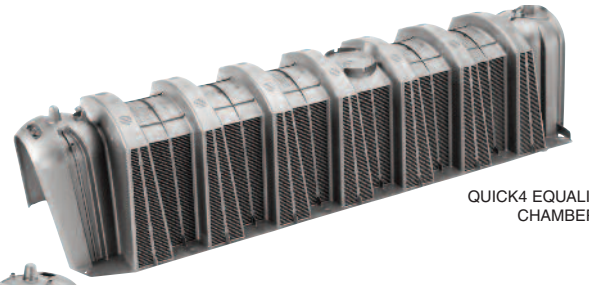
The purpose of this manual is to provide the minimum design and installation information for the use of Quick4® Equalizer® 24, Quick4 Equalizer Low Profile (LP) and Quick4 Equalizer® 36 chambers in Oregon. Exceptions and changes may be made, but should be confirmed by Infiltrator Systems Inc. and the Oregon Department of Environmental Quality. Each revised version of this manual supersedes the previous version.

The manual provides a brief description of both chambers with their sizing specifications. For more detailed design information, please contact Infiltrator Systems at 1-800-221-4436 or your local Oregon Infiltrator representative.

Quick4 EQ24 Chambers

The Quick4 Equalizer 24 chambers can be installed in an 18-inch wide or 24-inch wide trench. There are a variety of system inletting options to choose from, with and without a distribution box.



QUICK4 EQUALIZER 24 CHAMBER

MULTIPORT END CAP

Quick4 EQ36 Chambers

The Quick4 Equalizer 36 chamber can be installed in a 24-inch wide or 30-inch wide trench. There are a variety of system inletting options to choose from, with and without a distribution box.

If your area is prone to ground burrowing rodent activity, Infiltrator Systems suggests combining our standard installation instructions with our ground burrowing rodent protocol. Further information can be acquired by contacting your local distributor or regulator.

QUICK4 EQUALIZER 36 CHAMBER

MULTIPORT END CAP

Sizing of Quick4 Equalizer 24 and Quick4 Equalizer 36 Chamber Systems

Number of Quick4 Chambers	Linear Feet
113	452
100	400
88	352
75	300
69	276
63	252
57	228
50	200
38	152

Quick4 EQ24 LP Chambers

The Quick4 Equalizer 24 Low Profile (LP) chambers can be installed as a gravelless absorption system. The chambers can be installed in an 18-inch-wide or 24-inch-wide trench, with a minimum soil cover of 4 inches.

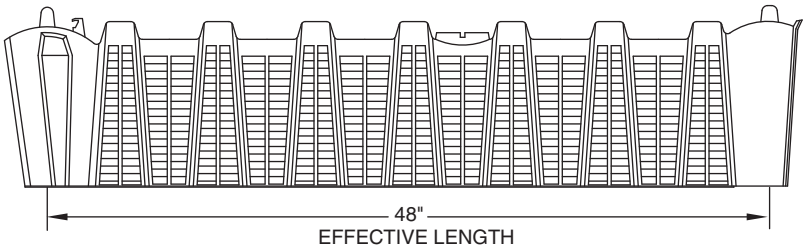
QUICK4 EQUALIZER 24 LOW PROFILE CHAMBER

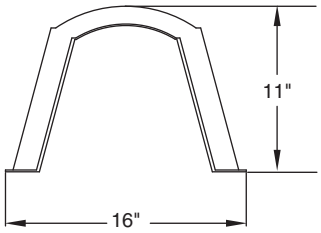
LOW PROFILE END CAP

INFILTRATOR® systems inc.

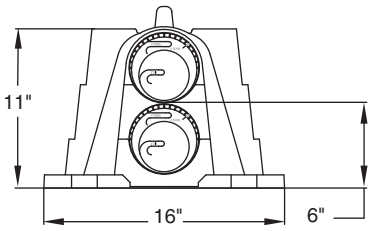
Quick4 Equalizer 24 Chambers

SIDE AND END VIEWS



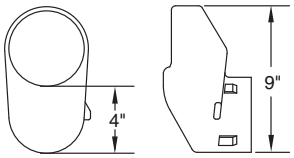


MULTIPORT END CAP
(not to scale)



PART # Q4EQ24E
(6" INVERT)

INVERT ADAPTER
(not to scale)



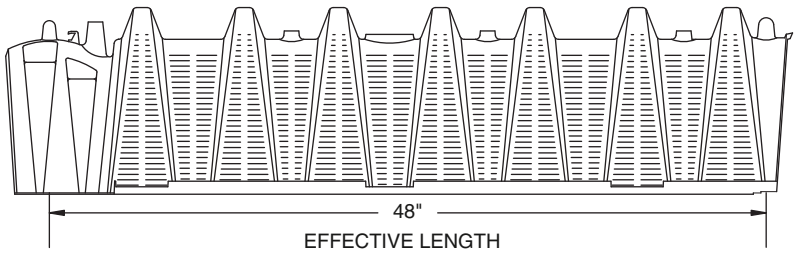
PART # Q4EQ24A
(10" INVERT)

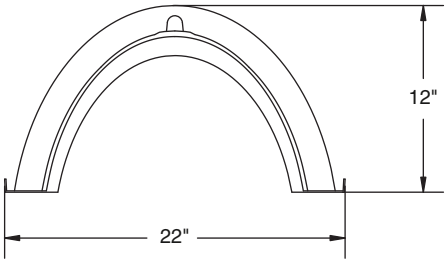
Nominal chamber specifications

Size (W x L x H)	16" x 48" x 11"
Storage Volume	20.4 gal

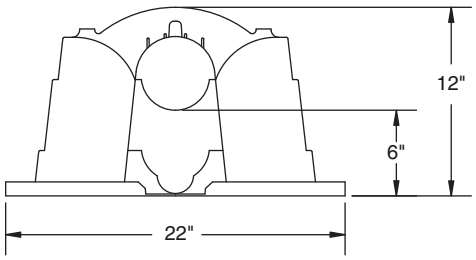
Quick4 Equalizer 36 Chambers

SIDE AND END VIEWS



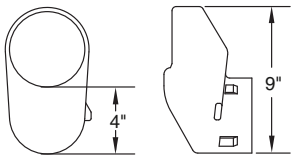


MULTIPORT END CAP
(not to scale)



PART # Q4EQ36E
(6" INVERT)

INVERT ADAPTER
(not to scale)



PART # Q4EQ36A
(10" INVERT)

Nominal chamber specifications

Size (W x L x H)	22" x 48" x 12"
Storage Volume	32 gal

Pressure Distribution

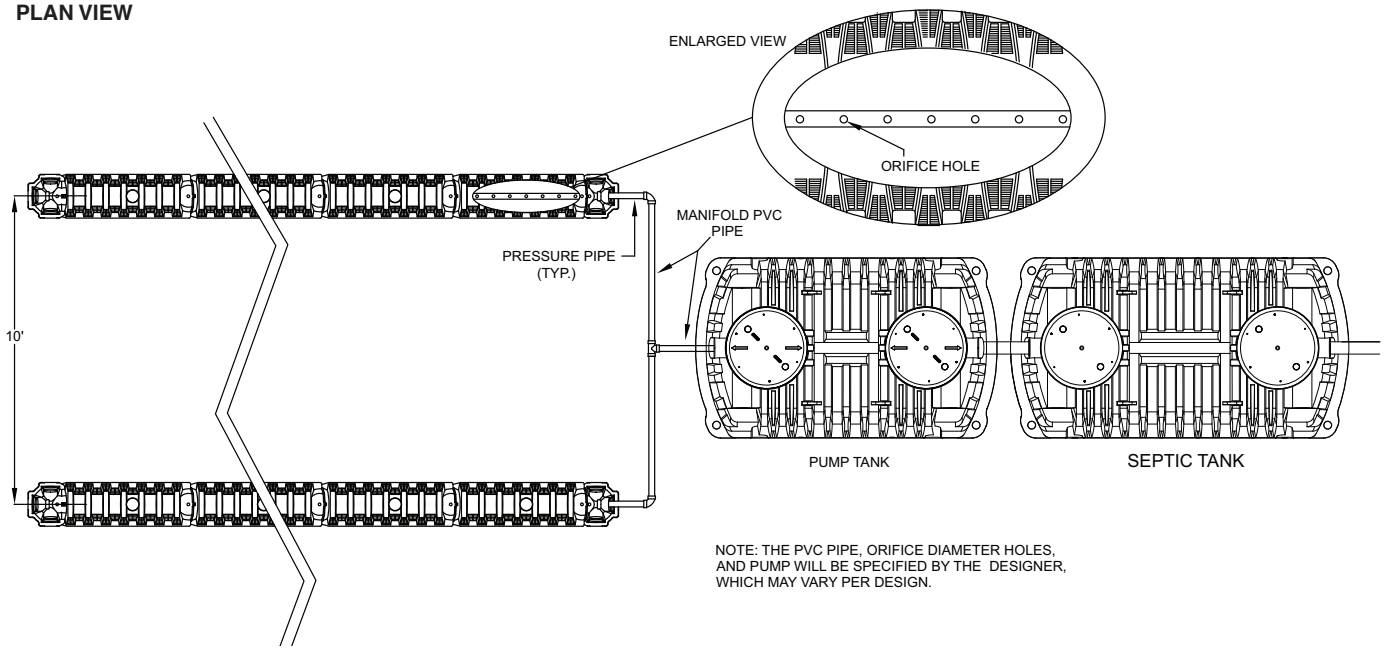
Pressure Distribution (PD) systems are commonly used in rapidly draining soil where vertical separation between the water table and/or restrictive layer is required. One to two-inch pipe, commonly SCH40, with orifices at the 12 o'clock position allow effluent to spray off the inside chamber dome, providing more even distribution.

See page 15 for specific Pressure Distribution Installation Instructions. The Quick4 Equalizer 24 chambers and Quick4 Equalizer 36 chambers may be used in pressure distribution systems.

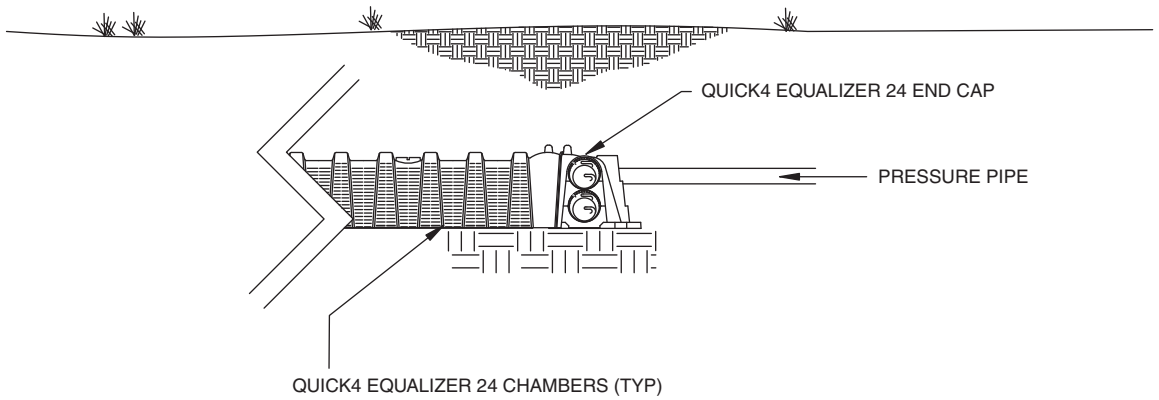
When constructing a PD system:

- Pipe, pump and orifice sizing is determined through design specifications
- Laterals may be suspended using plastic pipe hangers, 12-inch plastic zip ties, or supported using pipe support units
- Drain orifices and shields at the 6 o'clock position are recommended in cold climates
- Accessible 90-degree sweep cleanout extensions are installed at the end of each lateral

PLAN VIEW

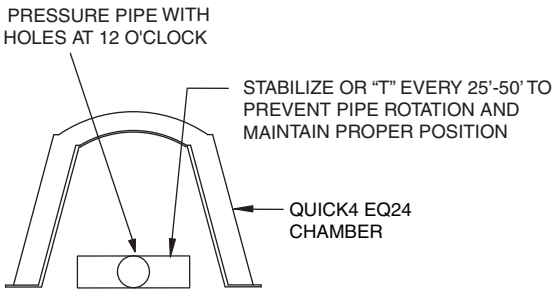


SIDE VIEW

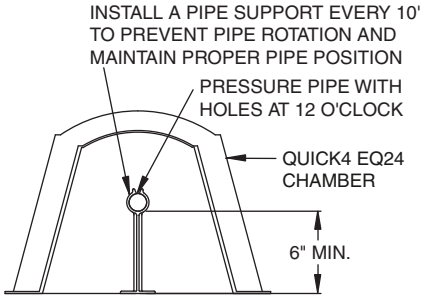


Pressure Distribution

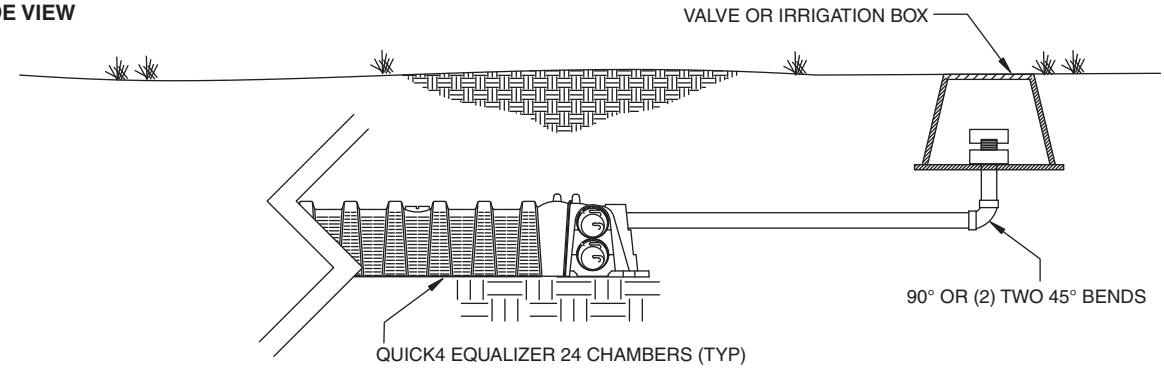
PIPE ON GROUND METHOD
END VIEW



PIPE SUPPORT
END VIEW



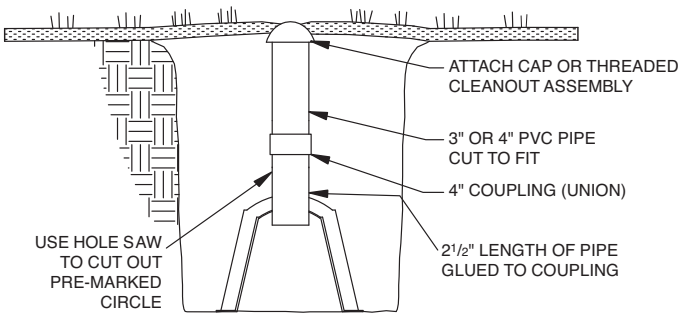
CLEANOUT EXTENSION DETAIL
SIDE VIEW



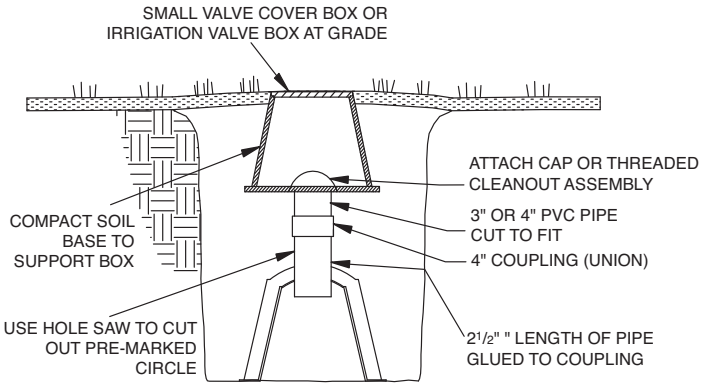
Quick4 Equalizer 24 Optional Inspection Port Detail (recommended by DEQ)

Note: All Infiltrator chamber models may be designed for this application.
Note: The DEQ recommends a monitoring port at the end of each line.

OPTION A: CHAMBER RISER TO GRADE



OPTION B: INSTALLATION WITH VALVEBOX



INFILTRATOR® systems inc.

Pressure Distribution Systems

Before You Begin

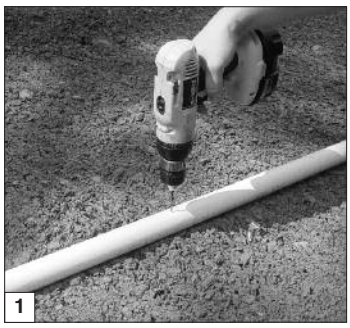
This section provides septic installation information for Quick4 chambers in pressure distribution systems. These systems can only be installed according to state and/or local regulations. Contact your local regulator for specific requirements. Soil and site conditions must be approved prior to installation. Have your local regulator conduct a thorough site evaluation to determine proper sizing and siting of the system before installation.

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 stabilized cover to support a wheel load rating of 16,000 lbs/axle or equivalent to an H-10 AASHTO load rating.
- Do not drive over trenches. If unavoidable use a tracked vehicle. Never drive down the length of the trenches.
- Onsite rules do not allow for vehicular traffic over drainfields. Compaction may affect performance even if it does not damage the product.

Installing Chambers and End Caps

1. To allow pressure laterals to drain after each dose, drill a hole in the bottom of the pipe at the end of the pressure line. Place the snap-off splash plate or a paving block at the bottom of the trench to protect the infiltrative surface from erosion.


1

Drill hole in pipe.

2. With a hole saw, drill out the appropriate diameter hole to accommodate the pressure lateral pipe.

3. Insert the pressure lateral pipe into the end cap's drilled opening and slide it into the manifold pipe. Glue the pressure lateral pipe to the manifold pipe.

4. With the pressure lateral pipe through the end cap, place the inlet end of the first chamber over the back edge of the end cap.

Note: Health Departments may require a wet-run pressure check be done prior to chamber installation when the pipe is laying on the ground. Check with your local Health Department for the proper procedure.

5. Secure the pressure lateral pipe to the top of the first chamber with a plastic pipe strap at the outlet end of the unit. Slide the strap up through a slot in the chamber top, down through the other slot, and cinch the two ends around the pipe.


5

Secure pipe to chamber.

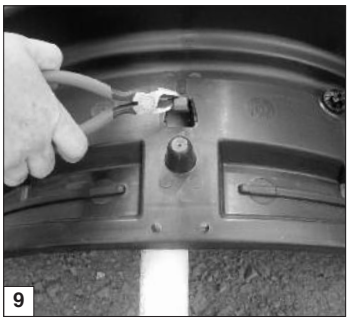
Note: The ISI Pipe Support Unit may also be used to hold and stabilize the pipe. *See page 11 for detail.*

6. Lift and place the next chamber onto the previous one 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 it to the ground to engage the interlocks.

7. Secure the lateral pipe to the top of the next chamber once in place. Follow the same method in Step 5.

8. Continue interlocking chambers and securing the pipe until the trench is completed.

9. Before attaching the final end cap, remove the tongue of the connector hook on the last chamber with a pair of pliers.


9

Remove tongue.

10. Insert the pressure lateral pipe through the hole in the final end cap and slide the end cap towards the last chamber. Lift the end cap over the modified connector hook and push straight down to secure it to the chamber.

Note: If cleanout extensions are required, use a hole saw to cut a hole in the end cap at the proper elevation so that the lateral pipe can extend. For clean-out access, a 90-degree sweep elbow that extends to the soil's surface can be attached to the lateral pipe.


10

Lift end cap.

11. If installing multiple rows of chambers, follow Steps 1-9 to lay the next row of chambers parallel to the first. Keep a minimum separation distance between each row of chambers as required by local code.

Covering the System

Before backfilling, the system must be inspected by a health or regulatory official as required by state and local codes. Create an as-built drawing of the system at this time, showing the location of the home, tank, d-box and trenches, with dimensions to each.

1. Backfill the trench by pushing the fill material onto the units with a small tracked bulldozer, bobcat, or box blade; maintaining a minimum of six inches of material between the chambers and the tracks.

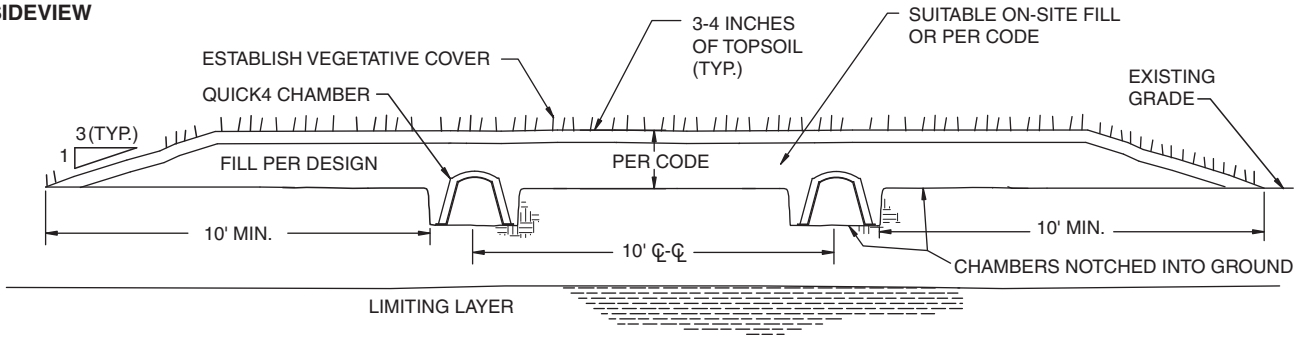
Note: Only drive tracked vehicles over the fill system when necessary.

2. Evenly grade fill material to a final depth of 10 inches over the chambers for an equal distribution system or 16 inches for a serial distribution system.

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

4. Landscape the absorption facility according to permit conditions and protect from livestock, automotive traffic or other activity that could damage the system.

SHALLOW IN-GROUND DESIGN
SIDEVIEW



Conventional Sand Filter Systems Using Gravelless Absorption Trenches

Quick4 EQ24 Low Profile (LP) Chambers

The Quick4 Equalizer 24 Low Profile (LP) chamber is designed for shallow placement applications with a minimum soil cover of 4 inches. Chambers installed following a conventional sand filter system must have pressure distribution of effluent.

LOW PROFILE
END CAP

QUICK4 EQUALIZER 24
LOW PROFILE CHAMBER

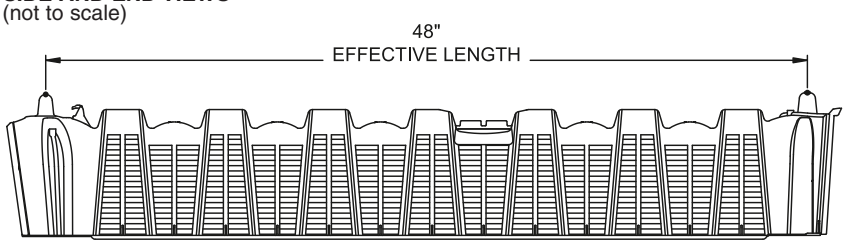
Quick4 Equalizer 24 LP Rules Explanation

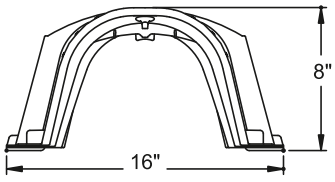
The Quick4 Equalizer 24 LP may be used in lieu of 12" plastic irrigation pipe (PIP), as prescribed in OAR 340-071-0290(6). Trench length and construction shall conform to the requirements described within OAR 340-071-0290(6), with the following modifications:

a. The trench excavation width shall be between 18" and 24".
b. The gravelless absorption product shall be 16" wide.
c. The trench shall be excavated 10" below the natural ground surface.
d. Because the top of the chamber will be within 2" of the natural ground surface, a minimum of a 2" capping fill shall be used to cover the installation. Backfill shall be mounded such that the final (following settling) capping fill thickness meets the 2" minimum. The total minimum soil cover over the chamber dome is 4".
e. Soil texture from the ground surface to the trench bottom shall not be finer than silty clay loam.
f. The gravelless absorption product shall meet the structural requirements identified in IAPMO PS-63.
g. Each trench shall include a 4" diameter inspection port.

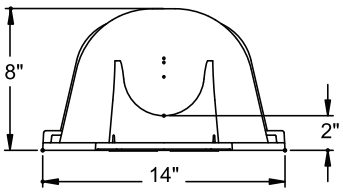
Product Specifications

SIDE AND END VIEWS
(not to scale)





LOW PROFILE END CAP
(Not to scale)

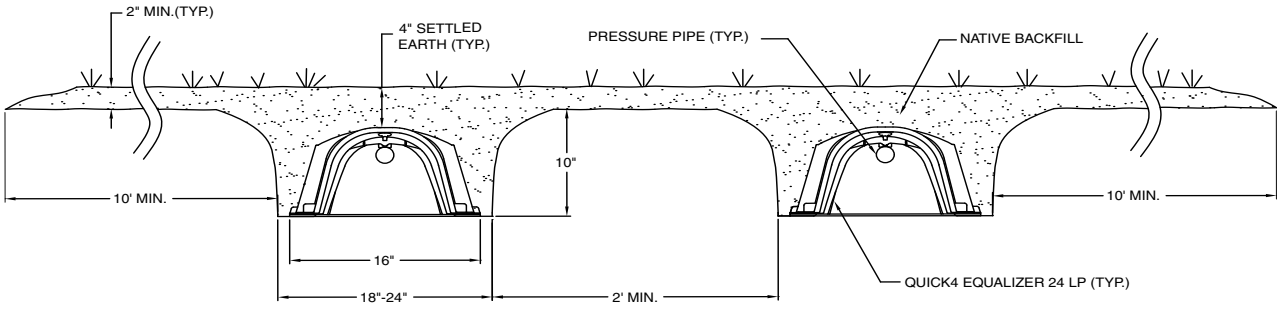


Nominal chamber specifications

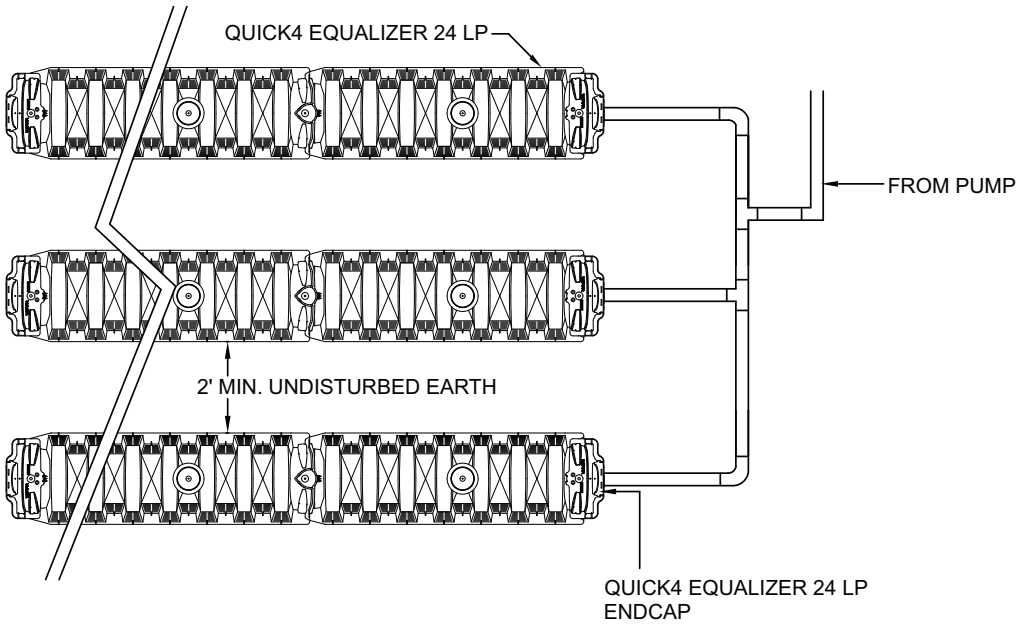
Size (W x L x H)	16" x 53" x 8"
Effective Length	48"

Trench Configurations

QUICK4 EQUALIZER 24 LP
CROSS SECTION (TYP.)
(not to scale)



PLAN VIEW (TYP.)
(not to scale)



Note: Installation for the Quick4 EQ24 LP chamber shall follow the applicable installation instructions beginning on page 10 of this manual. The pressure distribution and capping fill systems instructions apply to all gravelless options for use following ATT and sand filter systems in Oregon. Gravity distribution following a conventional sand filter is not permissible.

Oregon Limited Septic Warranty for Infiltrator Chambers

a. The structural integrity of each Infiltrator chamber and end cap, when installed in accordance with manufacturer's instructions, is warranted to the original purchaser against defective materials and workmanship for 7 years from the date of purchase. Should a defect appear within the warranty period, purchaser must inform Infiltrator Systems Inc. of the defect within fifteen (15) days. Infiltrator Systems will supply a replacement chamber and/or end cap. Infiltrator Systems' liability specifically excludes the cost of removal and/or installation of units.

b. THE WARRANTY IN SUBPARAGRAPH (a) IS EXCLUSIVE. THERE ARE NO OTHER WARRANTIES WITH RESPECT TO THE CHAMBERS AND END CAPS, INCLUDING NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE. THE WARRANTY DOES NOT EXTEND TO INCIDENTAL, CONSEQUENTIAL, SPECIAL, OR INDIRECT DAMAGES. THE COMPANY SHALL NOT BE LIABLE FOR PENALTIES OR LIQUIDATED DAMAGES, INCLUDING LOSS OF PRODUCTION AND PROFITS, LABOR AND MATERIALS, OVERHEAD COSTS, OR OTHER LOSS OR EXPENSE INCURRED BY PURCHASER. SPECIFICALLY EXCLUDED FROM 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 STRESSES GREATER THAN THOSE PRESCRIBED IN THE INSTALLATION INSTRUCTIONS; THE PLACEMENT BY PURCHASER OF IMPROPER MATERIALS INTO THE PURCHASER'S SYSTEM; OR ANY OTHER EVENT NOT CAUSED BY THE COMPANY.

FURTHERMORE, IN NO EVENT SHALL THE COMPANY BE RESPONSIBLE FOR ANY LOSS OR DAMAGE TO THE PURCHASER, THE UNITS, OR ANY THIRD PARTY RESULTING FROM ITS INSTALLATION OR SHIPMENT. PURCHASER SHALL BE SOLELY RESPONSIBLE FOR ENSURING THAT THE INSTALLATION OF THE SYSTEM IS COMPLETED IN ACCORDANCE WITH ALL APPLICABLE LAWS, CODES, RULES, AND REGULATIONS.

c. NO REPRESENTATIVE OF THE COMPANY HAS THE AUTHORITY TO CHANGE THIS WARRANTY IN ANY MANNER WHATSOEVER, OR TO EXTEND THIS WARRANTY. NO WARRANTY APPLIES TO ANY PARTY OTHER THAN TO THE ORIGINAL PURCHASER.

d. All types of chamber systems must be installed in full compliance with the latest version of the product installation requirements. The system must be in full compliance with all aspects of the state regulations and codes.

NOTE : Any chamber systems constructed with less than the DEQ approved minimum system size requirements will not be covered by any prod
ranties.

INFILTRATOR®
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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. Infiltrator, Equalizer, Quick4 and SideWinder are registered trademarks of Infiltrator Systems Inc. Infiltrator is a registered trademark in France. Infiltrator Systems Inc. is a registered trademark in Mexico. ChamberSpacer, Contour, MicroLeaching, MultiPort, PolyTuff, PosiLock, QuickCut, QuickPlay and SnapLock are trademarks of Infiltrator Systems Inc.
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