800-221-4436.

Distributed By:

INFILTRATOR® SYSTEMS INC

Environmental Onsite Wastewater Solutions℠

P.O. Box 768 6 Business Park Road Old Saybrook, CT 06475
860-577-7000 FAX 860-577-7001

www.infiltratorsystems.com

1-800-221-4436

U.S. Patents: 4,759,661; 5,017,041; 5,156,488; 5,336,017; 5,401,116; 5,401,459; 5,511,903; 5,716,163; 5,588,778; 5,839,844 Canadian Patents: 1,329,959; 2,004,564 Other patents pending.

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