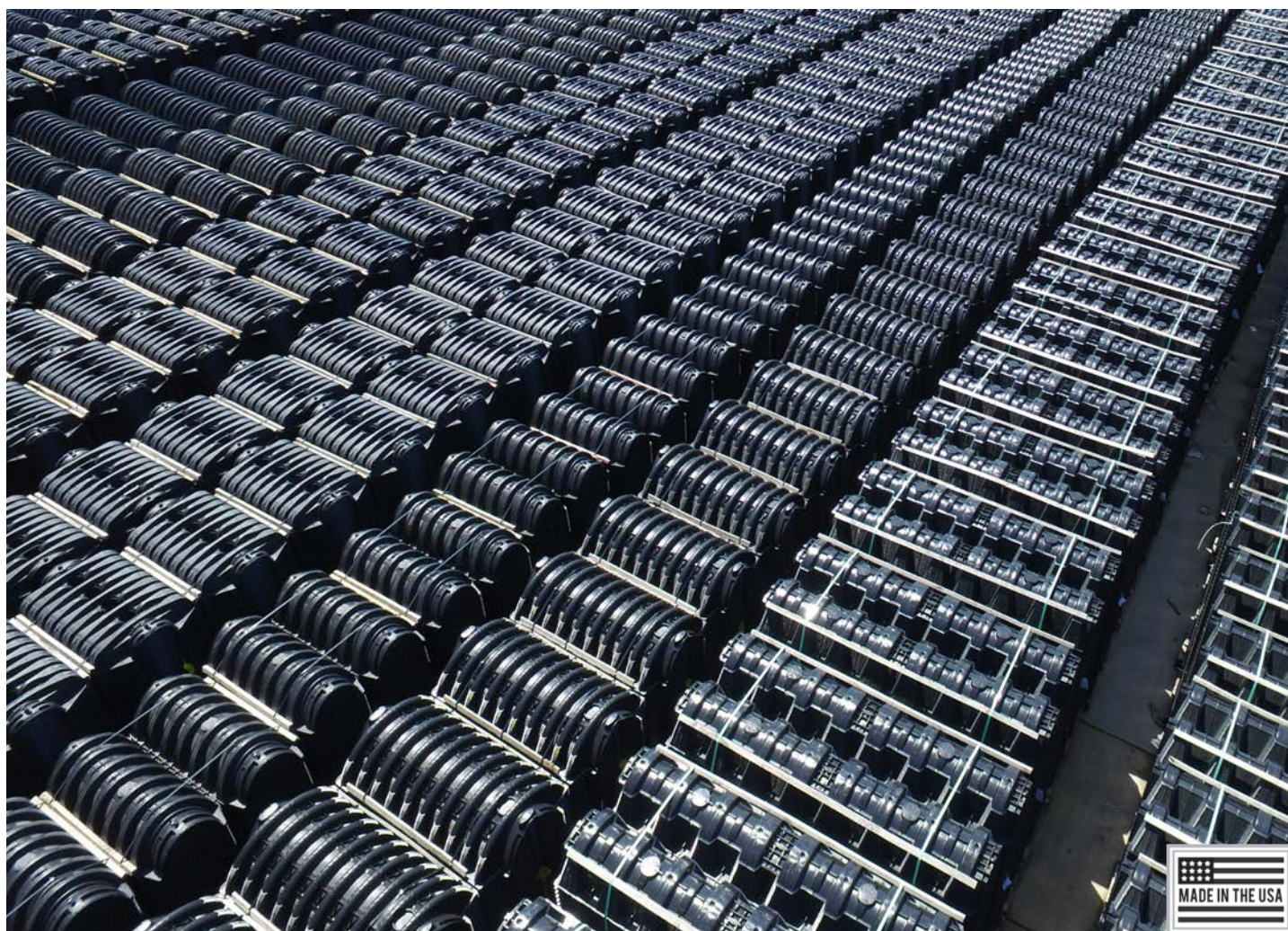


Design and Installation Manual for Quick4 Chambers, EZflow, Septic Tanks, Risers and Aquaworx Remediator Arkansas



The purpose of this product manual is to provide specific design and installation information pertinent for the use of Infiltrator products. **For more detailed design information, please contact Infiltrator Water Technologies at (800) 221-4436.**

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CHAMBERS

Quick4 Chambers

The Quick4 Equalizer 24 and Quick4 Equalizer 24 LP chamber can be installed in an 18-inch wide trench. The Quick4 Equalizer 36 and Quick4 Plus Equalizer 36 Low Profile (LP) chamber fits in a 24-inch wide trench. All chambers offer advanced contouring capability with their Contour Swivel Connection™. The Quick4 MultiPort™ Endcaps have high and low inlets allowing for maximum piping flexibility. The Quick4 Plus EQ36 LP chamber has two endcaps, the Quick4 Plus All-in-One and the Quick4 Plus endcap, offering system flexibility.

Quick4 Equalizer 24 Chamber Nominal Specifications

Size (W x L x H)	16" x 53" x 11"
Invert Elevation	6"
Storage	20.8 gal.

QUICK4 EQUALIZER 24



Quick4 Equalizer 24 Low Profile Chamber Nominal Specifications

Size (W x L x H)	16" x 53" x 8"
Invert Elevation	2"
Storage	17 gal.

QUICK4 EQUALIZER 24 LOW PROFILE



Quick4 Equalizer 36 Chamber Nominal Specifications

Size (W x L x H)	22" x 53" x 12"
Invert Elevation	6"
Storage	32 gal.

QUICK4 EQUALIZER 36



Quick4 Plus Equalizer 36 Low Profile Chamber Nominal Specifications

Size (W x L x H)	22" x 53" x 8"
Invert Elevation	6"
Storage	20.8 gal.

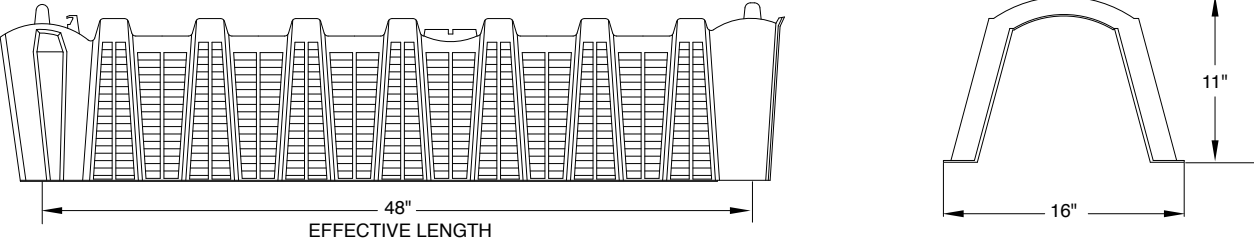
QUICK4 PLUS EQUALIZER 36 LOW PROFILE



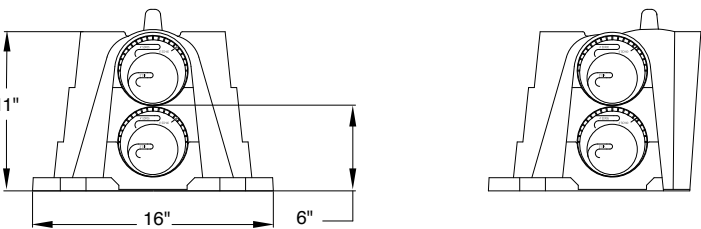
CHAMBERS

Quick4 Equalizer 24 Chamber

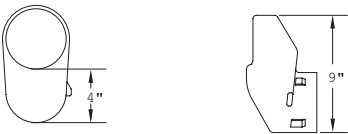
Side and End Views
(not to scale)



MultiPort Endcap
Front and Side Views
(not to scale)

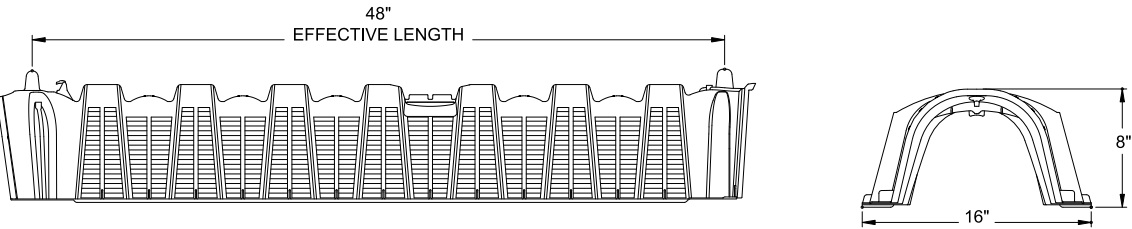


Invert Adapter
Front and Side Views
(not to scale)

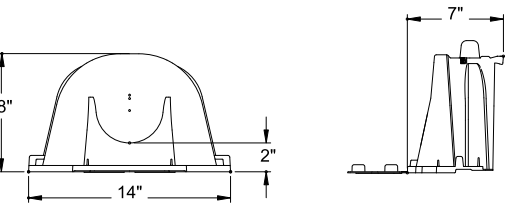


Quick4 Equalizer 24 Low Profile Chamber

Side and End Views
(not to scale)



Endcap
Front and Side Views
(not to scale)

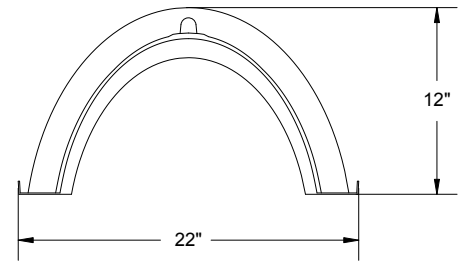
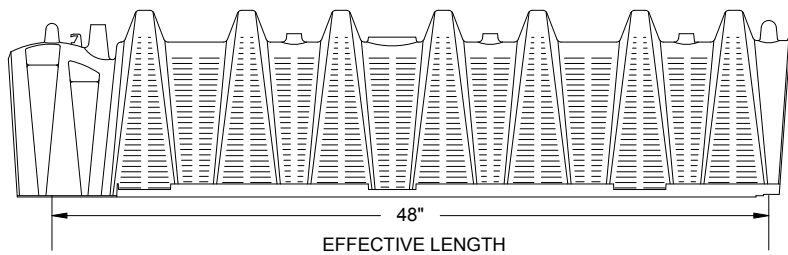


CHAMBERS

Quick4 Equalizer 36 Chambers

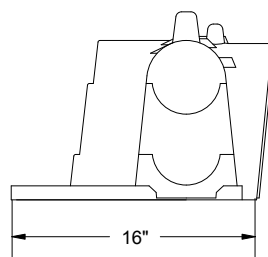
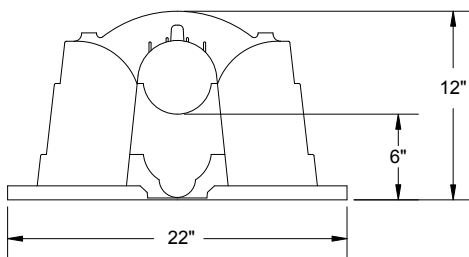
Side and End Views

(not to scale)



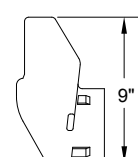
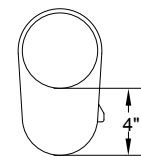
MultiPort Endcap - Front and Side Views

(not to scale)



Invert Adapter - Front and Side Views

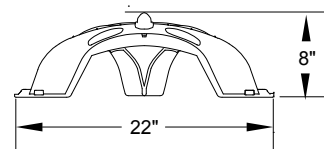
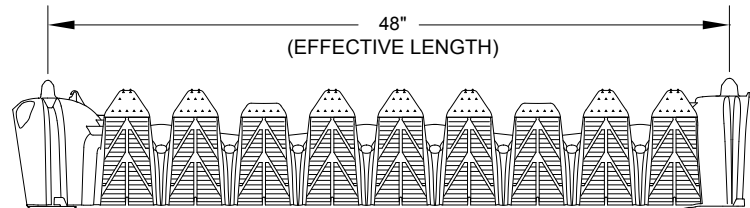
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Quick4 Plus Equalizer 36 Low Profile (LP) Chambers

Side and End Views

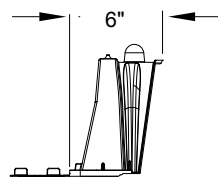
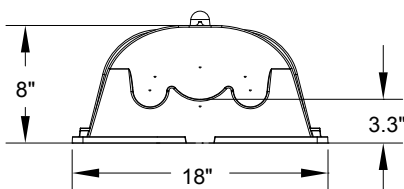
(not to scale)



Low Profile Endcap

Front and Side Views

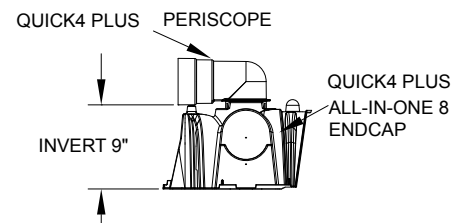
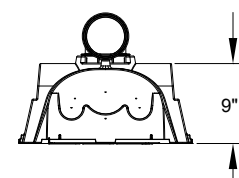
(not to scale)



Quick4 Plus All-in-One Periscope

Front and Side Views

(not to scale)



NOTE: It is at the contractors' discretion to cover the chambers with a very fine Infiltrator filter fabric (0.040 MIL) (ASTM D 4571) prior to backfilling the system when working in fine and very fine sands (loamy sand and sandy loam soils with low moisture content). A thicker filter fabric over the chambers may develop a biomat in the cloth, which may prevent the exfiltration of effluent from the chambers into the soil. Infiltrator filter fabric may be purchased from any Infiltrator Water Technologies distributor. ANY OTHER FILTER FABRIC USED WILL VOID THE WARRANTY.

NOTE: If you are in a gopher-prone area it is recommend that the installer places wire mesh (chicken wire) on the bottom of each trench before installing any Infiltrator chambers.

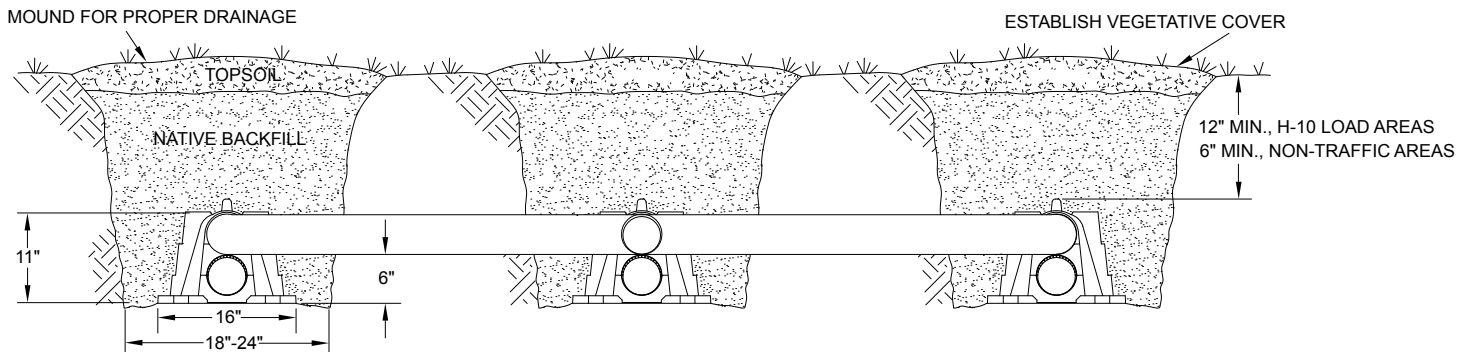
CHAMBER CONFIGURATIONS

Quick4 Equalizer 24 Trench Configurations

Chamber Rating: 8 square feet per chamber

TYPICAL CROSS SECTION

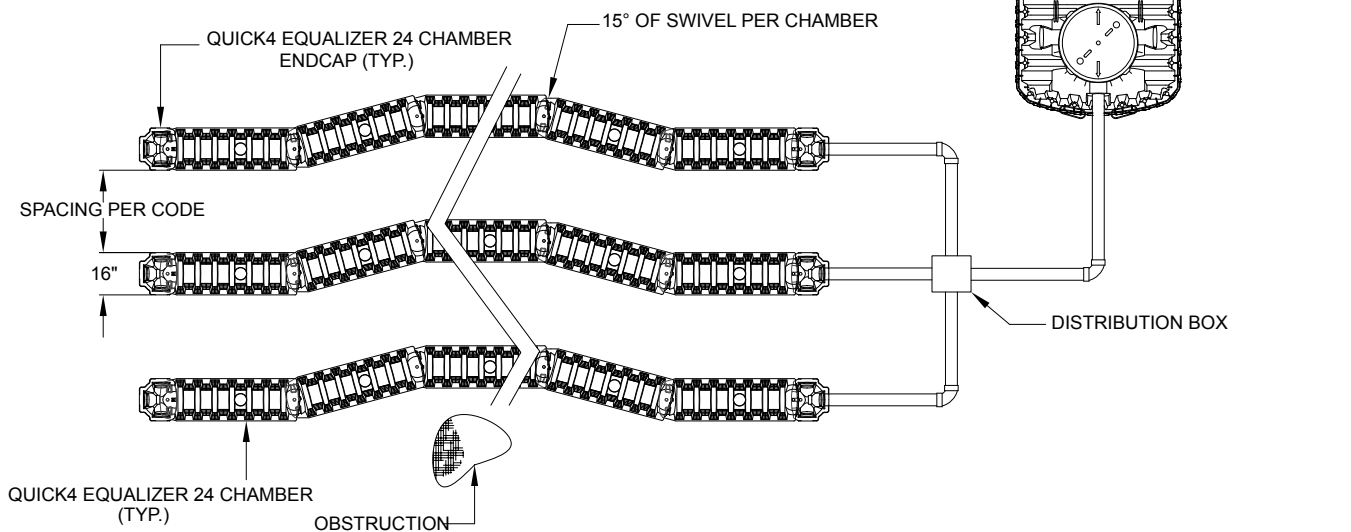
(not to scale)



TYPICAL PLAN VIEW

(not to scale)

NOTE: All Quick4 chambers easily follow the contours of an "S" curve and avoid obstacles without additional parts or accessories. Each Quick4 Equalizer 24, Quick4 Equalizer 36 or Quick4 Equalizer 24 LP chamber connections swivel up to 15° right or left.

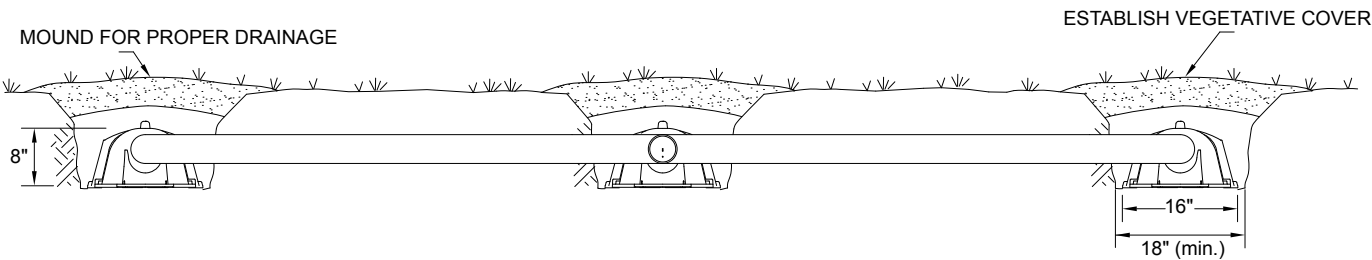


CHAMBER CONFIGURATIONS

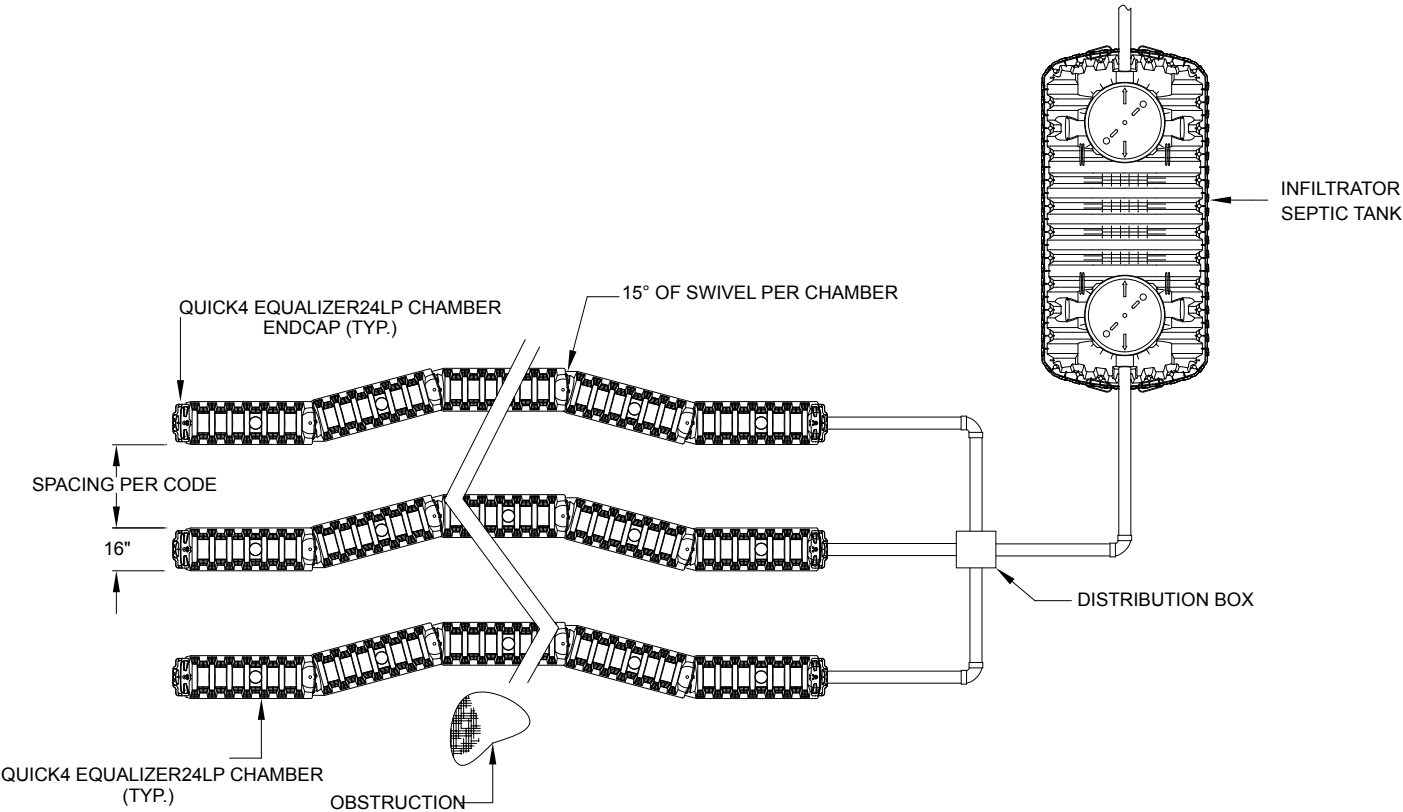
Quick4 Equalizer 24 LP Trench Configurations

TYPICAL CROSS SECTION (not to scale)

Chamber Rating: 8 square feet per chamber



TYPICAL PLAN VIEW (not to scale)

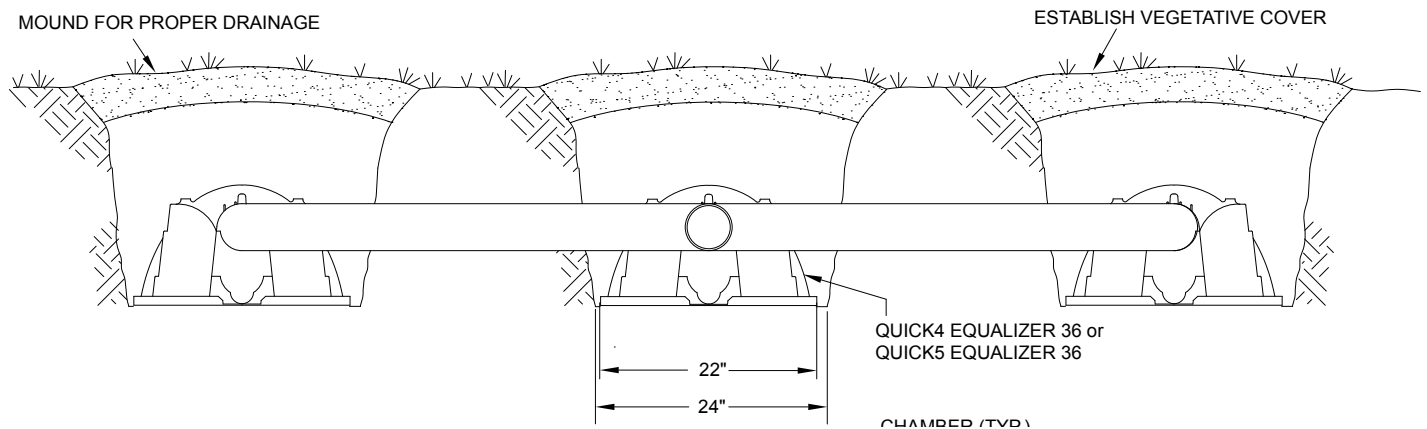


CHAMBER CONFIGURATIONS

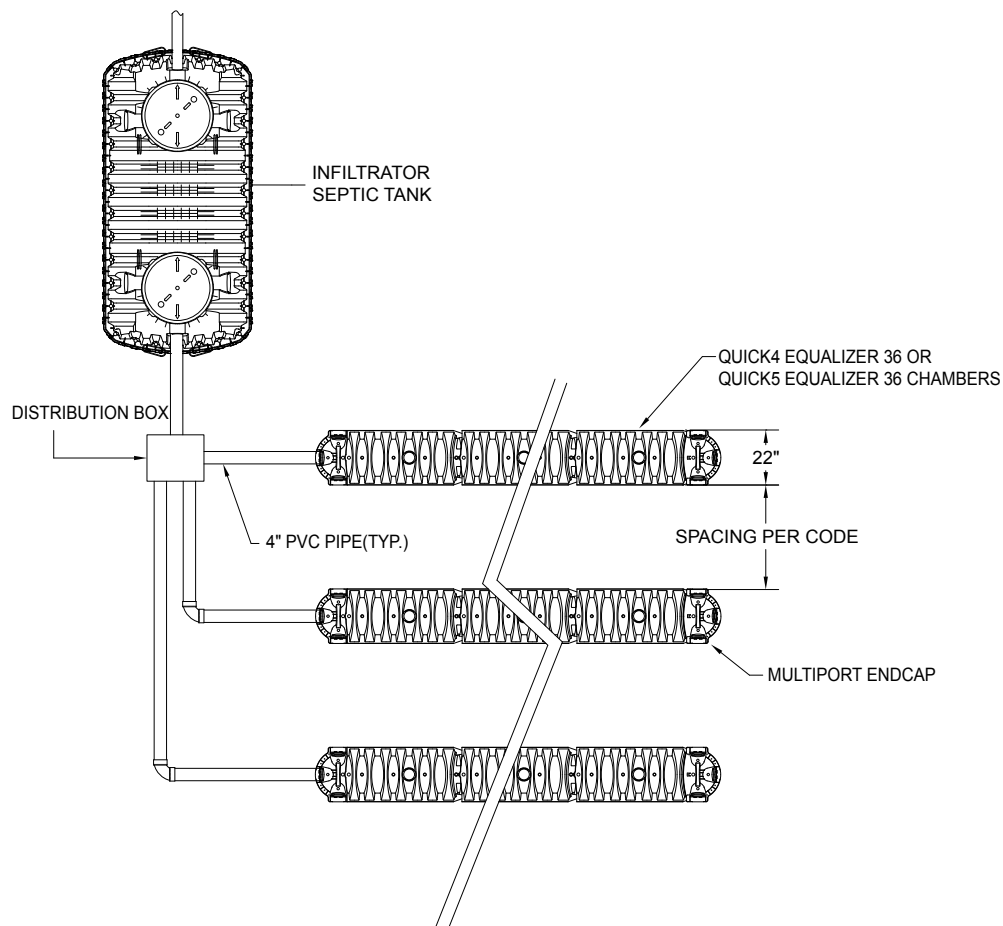
Quick4 Equalizer 36 Trench Configurations

TYPICAL CROSS SECTION (not to scale)

Chamber Rating: 8 square feet per chamber



TYPICAL PLAN VIEW (not to scale)

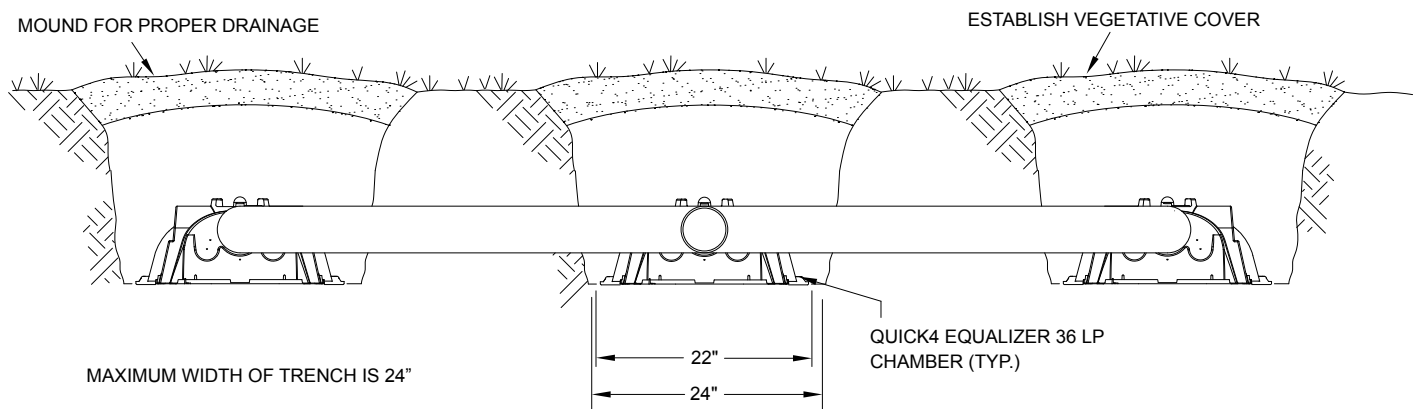


CHAMBER CONFIGURATIONS

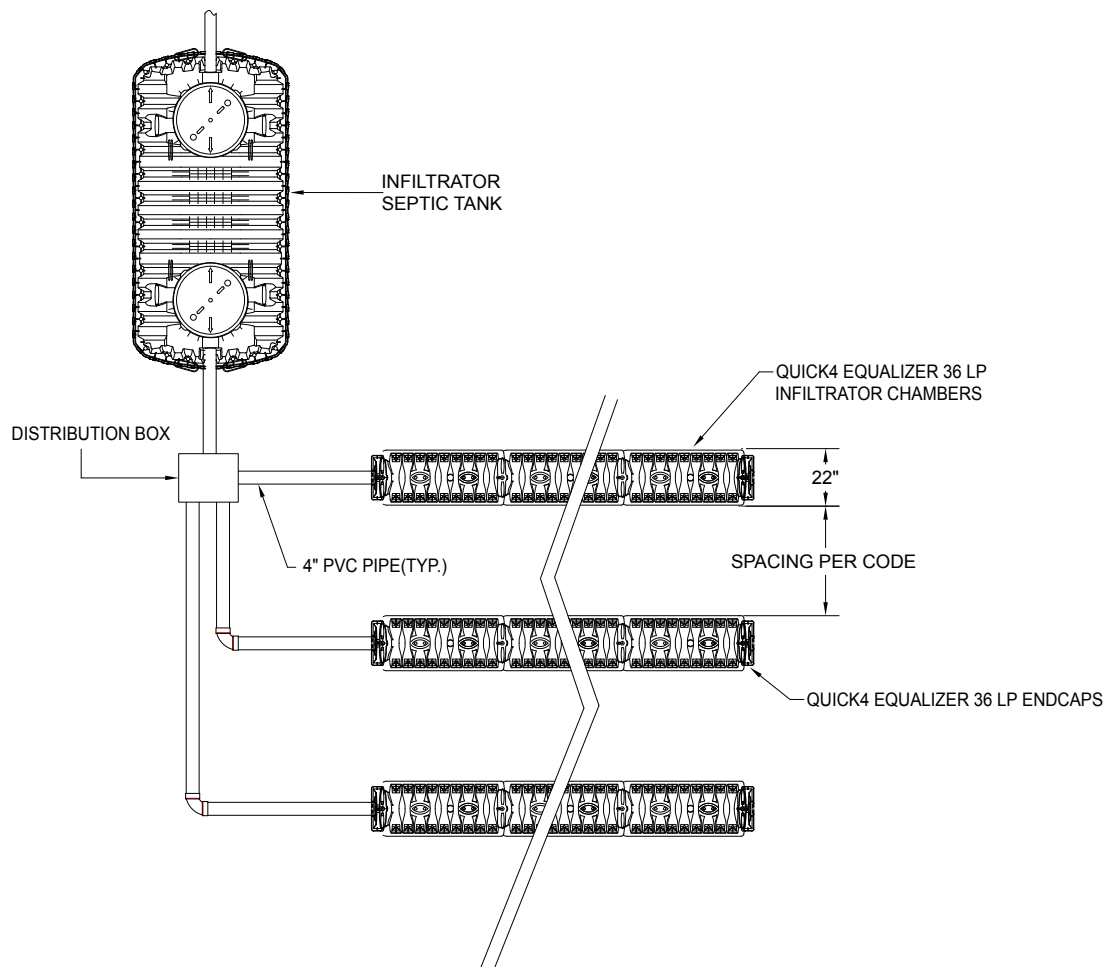
Quick4 Plus Equalizer 36 LP Trench Configurations

TYPICAL CROSS SECTION (not to scale)

Chamber Rating: 8 square feet per chamber



TYPICAL PLAN VIEW (not to scale)



INSTALLATION INSTRUCTIONS

Quick4 Equalizer 24 Chamber Systems

Before You Begin

Quick4 Equalizer 24 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

- | | |
|---|--|
| ☐ Quick4Equalizer24 Chambers | ☐ 1.5-inch Drywall Screws |
| ☐ MultiPort Endcaps | ☐ Screw Gun |
| ☐ PVC Pipe and Couplings | ☐ Hole Saw* |
| ☐ Backhoe | ☐ Small Valve-Cover Box* |
| ☐ Laser, Transit, or Level | ☐ 4-inch Cap for Inspection Port* |
| ☐ Shovel and Rake | ☐ Invert Adapter* |
| ☐ Tape Measure | |
| ☐ Utility Knife | |

* Optional

These guidelines for construction machinery must be followed during installation:

- ☐ Avoid direct contact with chambers when using construction equipment.
- ☐ 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.

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 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 18" wide trenches with proper center-to-center separation. Verify that the trenches are level or have the prescribed slope.

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

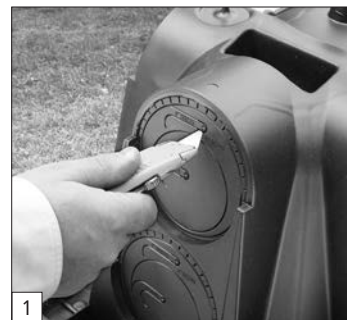
4. Rake the bottom and sides if smearing has occurred while excavating. Remove any large stones and other debris. Do not use the bucket teeth to rake the trench bottom.

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.

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

Preparing the MultiPort Endcap

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 SDR 35, and 4-inch SCH 40 pipe.
2. Pull the tab on the tear-out seal to create an opening on the endcap.
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. Insert the inlet pipe into the endcap at the beginning of the trench. Extend the pipe into the endcap roughly 3 inches before reaching the stop. (Screws optional.)



1 Start tear-out seal.



2 Pull tab on tear-out seal.

Installing the System

1. Check the header pipe to be sure it is level or has the prescribed slope.
2. Set the invert height at 6, 9 or 10 inches as specified in the design from the bottom of the inlet.

NOTE: Use the Invert Adapter to achieve a 9" or 10" invert height.

3. Place the inlet end of the first chamber over the back edge of the MultiPort endcap. Line up the notches on the bottom of each side of the MultiPort endcap with the slots on the bottom edge of the chamber.

4. Insert two 1 1/4" drywall screws on each side of the chambers. Tighten each screw until the MultiPort endcap is firmly secured to the chamber.



3 Place first chamber onto endcap.

5. Lift and place the end of the next chamber onto the previous chamber

INSTALLATION INSTRUCTIONS

Quick4 Equalizer 24 Chamber Systems

by holding it at a 45° 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: When the chamber end is placed between the connector hook and locking pin at a 45° 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 or void the warranty.

6. Swivel the chamber on the pin to achieve the proper direction for the trench layout.

NOTE: The chamber allows up to a 15-degree swivel in either direction at each joint.

7. Continue connecting the chambers until the trench is completed.

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

8. The last chamber in the trench requires a MultiPort endcap. Lift the MultiPort endcap at a 45-degree angle and insert the connector hook through the opening on the top of the MultiPort endcap. Applying firm pressure, lower the MultiPort endcap to the ground to snap it into place. Do not remove tear-out seal.

NOTE: Use straight lengths of pipe with the MultiPort endcap at the trench ends to create fitting-free looped ends.

9. 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.

10. Pack down fill by walking along the edges of trench and chambers. This is an important step in assuring structural support.

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

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



Connect the chambers.



Attach endcap to chamber.



Walking in the fill.

Installing OPTIONAL Inspection Ports

1. With a hole saw, drill the pre-marked area in the top of the chamber to create a 4-inch opening.

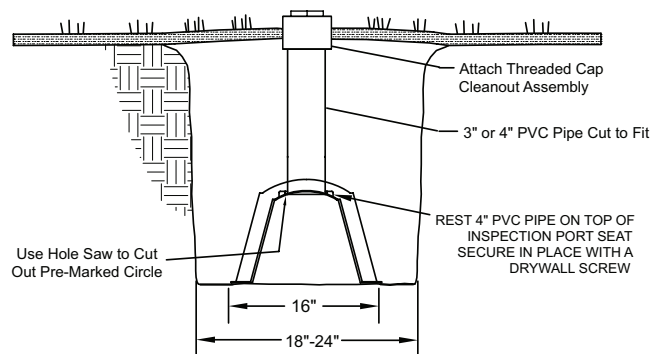
2. Set a cut piece of pipe of the appropriate length into the corresponding chamber's inspection port sleeve.

NOTE: The sleeve will accommodate up to a 4-inch SCH 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 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 notify contractors of the site location so they will not cross it with equipment or vehicles.

INSTALLATION INSTRUCTIONS

Quick4 Equalizer 24 LP Chamber Systems

Before You Begin

Quick4 Equalizer 24 LP Chambers are designed for shallow placement applications and 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

- | | |
|--|--|
| ☐ Quick4 Equalizer 24 LP Chambers | ☐ 1½-inch Drywall Screws |
| ☐ Endcaps | ☐ Screw Gun |
| ☐ PVC Pipe and Couplings | ☐ Hole Saw* |
| ☐ Backhoe | ☐ Small Valve-Cover Box* |
| ☐ Laser, Transit or Level | ☐ 4-inch Cap for Inspection Port* |
| ☐ Shovel and Rake | ☐ Invert Adapter* |
| ☐ Tape Measure | |
| ☐ Utility Knife | * Optional |

These guidelines for construction machinery must be followed during installation:

- ☐ Avoid direct contact with chambers when using construction equipment.
- ☐ 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.

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 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 18" wide trenches with proper center-to-center separation. Verify that the trenches are level or have the prescribed slope.

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

4. Rake the 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.

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.

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

Preparing the Endcap

1. With a hole saw drill a opening appropriate to the pipe diameter being used (normally 3 to 4 inches) on the front of the endcap.
2. Snap off the molded splash plate located on the bottom front of the endcap.
3. Install splash plate into the appropriate slots below the 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.

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

5. Insert the header pipe into the opening on the front of the endcap.

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: 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 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.

NOTE: The chamber allows up to a 15-degree swivel in either direction at each joint.



Place endcap onto first chamber.

INSTALLATION INSTRUCTIONS

Quick4 Equalizer 24 LP Chamber Systems

8. Continue connecting the 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 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.

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 next trench and begin with Step 1.



Attach endcap to last chamber.



Walking in the fill.

Installing Optional Inspection Ports

1. With a hole saw, drill the pre-marked area in the top of the chamber to create a 4-inch opening.

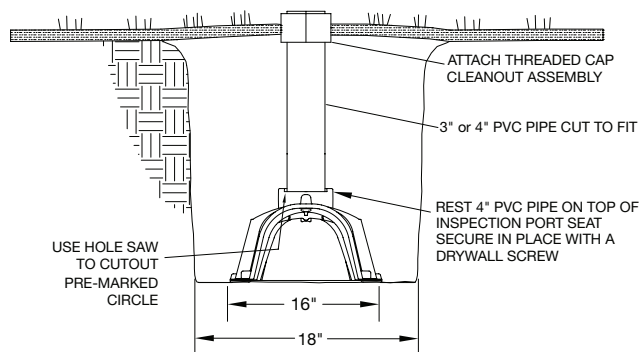
2. Set a cut piece of pipe of the appropriate length into the corresponding chamber's inspection port sleeve.

Note: The sleeve will accommodate up to a 4-inch SCH 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 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, it is recommended that tracked construction equipment be used. You must mound 12 inches of soil over the system before driving over it, and then grade it back a minimum of 4 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 notify contractors of the site location so they will not cross it with equipment or vehicles.

INSTALLATION INSTRUCTIONS

Quick4 Equalizer 36 Chamber Systems

Before You Begin

Quick4 Equalizer 36 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

- | | |
|---|--|
| ☐ Quick4 Equalizer 36 Chambers | ☐ Hole Saw |
| ☐ MultiPort Endcaps | ☐ 1½-inch Drywall Screws* |
| ☐ PVC Pipe and Couplings | ☐ Screw Gun* |
| ☐ Backhoe | ☐ Small Valve-Cover Box* |
| ☐ Laser, Transit, or Level | ☐ 4-inch Cap for Inspection Port* |
| ☐ Shovel and Rake | * Optional |
| ☐ Tape Measure | |
| ☐ Screwdriver or Knife | |

These guidelines for construction machinery must be followed during installation:

- ☐ Avoid direct contact with chambers when using construction equipment.
- ☐ 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.

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 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 24-inch wide trenches with proper center-to-center separation. Verify that the trenches are level or have the prescribed slope.

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

4. Rake the 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.

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.

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

Preparing the MultiPort Endcap

1. With a screwdriver or 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 SDR 35, and 4-inch SCH 40 pipe.



Start tear-out seal.

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



Pull tab on tear-out seal.

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



Install splash plate.

5. Insert the inlet pipe into the endcap at the beginning of the trench. Extend the pipe into the endcap roughly 4 inches. (Screws optional.)



INSTALLATION INSTRUCTIONS

Quick4 Equalizer 36 Chamber Systems

Installing the System

1. Check the header pipe to be sure it is level or has the prescribed slope.
2. Set the invert height at 6", 9" or 10" inches as specified in the design from the bottom of the inlet.
3. Place the inlet end of the first chamber over the back edge of the endcap.



Place first chamber onto endcap.

4. 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 it to the ground to connect the 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 the chamber joint. Broken hooks will not affect the structure nor void the warranty.

5. Swivel the chamber on the pin to the proper direction for the trench layout.

NOTE: The Quick4 Equalizer 36 Chamber allows 15 degrees of swivel in either direction at each joint.

6. Continue connecting the chambers until the trench is completed.

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

7. The last chamber in the trench requires an endcap. Lift the endcap at a 45-degree angle and insert the connector hook through the opening on the top of the endcap. Applying firm pressure, lower the endcap to the ground to snap it into place. Do not remove the tear-out seal.



Attach endcap to chamber.

NOTE: Use straight lengths of pipe with the MultiPort Endcap at the trench ends to create fitting-free looped ends.

8. 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.

9. Pack down the fill by walking along the edges of the trench and chambers. This is an important step in assuring structural support.

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

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



Walking in the fill.

Installing Optional Inspection Ports

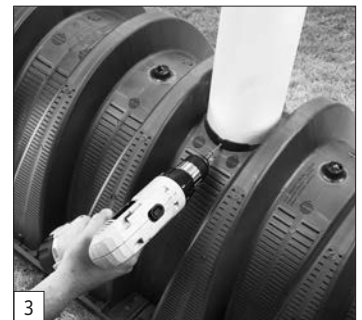
1. With a hole saw drill the pre-marked area in the top of the chamber to create a 4-inch opening.
2. Set a cut piece of pipe of the appropriate length into the corresponding chamber's inspection port sleeve.

NOTE: The sleeve will accommodate a 4-inch SCH 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 inspection port is below the desired grade.



Fasten the pipe.

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 notify contractors of the site location so they will not cross it with equipment or vehicles.

INSTALLATION INSTRUCTIONS

Quick4 Plus Equalizer 36 LP Chamber Systems

Before You Begin

This document addresses the installation of Quick4 Plus Equalizer 36 Low Profile (LP) chambers. The Quick4 Plus 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

- | | |
|---|---|
| ☐ Quick4 Plus Chambers | ☐ 1½-inch Drywall Screws* |
| ☐ Quick4 Plus Endcaps | ☐ Drill |
| ☐ Quick4 Plus All-in-One Endcaps | ☐ Hole Saw |
| ☐ PVC Pipe and Couplings | ☐ Screw Gun* |
| ☐ Backhoe | ☐ Small Valve-cover Box* |
| ☐ Laser, Transit or Level | ☐ 4-inch Cap for Inspection Port |
| ☐ Tape Measure | * Optional |
| ☐ Shovel and Rake | |
| ☐ Utility Knife | |

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 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 (silty clays, silts and clays), avoid walking in the trench to prevent compaction and loss of soil structure.

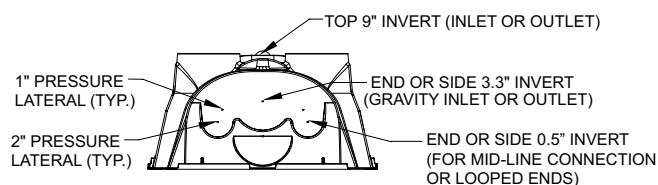
Preparing the Endcap

NOTE: Quick4 Plus and Quick4 Plus All-in-One Endcaps are available for use with the Quick4 Plus 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 endcap using center point marking (see illustration) as a guide. Do not dispose of the drilled-out piece of plastic in the trench.



Drill endcap.



2. Snap off the molded splash plate located on the bottom front of the endcap.
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 All-in-One Endcap only. Invert options based on system design.

1. With a hole saw drill the pre-marked area on top of the Quick4 Plus All-in-One Endcap. Do not dispose of the drilled-out piece of plastic in the trench.



Drill Quick4 Plus Periscope.

INSTALLATION INSTRUCTIONS

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

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

4. Rotate Quick4 Plus Periscope to desired angle



Insert Quick4 Plus Periscope.



Connect inlet pipe.

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.

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

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

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.



Place endcap inlet end.



Insert inlet pipe.

7. Swivel the chamber on the pin to achieve the proper direction for the 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.

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.

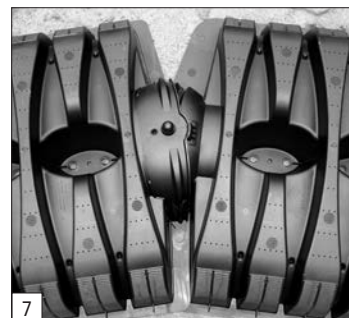
NOTE: Place a few shovels of soil around the endcap to secure it during backfill.

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 silty clays, silty and clay soils, do not walk in the sidewalls.

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



Swivel chambers.



Place endcap outlet end.

Installing Quick4 Plus All-in-One Endcap as a Mid-line Connection

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

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 the Quick4 Plus All-in-One Endcap.

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

Do not dispose of the drilled-out piece of plastic in the trench.



Drill endcap on side or top.

INSTALLATION INSTRUCTIONS

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

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

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

7. Repeat Steps 1 through 6 for additional trenches.



Drill endcap on end.



Installing Optional Inspection Ports

Quick4 Plus All-in-One Inspection Port

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

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

NOTE: Sleeve will accommodate up to a 4-inch Schedule 40 pipe.

3. Use two screws to fasten pipe around 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 ports below the desired grade.



All-in-One inspection port.

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.
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.

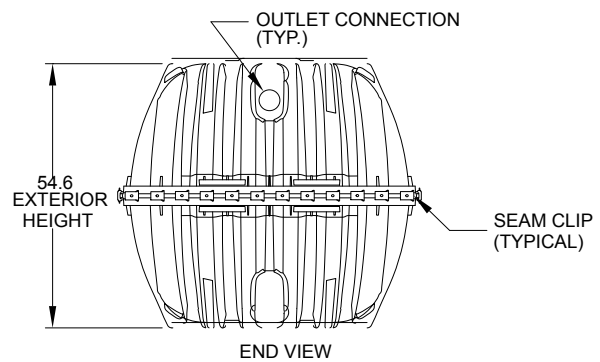
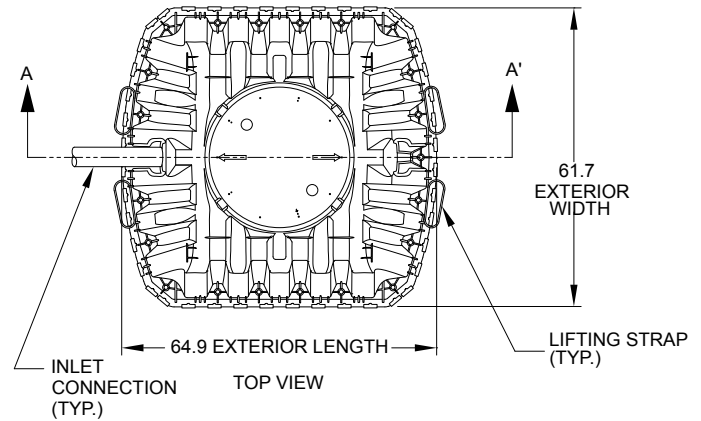
NOTE: For shallow cover, sand fill, and sandy soil applications, tracked construction equipment must be used. You must mound 12 inches of soil over the system before driving over it with wheeled construction equipment, then grade it back a minimum 6 inches upon completion.

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.

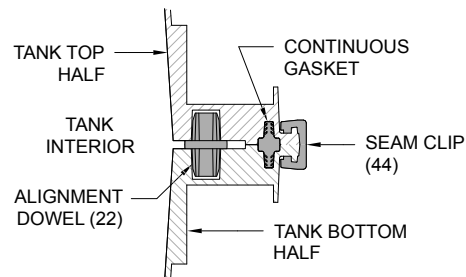
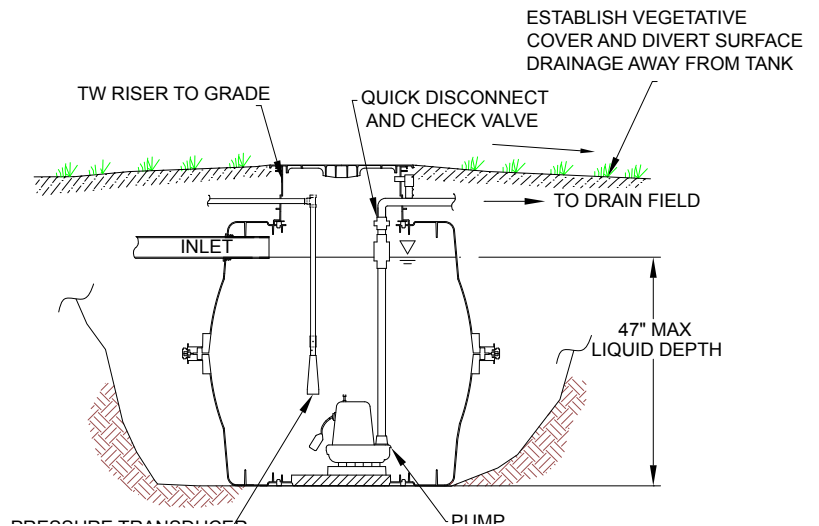
NOTE: If system is for new home construction, it is important to leave marking stakes along the boundary of the system. This will notify contractors of the system location so they will not cross it with equipment or vehicles.

IM-540 TANK



The IM-540 is an injection molded two piece mid-seam plastic tank. The IM-540 injection molded plastic design allows for a mid-seam joint that has precise dimensions for accepting an engineered EPDM gasket. Infiltrator's gasket design utilizes technology from the sanitary sewer pipe industry to deliver proven means of maintaining a watertight seal. The two-piece design is permanently fastened using a series of non-corrosive plastic alignment dowels and locking seam clips. The IM-540 will be assembled and sold through a network of certified Infiltrator distributors.

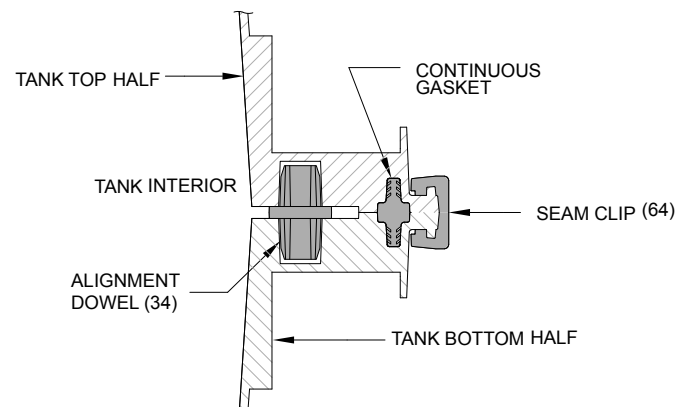
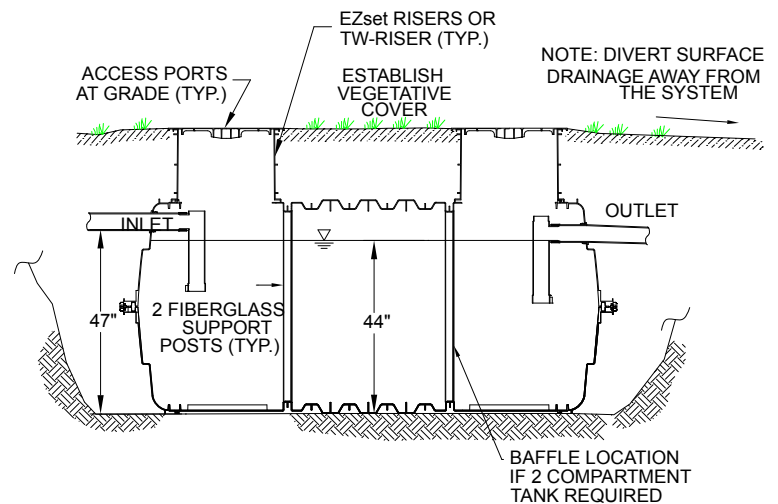
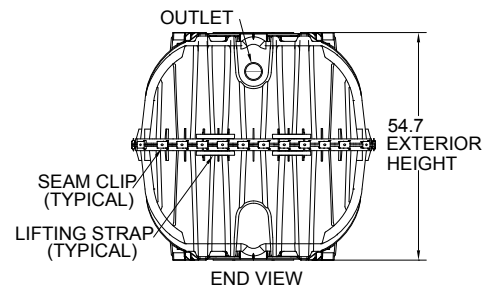
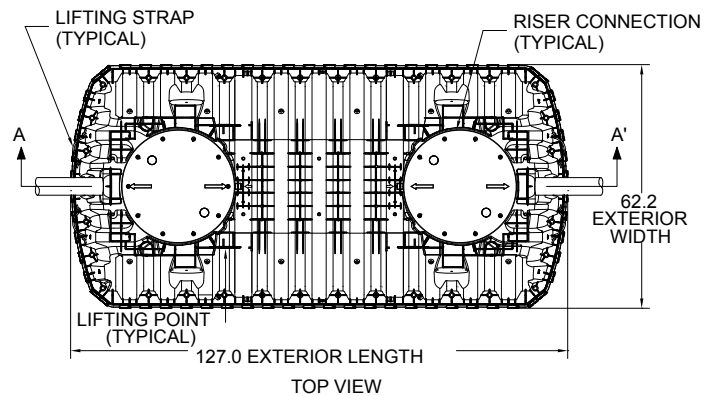
Parameter	Value
Total capacity	552 gal / 2089 L
Nominal wall thickness	0.2 in / 5.1 mm
Length	64.9 in / 1648 mm
Width	61.7 in / 1567 mm
Height	54.6 in / 1387 mm
Alignment dowels	22
Locking clips	44
Maximum burial depth	4 ft / 1.2 m
Minimum burial depth	0.5 ft / 0.2 m
Maximum pipe diameter	4 in / 100 mm
Weight	169 lbs / 77 kg



IM-1060 SEPTIC TANK

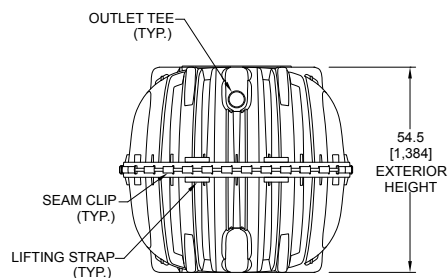
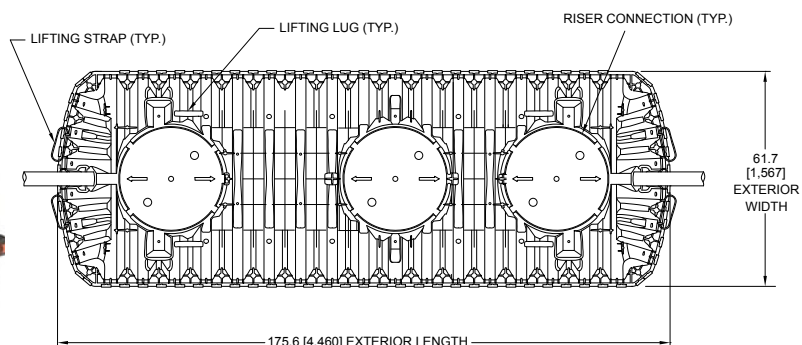


The IM-1060 Septic Tank by Infiltrator Water Technologies comes in one size and may be used as a septic or pump tank. The IM-1060 can be a single or dual compartment septic tank and includes access port lids and 4" diameter pipe grommets that accommodate SDR 35 or SCH 40 pipe. Inlet and outlet tees are optional.



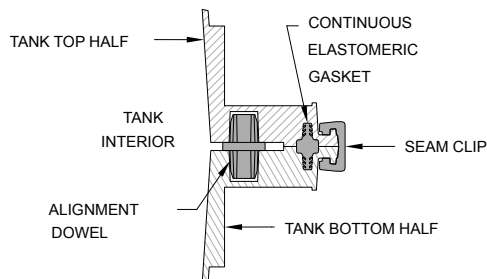
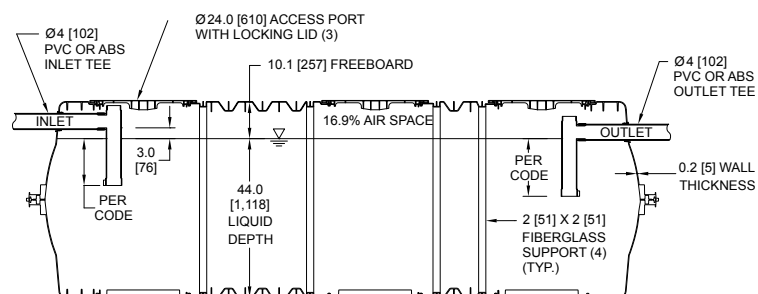
Parameter	Value
Working capacity	1,094 gal (4,141 L)
Total capacity	1,287 gal (4,872 L)
Airspace	17.6%
Nominal wall thickness	0.2 in (5.1 mm)
Length	127.0 in (3,226 mm)
Width	62.2 in (1,580 mm)
Length-to-width ratio	2.3 to 1
Height	54.7 in (1,389 mm)
Liquid level	44.0 in (1,118 mm)
Invert drop	3 in (76 mm)
Fiberglass supports	2
Alignment dowels	34
Locking clips	68
Compartments	1 or 2
Maximum burial depth	4 ft (1.2 m)
Minimum burial depth	0.5 ft (0.2 m)
Maximum pipe diameter	4 in (100 mm)
Weight	315 lbs (143 kg)

IM-1530 SEPTIC TANK



The IM-1060 Septic Tank by Infiltrator Water Technologies comes in one size and may be used as a septic or pump tank. The IM-1530 can be a single or dual compartment septic tank and includes access port lids and 4" diameter pipe grommets that accommodate SDR 35 or SCH 40 pipe. Inlet and outlet tees are optional.

Parameter	Value
Working capacity	1537 gal (5818 L)
Total capacity	1787 gal (6765 L)
Airspace	16.9%
Length	176" (4460 mm)
Width	62" (1567 mm)
Length-to-width ratio	2.8 to 1
Height	55" (1384 mm)
Liquid level	44" (1118 mm)
Invert drop	3 in (76 mm)
Fiberglass supports	4
Alignment dowels	46
Locking clips	86
Compartments	1 or 2
Maximum burial depth	48" (1219 mm)
Minimum burial depth	6" (152 mm)
Maximum pipe diameter	4" (100 mm)
Weight	501 lbs (228 kg)



IM-SERIES TANK NOMINAL VOLUME CHART

Height ¹		Total Liquid Volume in Tank at Indicated Height					
in	cm	IM-540		IM-1060		IM-1530	
		Gallons	Liters	Gallons	Liters	Gallons	Liters
1	3	3	11	3	11	17	64
2	5	8	30	13	49	34	129
3	8	14	53	28	106	51	193
4	10	21	80	46	174	68	257
5	13	29	109	65	246	94	356
6	15	37	141	86	326	122	462
7	18	46	173	107	405	152	575
8	20	55	207	129	488	180	681
9	23	64	243	152	575	212	803
10	25	74	279	176	666	245	927
11	28	84	317	200	757	280	1,060
12	30	94	356	225	852	312	1,181
13	33	105	396	251	950	351	1,329
14	36	116	437	277	1,049	387	1,465
15	38	127	480	303	1,147	422	1,597
16	40	138	523	330	1,249	464	1,756
17	43	150	566	357	1,351	500	1,893
18	46	161	611	384	1,454	537	2,033
19	48	173	656	411	1,556	575	2,177
20	50	186	702	438	1,658	614	2,324
21	53	198	749	465	1,760	652	2,468
22	56	210	796	493	1,866	690	2,612
23	58	223	843	521	1,972	729	2,760
24	61	235	891	549	2,078	770	2,915
25	64	248	940	577	2,184	808	3,059
26	66	261	988	605	2,290	847	3,206
27	69	274	1,038	633	2,396	887	3,358
28	71	287	1,088	662	2,506	928	3,513
29	74	300	1,137	691	2,616	968	3,664
30	76	313	1,185	719	2,722	1,007	3,812
31	79	326	1,233	747	2,828	1,048	3,967
32	81	338	1,281	775	2,934	1,087	4,115
33	84	351	1,328	802	3,036	1,126	4,262
34	86	363	1,375	830	3,142	1,165	4,410
35	89	375	1,421	857	3,244	1,204	4,558
36	91	387	1,466	884	3,346	1,242	4,701
37	94	399	1,511	911	3,449	1,280	4,845
38	97	411	1,555	938	3,551	1,318	4,989
39	99	422	1,598	965	3,653	1,355	5,129
40	102	433	1,640	992	3,755	1,393	5,273
41	104	444	1,681	1,018	3,854	1,430	5,413
42	107	455	1,722	1,044	3,952	1,466	5,549
43	109	465	1,761	1,069	4,047	1,502	5,686
44	112	475	1,799	1,094	4,141	1,537	5,818
45	114	485	1,836	1,118	4,232	1,572	5,951
46	117	494	1,871	1,142	4,323	1,604	6,072
47	119	503	1,905	1,165	4,410	1,638	6,201
48	122	512	1,938	1,187	4,493	1,667	6,310
49	124	520	1,970	1,208	4,573	1,697	6,424
50	127	528	1,999	1,228	4,648	1,724	6,526
51	130	535	2,027	1,247	4,720	1,749	6,621
52	132	542	2,050	1,265	4,789	1,766	6,685
53	135	547	2,071	1,278	4,838	1,777	6,727
54	137	551	2,087	1,287	4,872	1,785	6,757

IM-1060 Inlet and Outlet Hole Locations

Drill height markings are provided on the Infiltrator IM-1060 to serve as a guide for inlet and outlet hole locations. The IM-1060 is manufactured to have an end inlet invert height of 47 inches (1,194 mm) above the interior surface of the tank bottom when using the drill height guide markings and 4-inch-diameter (100 mm) pipes. The end outlet invert height is 44 inches (1,118 mm), corresponding to a 3-inch (76 mm) drop from end inlet to end outlet. The side inlets have invert heights of 47.5 inches (1,207 mm), and side outlets have invert heights of 44.5 inches (1,130 mm). This corresponds to a side inlet to side outlet invert drop of 3 inches (76 mm); a side inlet to end outlet invert drop of 3.5 inches (89 mm); and an end inlet to side outlet invert drop of 2.5 inches (64 mm).

Please download the
current Installation Instructions for the
IM-540, IM-1060 and IM-1530 Series Tanks at
www.infiltratorwater.com

1. Height measured from lowermost inside surface at bottom of corrugation in tank.

EZSNAP RISERS

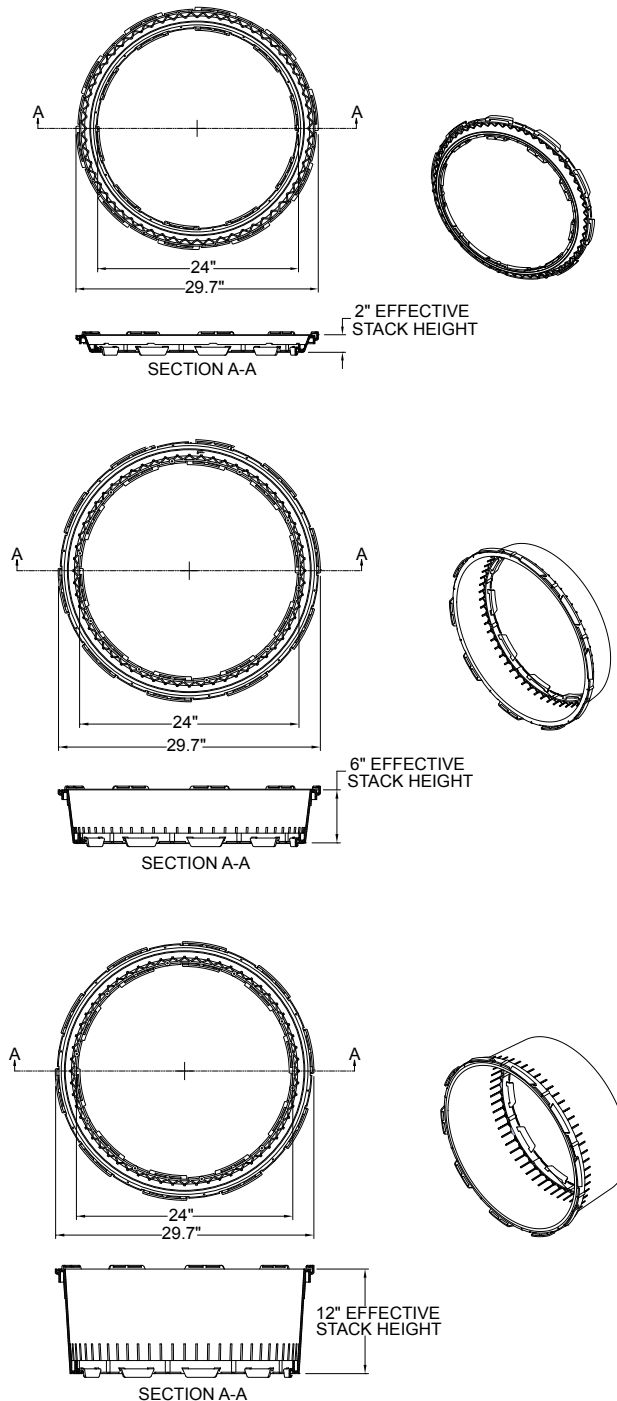
Click And Lock Riser Technology

The EZsnap riser is designed to create an easy-to-assemble watertight riser system for septic tanks, pump tanks, and cisterns.

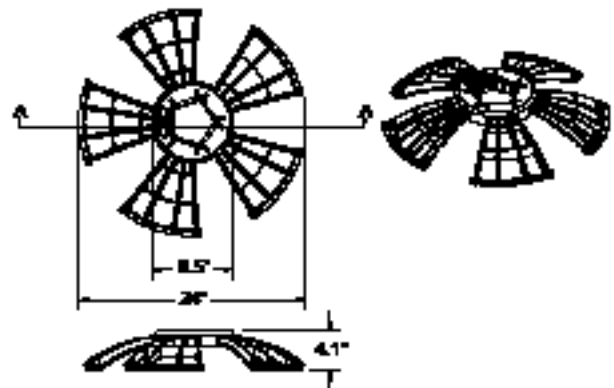
The EZsnap Riser features click and lock technology eliminating the need for assembly tools, sealant/caulk and hardware. The 24" diameter EZsnap Riser is available in 2", 6" and 12" tall sections that nest together making for efficient storage and shipping.



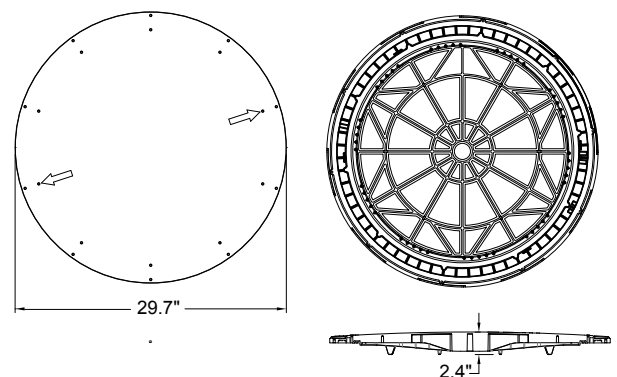
EZSnap Riser Specifications



EZSnap Safety Star Specifications



EZSnap 24" Lid Specifications



Infiltrator IM-Series Tank Riser Connection

Guidance Document for EZsnap Risers



Before You Begin

This document provides recommended procedures for the connection of EZsnap Riser products to Infiltrator Water Technologies' (Infiltrator's) IM-Series tanks.

The intent of this document is to provide procedures for making the connection between the riser and tank. Risers must be installed according to state and/or local regulations, which supersede the guidelines in this document. If unsure of the requirements for a particular site, contact the local health department or permitting authority.

Parts and Supplies

The parts and supplies necessary for installation of a riser system on Infiltrator IM-Series tanks must be purchased separately from the tank. All parts and supplies are commercially available. Contact Infiltrator or the riser manufacturer for assistance obtaining parts and supplies.

Required Tools for EZsnap Risers

- Rubber Mallet
- Screw Gun
- 7/16" Hex Nut Driver Screw Gun Bit
- #3 Square Head Robertson Driver Bit, 6-inch Length
- #2 Phillips Driver Bit, 6-inch Length
- Rags
- Install riser assembly prior to backfilling tank.



Risers nest together for efficient shipping.

Note: The EZsnap Riser segment includes factory-installed gaskets on both ends of the riser segment, so the application of a sealant or mastic on the connection surface is not required. Proper care must be taken to ensure the gasket surface is clean and free of debris. It's recommended that all gaskets and connection surfaces be wiped clean. Each riser section

is tapered to have a narrow end and a wide end. When shipped the EZsnap Risers are stacked wide end down and nested together. When making riser connections the narrow ends are designed to connect to the narrow end and the wide end is designed to connect to the wide end. It is a recommended best practice that the taller sections be installed at the deepest points of the installation.



Engage one set of tabs into proper position.

Riser-to-Tank Connection

Insert the EZsnap Riser, narrow end down into the IM-Tank opening. Rotate the riser until



Use mallet to engage the rest of the tabs.



Screws recommended for riser to tank connection only.

the riser connection tabs align with the tank indexing tabs on the tank opening. Screw pilot holes will be in alignment on the riser and tank when in proper position. On one side of the tank insert the riser connection tabs into the tank indexing tabs and engage into the proper position. Then using a rubber mallet pound down on the top of the riser engaging the rest of the tabs. It is helpful to move around the circumference of the tank opening. It is recommended for the tank to riser connection only to secure the connection with the supplied (10) #12 High-Low 1-3/4" stainless steel screws. Tighten screws in a "star" pattern, tightening screws on opposite sides of the EZsnap Riser.

Riser to Riser Connection

The EZsnap Risers come in multiple heights to generate the desired finished grade. Each Riser is tapered to have a large end and small end align like-diameter ends of riser segments. Rotate until the tabs on the upper riser segment drops into alignment on the lower riser segment. With tabs in alignment, push directly down on the top rim of the upper riser segment until the connection tab engages into the lower riser segment. A rubber mallet may be necessary to engage the tabs by hitting on the top surface of the riser if manual pressure is not adequate.



Risers are available in 2, 6 and 12 inch diameters for desired finished height.

The Infiltrator Safety Star Installation

The Infiltrator Safety Star is designed to be mounted to the screw pilot holes at a narrow end riser connection. One arm on the Safety



Star folds down 15 degrees allowing it to collapse and fit through a 24" opening.

1. Install the Infiltrator Safety Star at an EZsnap narrow riser to riser connection closest to the ground surface. A minimum of a 6-inch riser is required to accommodate the safety star and to attach the lid properly.
2. Fasten the Safety Star in place using #12 x 1-3/4" stainless steel screws.



Infiltrator's five arm Safety Star system is equipped with a folding arm for easy installation.

Lid-to-Riser Connection

The EZsnap Lid will accommodate the narrow and the wide end of the riser. To install, set the lid on top of the last riser and rotate until the riser tabs recess into the receiving pockets on the lid. The lid will drop down approximately 1/2-inch and stop rotating when seated properly. With the lid properly seated the screw pilot holes are in alignment.



Fasten the lid to the riser with screws provided.

Use the ten #14 stainless steel screws provided to fasten the lid to the riser. There are nine (9) hexagonal head

stainless steel bolts and one (1) #3 Pan-head Robertson screw, which is used as a tamper-resistant fastener. Depending upon which end of a riser segment is being used for the lid connection, use the outer-diameter screw pilot holes on the lid for the larger-diameter end of the riser and the inner-diameter screw holes for the smaller-diameter end of the riser. Call-outs on the lids clearly define the proper screw pilot holes to use for the different scenarios. Adjust the screw gun settings to prevent stripping out the pilot holes. Do not over-tighten screws.

Required Tools for Riser Pipe Installation

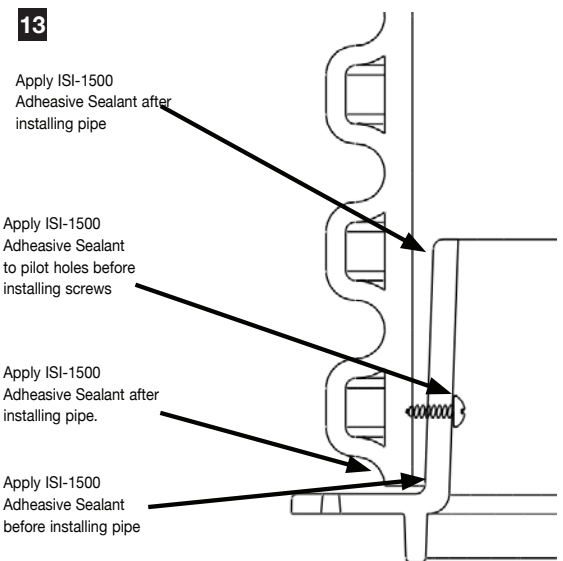
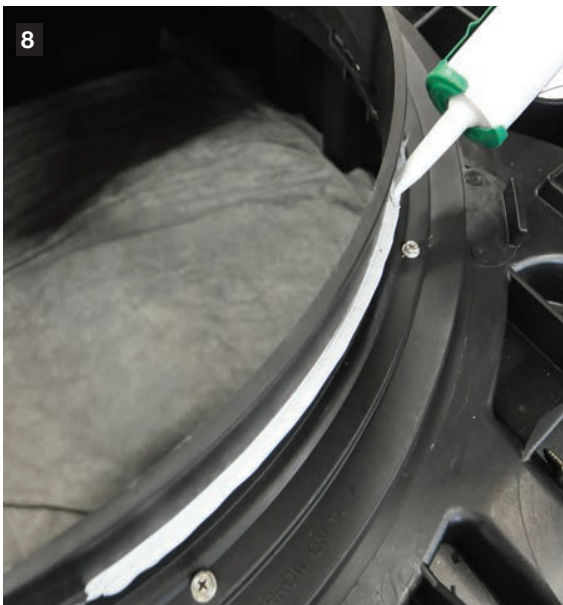
- Screw gun
- Caulk gun and ISI-1500 Sealant
- Marker or marking pencil
- Brush
- Rag
- #14 x 1-3/4" stainless steel screws (supplied with SNAPPAR)
- #12 x 1-3/4" stainless steel screws (for IPEX)
- (4) #12 x 1/2" stainless steel screws (not provided)
- Infiltrator Pipe Adapter Ring (SNAPPAR-2400)

24-inch (600-mm) IPEX, Ultra-Rib™ PVC Pipe

Note: 24-inch (600-mm) IPEX pipe must be installed using the Infiltrator Pipe Adapter Ring (SNAPPAR-2400).

1. Install riser assembly prior to backfilling tank.
2. Cut IPEX pipe along an inner corrugation to allow lid to fit properly. Cut should be smooth and even.
3. Apply 1 continuous 3/8" beads of ISI-1500 Adhesive Sealant to the smaller of the two standing ribs closest to the screw pilot holes on the top surface of the IM-Tank manhole opening. Add an extra dab of sealant in each screw hole. Sealant thickness must fill gap beneath Infiltrator Pipe Adapter Ring.
4. Align the Pipe Adapter Ring with the IM-Tank opening by lining up the arrows on the Pipe Adapter Ring with the arrow on the tank inlet or outlet. The ring will seat on the tank tightly when properly aligned. Center and press to create an even distribution of the sealant.
5. Fasten Infiltrator Pipe Adapter Ring to the IM-Tank manhole opening using ten #12 x 1-3/4-inch stainless steel screws. Tighten in star pattern. Repeat star pattern at least twice, without over tightening screws.
6. Mark (4) evenly spread locations on the inside of the Infiltrator Pipe Adapter Ring for pilot holes to accept screws. The pilot holes should be at a height half way up





the interior flange of the Infiltrator Pipe Adapter Ring.

7. Drill (4) 1/8-inch (3.5-mm) pilot holes at marked locations on the Infiltrator Pipe Adapter Ring.

8. Apply (1) bead of ISI-1500 Adhesive Sealant to the first taper on the Infiltrator Pipe Adapter.

9. Place the IPEX pipe over the Infiltrator Pipe Adapter Ring until it is seated at the base of the flange.

10. Insert ISI-1500 Adhesive Sealant into the (4) pre-drilled pilot holes.

11. Fasten IPEX pipe to Infiltrator Pipe Adapter Ring using (4) #12 x 1/2-inch stainless steel screws from the inside of pipe.

12. Tighten screws in a "star" pattern, tightening screws on opposite sides of the Infiltrator Pipe Adapter Ring. Repeat the star pattern at least twice, without over tightening screws.

13. Apply a generous bead of sealant into the groove at the top of the pipe adapter and then smear the sealant into the groove between the pipe and Infiltrator Pipe Adapter Ring.

14. Use the Infiltrator IM-Series septic tank lid, or equivalent product as a lid for the riser pipe. The lid will require the installation of the factory supplied adhesive backed gasket to the bottom side of the lid to ensure a snug fit. Set and center the lid onto the riser pipe and fasten using the factory supplied (10) #14 x 1-3/4-inch stainless steel lag bolts. Pre-drill 1/8" (3.5-mm) pilot holes on the inner set of templated locations on the lid.

Note: when using the Infiltrator lid, apply the factory supplied adhesive back gasket to the bottom side of the lid to ensure a snug fit.

15. Backfill tank in accordance with Infiltrator's tank installation instructions.

16. Following tank backfilling, visually examine the riser to Infiltrator Pipe Adapter Ring connection for damage resulting from backfill placement. Repair or replace if damaged. Allow 24 hours sealant cure-time before testing or putting into service.



24-inch (600-mm) HDPE Pipe

Note: The 24-inch (600-mm) HDPE pipe must be installed using the Infiltrator Pipe Adapter Ring (SNAPPAR-2400).

1. Install riser assembly prior to backfilling tank.

2. Cut HDPE pipe along an inner corrugation to allow lid to fit properly. Cut should be smooth and even.

3. Apply 1 continuous 3/8" beads of ISI-1500 Adhesive Sealant to the smaller of the two standing ribs closest to the screw pilot holes on the top surface of the IM-Tank manhole opening. Add an extra dab of sealant in each screw hole. Sealant thickness must fill gap beneath Infiltrator Pipe Adapter Ring.

4. Align the Pipe Adapter Ring with the IM-Tank opening by lining up the arrows on the Pipe Adapter Ring with the arrow on the tank inlet or outlet. The ring will seat on the tank tightly when properly aligned.

4. Align the Pipe Adapter Ring with the IM-Tank opening by lining up the arrows on the Pipe Adapter Ring with the arrow on the tank inlet or outlet. The ring will seat on the tank tightly when properly aligned. Center and press to create an even distribution of the sealant.
5. Fasten Infiltrator Pipe Adapter Ring the IM-Tank manhole opening using ten #14 x 2" stainless steel screws. Tighten in star pattern. Repeat star pattern at least twice, without over tightening screws.
6. Mark (4) evenly spread locations on the Infiltrator Pipe Adapter Ring for pilot holes to accept screws. The pilot holes should be at a height half way up the interior flange of the Infiltrator Pipe Adapter Ring.
7. Drill (4) 1/8" (3.5-mm) pilot holes at marked locations on the Infiltrator Pipe Adapter Ring.
8. Center the HDPE pipe over the Infiltrator Pipe Adapter Ring.
9. Fasten HDPE pipe to Infiltrator Pipe Adapter Ring using four #12 x 1 1/4" (5.5 mm x 31 mm) stainless steel screws from inside the pipe.
10. Tighten screws in a "star" pattern, tightening screws on opposite sides of the Infiltrator Pipe Adapter Ring. Repeat the star pattern at least twice, without over tightening screws.
11. Apply ISI-1500 Adhesive Sealant in the space between

the pipe and Infiltrator Pipe Adapter Ring to seal the gap between the pipe and adapter ring.

12. Use the Infiltrator IM-Series septic tank lid, or equivalent product as a lid for the riser pipe. The lid will require the installation of the factory supplied adhesive backed gasket to the bottom side of the lid to ensure a snug fit. Set and center the lid onto the riser pipe and fasten using the factory supplied (10) #14 x 2" stainless steel lag bolts. Pre-drill 1/8" (3.5-mm) pilot holes on the inner set of templated locations on the lid.

Note: when using the Infiltrator lid, apply the factory supplied adhesive back gasket to the bottom side of the lid to ensure a snug fit)

13. Backfill tank in accordance with Infiltrator's tank installation instructions.

14. Following tank backfilling, visually examine the riser to Infiltrator Pipe Adapter Ring connection for damage resulting from backfill placement. Repair or replace if damaged. Allow 24 hours sealant cure-time before testing or putting into service.

Backfill Tank and Risers

Backfill tank and risers in lifts properly supporting all sides of the risers as you move up.

Note: Always install and secure lids prior to backfill.

Disclaimer: These recommended procedures have been developed to identify best practices for achieving a watertight connection between the tank and riser under typical tank installation conditions. These procedures have been shown to result in a watertight connection between the riser assemblies identified in this document and the Infiltrator IM-Tank. Infiltrator does not guarantee a watertight connection between tank and riser because achieving a watertight connection is dependent upon a combination of installer practices and procedures, and field conditions. Please contact Infiltrator's Technical Services Department at 800-221-4436 if difficulty is encountered during riser connection installation. Please contact the appropriate riser manufacturer for concerns associated with anything that does not involve the tank to-riser connection.



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 Water Technologies. Infiltrator is a registered trademark in France. Infiltrator Water Technologies is a registered trademark in Mexico. Contour, MicroLeaching, PolyTuff, ChamberSpacer, MultiPort, PosiLock, QuickCut, QuickPlay, SnapLock and StraightLock are trademarks of Infiltrator Water Technologies. PolyLok is a trademark of PolyLok, Inc. TUF-TITE is a registered trademark of TUF-TITE, INC. Ultra-Rib is a trademark of IPEX Inc.

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TANK02 0719

Aquaworx Remediator: RKT-03 (Residential Unit)

The Aquaworx Remediator rejuvenates most failing septic systems. Insert it into an existing residential septic tank and it can reverse the biological clogging process causing the failure. The Remediator is an airlift column where bacteria are introduced to oxygen enriched effluent. The cusped plastic around the bottom provides a substantial surface area for the colonization of bacteria.

SPECIFICATIONS

Dimensions: 36" h x 14" dia, 60 lbs with pump

HP 40 Pump: 120v/60hz/0.8 amps/96 watts

Air Delivery Rate: 1.5 CFM @ 4.6 feet. 40 L/min or 11 gal/min

Liquid Mixing Rate: 16,000 GPD

Digestion Rate: 1.5-2.5 lbs/BOD/day

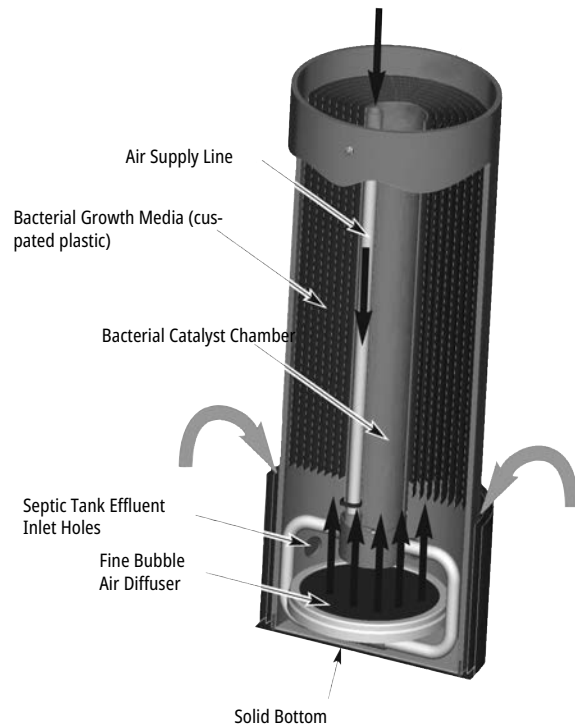
Minimum Tank Depth: 3.5 feet

Maximum Tank Depth: 6.9 feet

Maximum Tank Size: 1500 gal/single unit

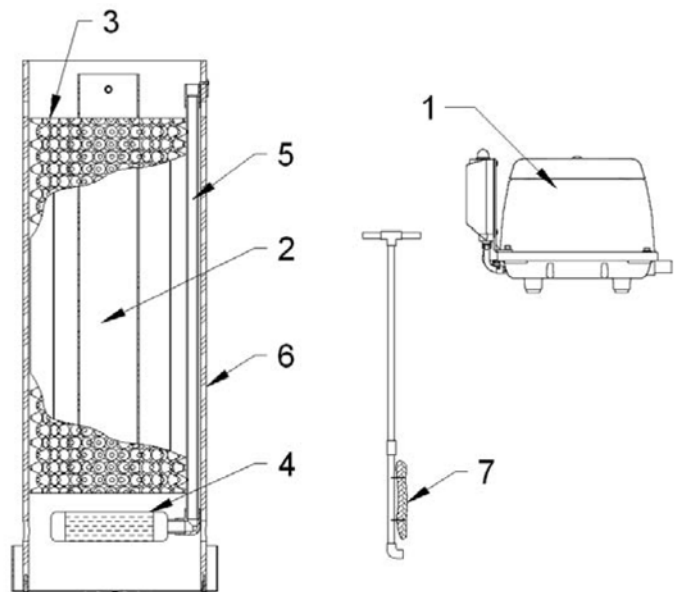
Daily Treatment Volume: max. 600 gpd/single unit*

*Multiple units may be combined for high flows



COMPONENTS

1. Linear air pump with alarm
2. Bacteria catalyst chamber
3. Cuspate plastic media
4. Fine bubble diffuser
5. 1/2" PVC air line
6. 12" PVC housing
7. Bacteria catalyst



Aquaworx Remediator: RKT-02 (Commercial Unit)

The Aquaworx Remediator RKT-02 (Commercial Unit) is designed to handle larger, commercial wastewater flows. The main distinction between the two units is the enhanced Air Pump and Fine Bubble Air Diffuser. The RKT-02 provides increased performance to handle the larger daily flows and higher strength waste common in commercial facilities.

SPECIFICATIONS

Dimensions: 36" h x 14" dia, 60 lbs with pump

HP 80 Pump: 120v/60hz/1.6 amps/190 watts

Air Delivery Rate: 3.0 CFM @ 4.6 feet 80 L/min or 21 gal/min

Liquid Mixing Rate: 30,000 GPD

Digestion Rate: 3-5 lbs/BOD/day

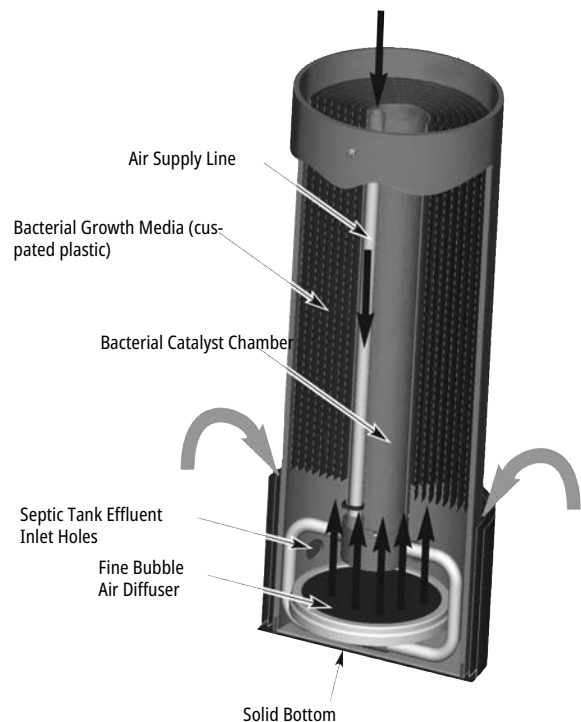
Minimum Tank Depth: 3.5 feet

Maximum Tank Depth: 6.9 feet

Maximum Tank Size: 2500 gal/single unit

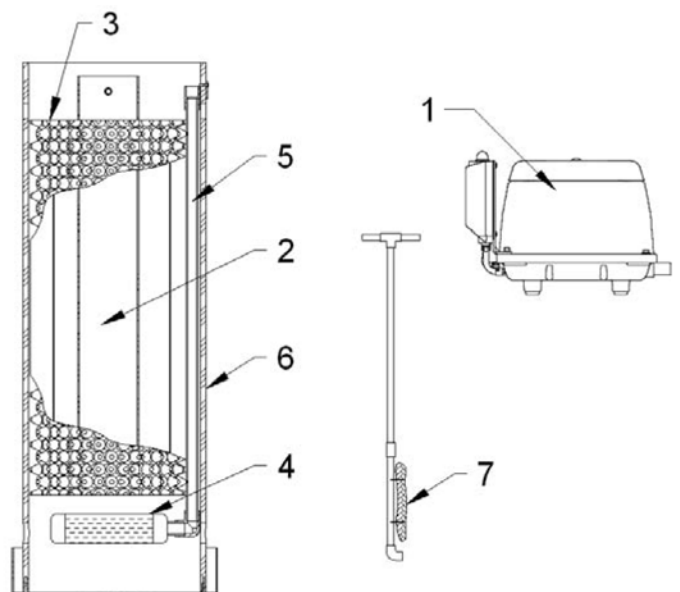
Daily Treatment Volume: max. 1000 gpd/single unit*

*Multiple units may be combined for high flows



COMPONENTS

1. Linear air pump with alarm
2. Bacteria catalyst chamber
3. Cuspate plastic media
4. Fine bubble diffuser
5. 1/2" PVC air line
6. 12" PVC housing
7. Bacteria catalyst



AQUAWORX INSTALLATION INSTRUCTIONS

Before You Begin

Unpack the Aquaworx Remediator Unit (Unit) and check for signs of damage. Notify Aquaworx™ immediately at 1-877-278-2979 if any damage has occurred. Remove the threaded rod from top of the Unit. The rod is a shipping aid and is not to be installed with the Unit. The following guidelines are for typical installations in a 850 to 2000 gallon residential septic tank. These installation instructions are general. Some installations may have differing additional requirements due to particular site conditions. Note: The Aquaworx Remediator site evaluation form must be completed prior to installation. The following guidelines pertain to both RKT-02 and RKT-03 units.

Materials and Equipment Needed

- | | |
|--|---|
| ☐ Rake and Shovel | ☐ 1/2" PVC Schedule 40 Pipe |
| ☐ Screwdriver and Wrench | ☐ Multiple 1/2" PVC 90° Elbows |
| ☐ Hand Saw and Tape Measure | ☐ 1/2" Quick Connect Union |
| ☐ Primer and Glue | ☐ Anti-tampering screws |
| ☐ Protective Gloves and Mastic | ☐ 1/2" PVC Tee or Elbow |
| ☐ Riser (if not on septic tank) | ☐ S1/2" Hole Saw/Drill Bit |

Septic Tank Requirements

A) RISER

The riser will provide access to the Unit for future inspections and maintenance. If there are no risers on the septic tank, then expose the top of septic tank so a riser (not provided) can be installed. Risers shall be approved by the local authority and be installed per manufacture's installation instructions. The lid shall be secure to prevent unauthorized access and have provisions for safe access. Install the riser over the septic tank opening where the Unit will be installed.

B) UNIT LOCATION

If the tank is a dual-compartment septic tank then install the Unit at the outlet end. However if there are access limitations/obstructions, then the Unit can be installed at the inlet end. For a single-compartment tank, the Unit may be placed in either end of the tank. For an onsite system having more than one tank installed in series, install the Unit in the first tank.

C) MINIMUM AND MAXIMUM SOLID DEPTHS

- Floating solids layer shall be less than 6 inches
- Bottom sludge layer shall be less than 3 inches
- If the layers are greater then have the tank pumped

D) TANK PUMPING AND INSPECTION RECOMMENDATIONS

Pumping the tank is not a requirement, but if it is necessary then it is recommended that the tank be visually inspected for cracks or leaks from house plumbing, baffles, concrete corrosion, inlet and outlet tees. NOTE: Aquaworx recommends a minimum liquid depth of 38" for proper unit operation. After pumping (if necessary), either refill the septic tank with the recommended 38" liquid depth or allow for sufficient time for the tank to refill prior to turning the Unit on.

Establish Location for Air Pump

The air pump can be located in a garage, shed, basement or other suitable structure. Locate the pump within 3 feet of an electrical source. If the locations described above are unavailable or impractical, the pump can be

located in a plastic basin. The basin should be waterproof manufactured specifically for an outdoor environment.

Locate the basin within 3 feet of the electrical source, preferably in a shady spot. (Complete basin installation instructions are provided in the Appendix.)

Install Airline from Air Pump to Riser

1. Dig a 4-6 inch-wide by 8 to 12 inch-deep trench depending on minimum depth preferred in your area) from the air pump to septic tank riser so that trench intersects outside of riser at approximately a 90-degree angle.

2. Drill a 7/8-inch hole through the riser at or near the bottom of the trench. Install a 1/2-inch PVC SCH 40 pipe (not provided) through the hole so that it extends into the riser by at least 12 inches. This PVC pipe is the airline that will connect the air pump to the Aquaworx Remediator Unit. The area where the airline enters the riser must be sealed with mastic or by similar means.

3. Run the 1/2-inch SCH 40 PVC pipe back to the air pump and glue the pipe into the air connections male adaptor (Figure 1).

NOTE: Do not allow dirt or other contaminants to enter the airline. Additional fittings and pipe may be required depending on the location of the pump.

Install the Unit in the Septic Tank

1. Be sure that the threaded rod has been removed from the top of the Unit. Do not remove the internal pipe and surrounding media from the center of the Aquaworx Remediator (Figure 2).

2. Included with the Unit is a piece of rope made of a non-reactive material. Thread the ends of the rope through the holes left by the threaded rod and tie with non-slip knots. Pull hard against the knots to make certain they do not slip. The rope will be utilized to set the Unit into the septic tank and to remove it for future maintenance needs (Figure 3).

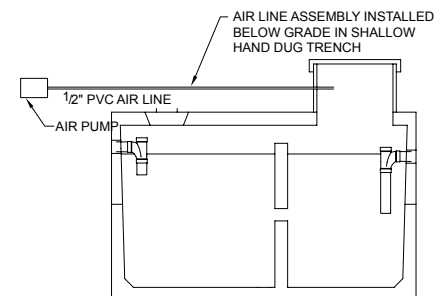
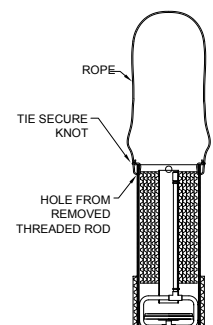
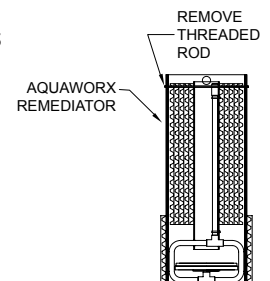


Figure 1



AQUAWORX INSTALLATION INSTRUCTIONS

3. Prime and glue a piece of 1/2-inch SCH 40 PVC pipe (not provided) into the coupling within the 4-inch center tube (Figures 4 & 5).

NOTE: Use care to ensure a tight connection. The vertical PVC pipe is also part of the inlet airline assembly. The length of this pipe should allow it to vent.

4. Using the rope provided lower Unit into the tank (Figures 6 & 7).

NOTE: Place the Unit with the airline assembly as close as possible to the inside wall of the riser. Because the Unit sits on the bottom of the septic tank, the rigid PVC airline assembly adds stability when glued in place. The Unit should be positioned below the riser for easy access to the top of the Unit.

5. Anchor the rope to the ground with a stake or large rock so that it does not fall into the tank while completing the airline assembly.

6. To complete the airline assembly, cut the two PVC pipes to the appropriate length. Make a glued connection with a 1/2-inch PVC 90 (not provided) (Figure 8).

NOTE: If installing a quick connect union (recommended), cut the horizontal pipe to a shorter length allowing for the extra connection.

7. Remove the Bacterial Catalyst Assembly from the packaging. Note: Wash hands after handling. Glue a 1/2-inch PVC SCH 40 pipe (not provided) into the coupling end of the Bacterial Catalyst Assembly creating an extension. The extension should be long enough to extend up into the riser when the Bacterial Catalyst Assembly is set down into the installed Unit.

8. Cut the PVC pipe to a length so that it is a few inches below the lid of the riser and glue on a 1/2-inch PVC tee or elbow (not provided) as a handle. This facilitates the removal and replacement of the Bacterial Catalyst Assembly.

9. Slide the PVC extension with the Bacterial Catalyst Assembly down the center PVC pipe of the Unit (Figure 9).

NOTE: Do not force the Bacterial Catalyst Assembly into the Unit. As long as it is submerged within the air column in the Unit then it is positioned correctly.

10. Secure the Bacterial Catalyst Assembly by clipping the "C" clip (provided) around the PVC pipe coming out of the Unit (Figure 10).

11. Tie off the excess rope from the Unit to the horizontal airline pipe (Figure 11).

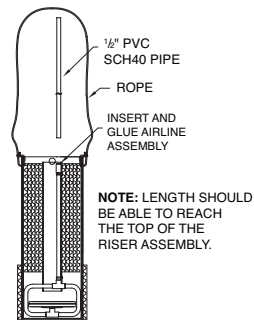


Figure 4

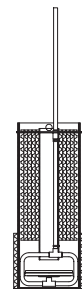


Figure 5

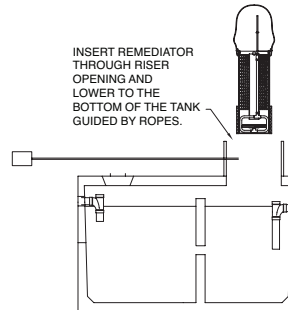


Figure 6

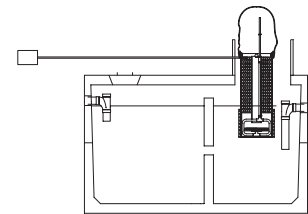


Figure 7

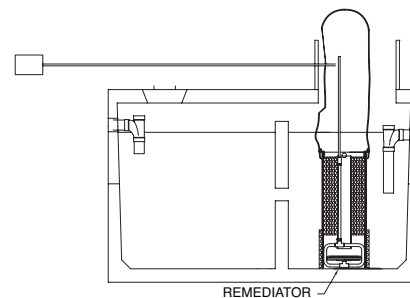


Figure 8

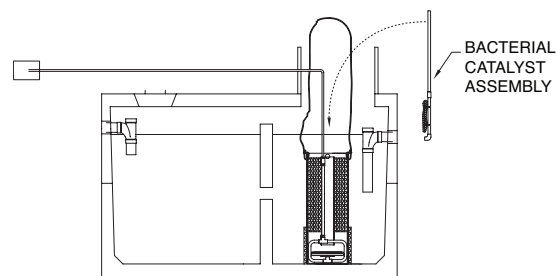


Figure 9



Figure 10



Figure 11

AQUAWORX INSTALLATION INSTRUCTIONS

Start up the Unit

1. Plug the air pump into a GFCI rated electrical outlet. Make sure the air pump begins to operate. (Listen for a humming sound.)
 2. Check all PVC pipe and fitting joints for evidence of air leaks. Make sure liquid over the Unit is being actively agitated and aerated and the Bacterial Catalyst Assembly is submerged (Fig. 12).
 3. Unpleasant and noxious odors will become noticeable, but should subside within 48 hours. Avoid breathing the gases from the septic tank. Place the riser lid over the top of the riser opening to reduce exposure to these gases. White PVC pipe and fittings are not UV resistant. All exposed pipe and fittings must be covered or painted (not provided).
 4. Install septic tank riser lid with anti-tampering screws (not provided). Make certain all lids are child proof.
 5. Backfill trenches and bury all 1/2-inch PVC pipes to restore the landscaping.
- Follow-up inspections are recommended at one week and three weeks after start up.



Figure 12

Warning

All electrical installations to be completed according to local codes and ordinances. All electrical work to be done by qualified electrician.

Never enter an empty septic tank. Septic gases are extremely hazardous and can cause death. Detectable and non-detectable poisonous gases will remain in the empty septic tank.

Do not breathe septic gases while working around open septic tanks. Exposure to methane and hydrogen sulfide can be harmful.

As the Unit begins to operate within the septic tank, unpleasant and offensive odors will increase and become very noticeable. These odors normally disappear after a day or two. After start up of the Unit, a foam or bubbly flock may occur within a week or two. If foam is present then wash down with a hose.

Air Pump Requirements

The Air Pump can be located in a garage, shed, basement or other suitable structure. When these are unavailable or impractical it can be located in a plastic basin. There are many plastic basins available. The basin should have a minimum diameter of 20 inches and minimum height of 12 inches.

It should be constructed of material designed to withstand exterior installation and provide a waterproof environment for the air pump. Locate the basin within 3 feet of the electrical source in a shady spot. Burying the basin is not recommended, since there is potential for moisture, condensation or water to collect in the basin. In addition, it may allow excessive heat build up. These conditions can cause the air pump to malfunction.

Connect Basin Air Line to Air Pump

The Aquaworx Remediator package includes a clear tube air pump connector with two hose clamps, and a barbed glued fitting connected to a PVC 90-degree elbow. Please locate and set aside.

1. Cut the PVC close nipple (provided) to 1 1/2-inches in and glue the close nipple into the female adaptor. Make certain the threaded barb adaptor on the clear tube air pump connector is tightly threaded into the PVC 90-degree elbow (provided). Tighten the hose clamp on the barb end (provided). Position the air pump in the center of the basin. **DO NOT GLUE THIS CONNECTION NOW!** Estimate the correct length for the clear plastic tubing and cut (Figure 13).



Figure 13

2. Remove the air pump and the clear tube connector. Put the second hose clamp (provided) over the open end of the clear plastic tube, slide the tube over the outlet port of the air pump and tighten the hose clamp (Figures 14 & 15).



Figure 14

3. Reposition the air pump within the basin, now connected to the clear tube connector, slip the PVC 90-degree elbow over the close nipple to insure the clear tube is not kinked, then glue the PVC 90-degree elbow on the close nipple (Figure 16).



Figure 15



Figure 16

AQUAWORX INSTALLATION INSTRUCTIONS

Make Electrical Connection to Basin and Air Pump

NOTE: Hire a qualified electrician to wire a GFCI protected connection to the air pump.

SUGGESTED ELECTRICAL CONDUIT ASSEMBLY

Required components:

- 1/2-inch Carlon (or similar) Gray Electrical Male Adapter
- 1/2-inch Carlon (or similar) PVC Entry Elle
- 1/2-inch PVC SCH 40 Pipe
- 3/4-inch Barb End Spade Bit
- EMT Lock Nut
- Wet or Dry PVC Glue

1. Install a 1/2-inch Carlon (or similar) gray electrical male adaptor (not provided) by drilling another 3/4 inch hole, typically at 90 or 180 degrees from the airline connection male adaptor. Follow the same procedure as the air line male adaptor installation except use an EMT lock nut on the inside of the basin instead of the female adaptor (Figure 17).



Figure 17

2. Cut a close nipple approximately 1 1/2 inches long from 1/2-inch PVC pipe (not provided) and glue it into the Carlon male adaptor. Glue a 1/2-inch Carlon PVC entry "L" (not provided) onto the close nipple in the position best suited to connect to the electrical service. Leaving it unglued for the electrician is also an option. Check to make certain the electrician properly glued this connection (Figure 18).



Figure 18

NOTE: The electrician can connect the electrical service to this entry or make his own waterproof connection to the basin. The electrician must connect the basin and air pump to a GFCI protected service that meets the codes and ordinances of the local authority having jurisdiction over electrical installations.

Site Evaluation Checklist

Date of Evaluation _____ People Present _____

Property Owner _____ Rent or Own _____

Property Address _____ City _____ State _____ ZIP _____

Home Phone _____ Cell Phone _____ Work Phone _____

Other Information _____

FLOW ESTIMATES

of Bedrooms _____ # of Bedrooms on Permit _____ # of Occupants _____ Garbage disposal _____

Laundry machine volume in gal. _____ # of Laundry loads per week _____ Water Softener _____

Water Softener plumbed to Septic Tank? _____ # of cycles per day _____ Volume of cycles _____

Plumbing fixtures checked for leaks? _____

SYSTEM INFORMATION

Age of System _____ Permit Obtained _____ # of system replacements on property _____

Tank Volume _____ Tank Depth _____ # of Tank compartments _____ Tank checked for leaks _____

Type of System: Trench _____ Bed _____ Mound _____ At Grade _____ Drip _____

Media Type _____

Dimensions of the Field _____ Trench Length _____ Trench Width _____

Depth of the Field _____ Depth of Cover _____ Nature of Cover: Loose _____

Compacted _____ Fill Material Present _____ Type of fill material _____

Effluent Filter present _____ Type / MFG _____ Subsurface Drainage _____

Is subsurface drainage functioning _____

How often has Tank been serviced _____ Were records kept _____

SOIL INFORMATION

Soil type in location of field _____ Soil loading rate of field area _____

Depth to seasonal or perched water table _____ Separation of water table to field bottom _____

Depth to other limiting condition _____ Separation of other limiting condition to field bottom _____

Was soil report completed _____ Name of soil evaluator _____

Other Comments:

Attach copies of all septic permits obtained for this site, tank pumping records and soil reports.

Certified Installer Agreement

County _____ Counties within Service Area _____

Telephone _____ Fax _____ Cell _____

Email _____ Certified Installer/Contractor License Number _____

This Certified Installer Agreement (the "Agreement") dated _____ by and between Infiltrator Water Technologies. ("ISI"), a Connecticut corporation with its principal place of business at 4 Business Park Road, Old Saybrook, CT 06475 and "Installer" (information listed above).

WHEREAS, ISI is the manufacturer of the Aquaworx Remediator™ and accompanying accessories including the Bacterial Catalyst, the Aquaworx Remediator™ Air Pump and the Air Basin Assembly (the "Products");

WHEREAS, ISI is the owner or licensee of certain trademarks as set forth on Exhibit A (the "Marks") and the goodwill represented by the Marks;

WHEREAS, the Installer desires to hold itself out to the public as a "Certified Installer" of the Products and ISI desires to appoint Installer as a Certified Installer of the Products under the terms set forth in this Agreement;

NOW, THEREFORE, in consideration of the premises and the mutual covenants and promises of the parties, the sufficiency of which is acknowledged, the parties agree as follows:

1. Prior to commencing its business as a Certified Installer hereunder, Installer shall take a certification course established by ISI. Upon successful completion of the certification course, Installer is issued a certificate card to be used as proof of completion with customers and regulators. Installer shall follow all of ISI's installation instructions, including without limitation, providing to ISI a fully completed and executed Site Evaluation Form following each installation of a Product. Installer agrees that it shall be fully responsible for all warranty claims in the event that it does not comply with the installation instructions and site evaluation requirements.
2. Installer shall be fully responsible for all permits and licenses with regard to any installation or maintenance of the Products. Installer shall be fully licensed to install and maintain the Products and shall provide ISI copies of such licenses upon request. All work performed as a Certified Installer hereunder shall be in full compliance with all applicable laws and regulations. Installer shall only use ISI approved methods and materials in the installation and maintenance of the Products. All electrical connections shall be made by licensed electrician as may be required by local regulation.
3. ISI will provide the Installer technical support on the installation and maintenance of the Products and forward sales leads to Installer in its local area.
4. Installer shall provide each of its customers with a copy of ISI's Limited Warranty for the Product being sold.
5. ISI shall assume no liability to Installer or any third party with respect to the services rendered by Installer. Installer hereby indemnifies and holds ISI harmless against any loss or losses as a result of claims, actions, lawsuits and investigations, including without limitation, attorneys fees involving or arising from Installer's activities as a Certified Installer of the Products, including, without limitation, its sales and installation activities.
6.
 - a. Installer agrees to maintain in full force and effect insurance coverage in such amounts to satisfy the minimum liability, workman's compensation, and commercial automobile as required by the state or local licensing agreement.OR
 - b. In the event that the state or local licensing agency does not have minimum insurance requirements, the Installer shall maintain in full force and effect (a) Commercial General Liability insurance for damages claims due to bodily injury (including death) or property damage caused by or arising from acts or omissions of Installer, including broad form property damage and blanket contractual liability with limits of \$1,000,000 per occurrence; (b) Workers Compensation insurance in compliance with all statutory requirements as well as employer's liability insurance with limits of \$500,000; (c) Commercial automobile insurance for all owned, non-owned or hired automobiles with limits of at least \$1,000,000 per occurrence; and (d) Umbrella liability insurance with limits of \$1,000,000. Installer shall upon execution hereof and thereafter upon request provide ISI a certificate of insurance evidencing all such required coverage and proof of a current contractor's license.
7. Subject to the terms and conditions of this Agreement, ISI hereby appoints Installer as a "Certified Installer" of the Products and grants to Installer a non-exclusive, non-transferable, limited license to use the Marks in connection with its business as a Certified Installer of the Products. Whenever a Mark is used as provided herein, the Mark shall be accompanied by appropriate notice of statutory rights ("®") or common law rights ("™"), as directed by ISI, or other such words and/or symbols as may be requested by ISI from time to time. Installer will use a Mark only in the style and according to the specifications reflected in Exhibit A. Installer agrees that all rights in and to the Marks are and shall remain vested in ISI, and that all rights accruing from Installer's use of the Marks shall inure to Licensor.
8. This Agreement may be terminated by ISI for breach of any of Installer's obligations hereunder without notice. This Agreement may be terminated by either ISI or Installer at any time and without any reason upon thirty (30) days notice. Paragraph 5 shall survive any termination of this Agreement. Upon termination, Installer shall immediately stop using the Marks and no longer hold itself out to the public as a Certified Installer of the Products.
9. This Agreement will be governed by and interpreted in accordance with the laws of the State of Connecticut without regard to conflicts of laws principles.
10. This Agreement may be executed in counterparts and/or by facsimile.

Infiltrator Water Technologies. Installer _____

Signature Signature _____ Printed Printed _____

1-Year Suggested Service Agreement

This service agreement (the "Agreement") is dated _____, 20____, between _____ "Service Provider" and _____ "Owner" (Collectively, the "Parties").

THE PARTIES AGREE AS FOLLOWS:

1) SERVICES:

The Service Provider shall provide the minimum service outlined in the Maintenance Schedule below. The Service Provider shall provide all labor, transportation and equipment needed to properly inspect and service the Aquaworx Remediator™ system

2) REPLACEMENT OF COMPONENTS:

The Service Provider will replace worn / non-functional parts and components at the Owner's expense. Such items may include but not be limited to: air pump components, air pump, generator components, bacteria catalyst, riser, riser lid, basin, basin lid, grommets, electrical connections and rubber seals. The Service Provider shall provide the Owner with a list and cost of proposed replacement components prior to installation.

3) MAINTENANCE SCHEDULE:

The Service provider shall make a minimum of one site inspection at each of the intervals listed below:

A) Start up* (1-3 weeks) – Inspections of all accessible system components for proper fit and function. Verification of solid levels and reduced odors in septic tank and visual inspection for surfacing effluent above leachfield.

B) Mid Year (6 months) – Inspections of all accessible system components for proper fit and function. Verification of solid levels and reduced odors in septic tank and visual inspection for surfacing effluent above leachfield. Cleaning of air pump filter and inspection of basin assembly, septic tank riser, riser lid and seals. Removal and replacement of Bacterial Catalyst assembly.

C) Year End (12 months) - Inspections of all accessible system components for proper fit and function. Verification of solid levels and reduced odors in septic tank and visual inspection for surfacing effluent above leachfield. Cleaning of air pump filter and inspection of basin assembly, septic tank riser, riser lid and seals. Removal and replacement of Bacterial Catalyst assembly.

4) PAYMENT:

The Owner shall pay the Service Provider a service fee of \$ _____ within one week of the initial system installation. The Service Agreement may be renewed 30 days prior to end of each one-year term.

5) TERM:

This service agreement shall be in effect for a period of one year. The Service Agreement may be renewed for total period of three years. Operation of the Aquaworx Remediator™ system without a service agreement shall void the manufacturer's limited warranty.

OWNER

Printed name

Date _____

SERVICE PROVIDER

Printed name

Date _____

* NOTE: Start-up inspection is not required for years 2 and 3, if the service agreement is extended.

EZFLOW SYSTEMS

EZflow Systems in Arkansas

The Arkansas Product Review Committee and Department of Health have evaluated the EZflow 1201P-GEO and 1202H-GEO specifications and a product sample. This product has been approved for use as a substitute for conventional pipe and gravel in absorption trenches. The approval of the 1201P-GEO and 1202H-GEO indicates that the product meets the Rules and Regulations Pertaining to Sewage Disposal Systems, Designated Representatives and Installers, Act 402 of 1977, A.C.A. 12-236-101 et seq., and with all manufacturers specifications that do not conflict with the standards. Specifically, the site and soils must be classified as suitable or provisionally suitable for a conventional system or have an acceptable percolation rate and allow for the required vertical separation to limiting soil horizons.

The most suitable backfill material available should be used. Clay backfill is not recommended. The backfill should be mounded over the trench to allow for settling and ensure a minimum of six inches of cover as specified by the manufacturer.

Materials and Equipment Needed

EZflow 1201P-GEO or EZflow 1202H-GEO bundles

EZflow internal pipe couplers

Endcaps, if needed

Backhoe

Laser, Transit or Level

Installation Instructions

1. The EZflow assemblies are 12 inches in diameter by 10 feet long. The polyethylene net bundles contain a four inch perforated pipe surrounded by EPS aggregate.

In cases where linear footage required is not in multiples of 10, the installer may (a) reduce the product to the needed length and refasten the netting to the pipe or, (b) use an additional 10 feet of product to exceed the required trench length.

NOTE: The required length of drainfield is that required for a two foot wide stone trench.

2. The plastic stretch wrap is removed before the ten foot long bundles are placed in the trench(es).

3. The top of each GEO cylinder contains a filter fabric pre-manufactured in between the netting and aggregate. The fabric is inserted to prevent soil intrusion. The installer shall make sure that the fabric is on top with the 1201P-GEO or 1202H-GEO configuration, that it is in contact with the fabric contained in the adjacent cylinder before backfilling.

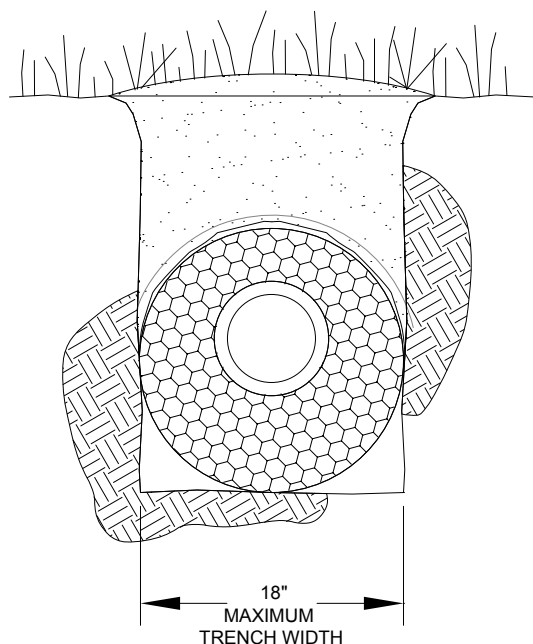
4. The bundles containing 4-inch perforated pipe are joined end to end with an internal coupling available from EZflow. The same internal coupler is used to start the trench, as it will slide inside the 4-inch PVC pipe.

5. The trench top shall be shaped to ensure surface runoff. Minimum cover over the pipe and aggregate assembly shall be 6 inches. Mounding of backfill may be necessary to ensure the required 6 inches of cover.

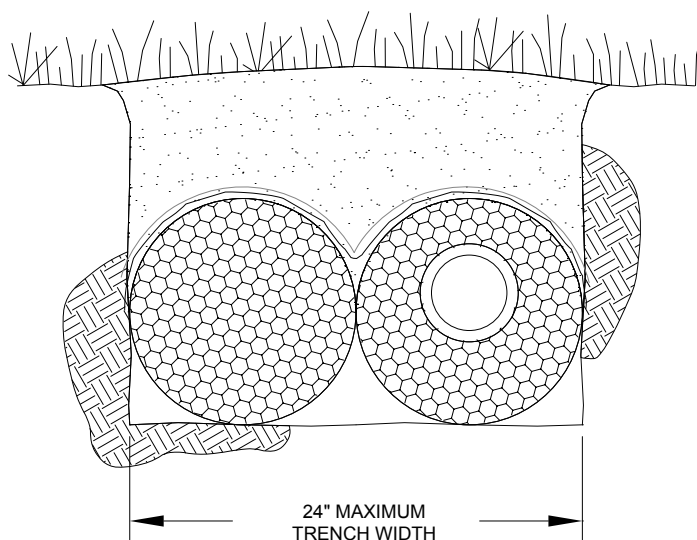
6. Repeat steps 1 through 5 for each required trench.

Products

1201P-GEO



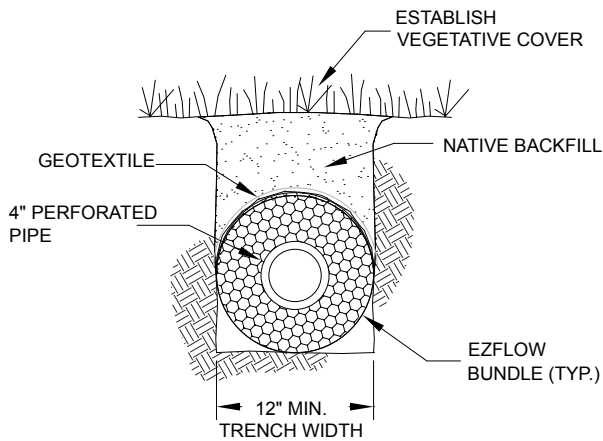
1202H-GEO



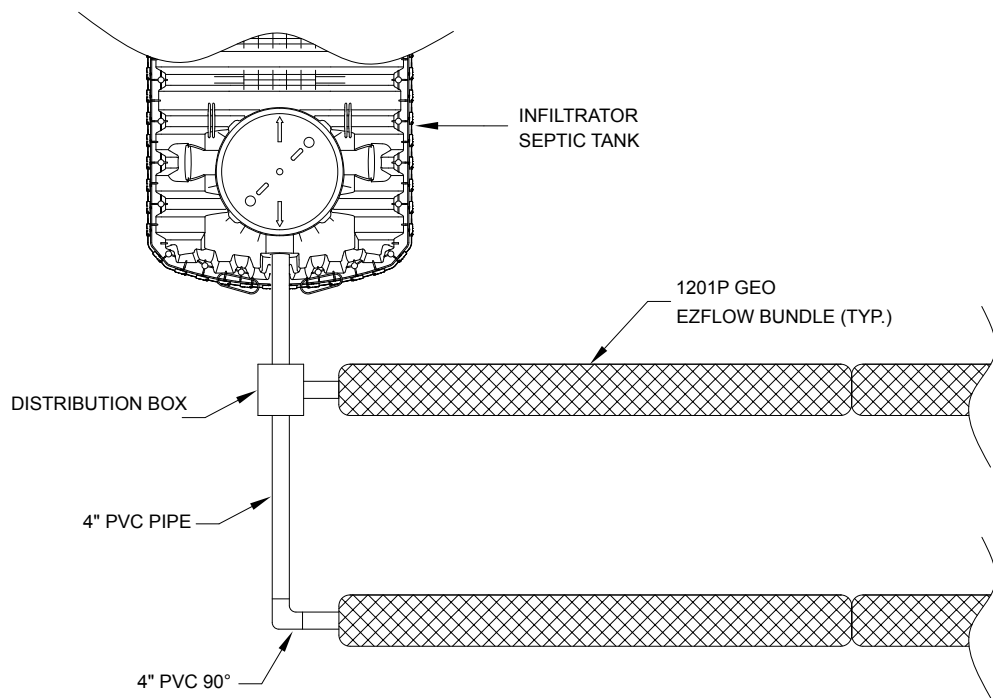
EZFLOW SYSTEMS

EZ 1201P-GEO Trench Configurations

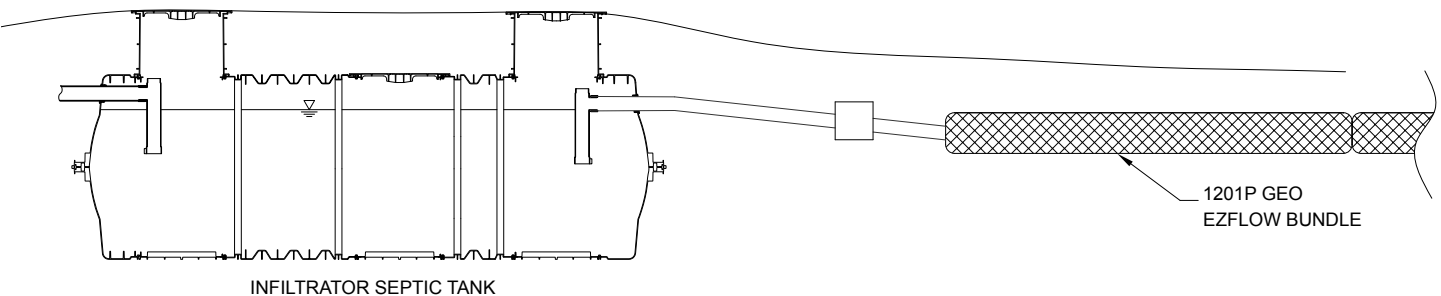
TYPICAL CROSS SECTION (not to scale)



TYPICAL PLAN VIEW (not to scale)

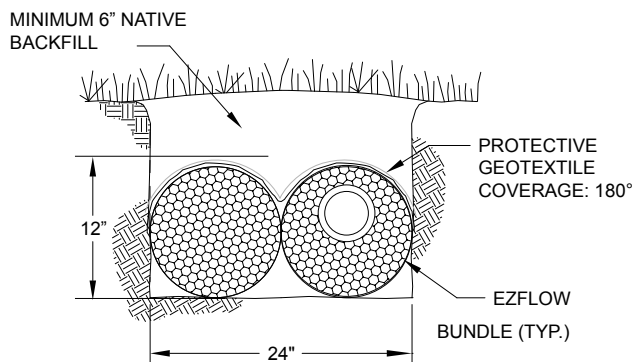


TYPICAL SIDE VIEW (not to scale)

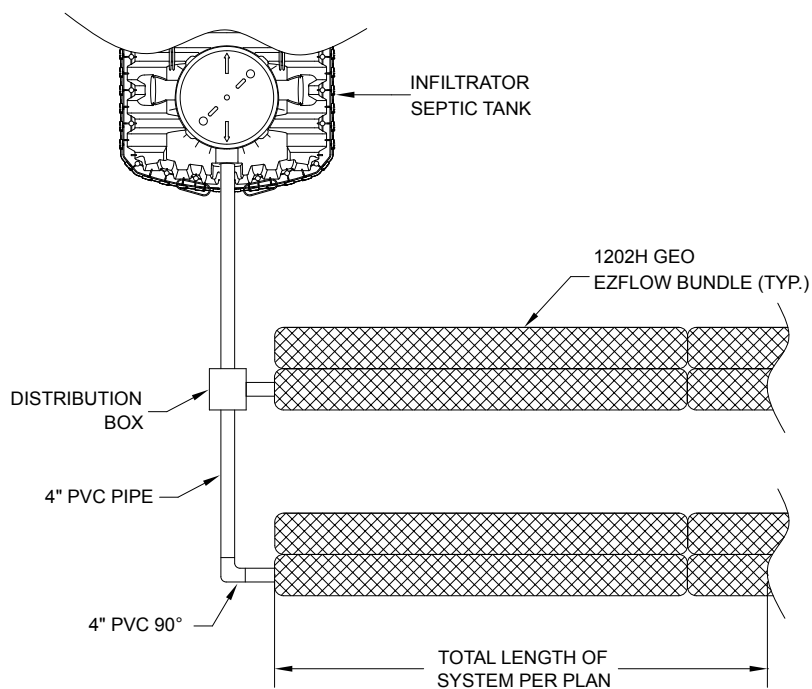


EZ 1202H-GEO Trench Configurations

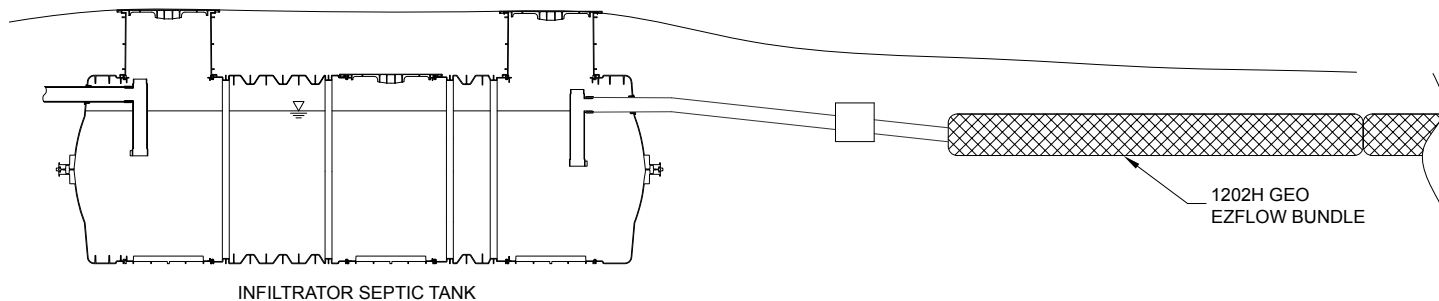
TYPICAL CROSS SECTION (not to scale)



TYPICAL PLAN VIEW (not to scale)



TYPICAL SIDE VIEW (not to scale)



WARRANTIES

INFILTRATOR WATER TECHNOLOGIES STANDARD LIMITED WARRANTY

(a) The structural integrity of each chamber, endcap and other accessory 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 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 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 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) This Limited Warranty shall be void if any part of the chamber system (chamber, endcap or other accessory) 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 this Limited Warranty in any manner whatsoever, or to 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.

WARRANTIES

INFILTRATOR WATER TECHNOLOGIES STANDARD LIMITED WARRANTY

(a) This limited warranty is extended to the end user of an Infiltrator Tank. A Tank manufactured by Infiltrator, when installed and operated in accordance with Infiltrator's installation instructions and local regulation by a licensed installer, is warranted to you: (i) against defective materials and workmanship for five (5) years after installation. Infiltrator will, at its option, (i) repair the defective product or (ii) replace the defective materials. Infiltrator's liability specifically excludes the cost of removal and/or installation of the Tank.

(b) In order to exercise its warranty rights, you must notify Infiltrator in writing at its corporate headquarters in Old Saybrook, Connecticut within fifteen (15) days of the alleged defect.

(c) YOUR EXCLUSIVE REMEDY WITH RESPECT TO ANY AND ALL LOSSES OR DAMAGES RESULTING FROM ANY CAUSE WHATSOEVER SHALL BE SPECIFIED IN SUBPARAGRAPH (a) ABOVE. INFILTRATOR SHALL IN NO EVENT BE LIABLE FOR ANY CONSEQUENTIAL OR INCIDENTAL DAMAGES OF ANY KIND, HOWEVER OCCASIONED, WHETHER BY NEGLIGENCE OR OTHERWISE. SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THIS LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU. THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS AND YOU MAY ALSO HAVE OTHER RIGHTS WHICH VARY FROM STATE TO STATE.

(d) THIS LIMITED WARRANTY IS THE EXCLUSIVE WARRANTY GIVEN BY INFILTRATOR AND SUPERSEDES ANY PRIOR, CONTRARY, ADDITIONAL, OR SUBSEQUENT REPRESENTATIONS, WHETHER ORAL OR WRITTEN. INFILTRATOR DISCLAIMS AND EXCLUDES TO THE GREATEST EXTENT ALLOWED BY LAW ALL OTHER WARRANTIES, WHETHER EXPRESS OR IMPLIED, OR STATUTORY, INCLUDING ANY WARRANTY OF MERCHANTABILITY, FINESSE FOR A PARTICULAR PURPOSE AND ANY IMPLIED WARRANTIES OTHERWISE ARISING FROM COURSE OF DEALING, COURSE OF PERFORMANCE, OR USAGE OF TRADE. NO PERSON (INCLUDING ANY EMPLOYEE, AGENT, DEALER, OR REPRESENTATIVE) IS AUTHORIZED TO MAKE ANY REPRESENTATION OR WARRANTY CONCERNING THIS PRODUCT, EXCEPT TO REFER YOU TO THIS LIMITED WARRANTY. EXCEPT AS EXPRESSLY SET FORTH HEREIN, THIS WARRANTY IS NOT A WARRANTY OF FUTURE PERFORMANCE, BUT ONLY A WARRANTY TO REPAIR OR REPLACE.

(e) YOU MAY ASSIGN THIS LIMITED WARRANTY TO A SUBSEQUENT PURCHASER OF YOUR HOME.

(F) NO REPRESENTATIVE OF INFILTRATOR HAS THE AUTHORITY TO CHANGE THIS LIMITED WARRANTY IN ANY MANNER WHATSOEVER, OR TO EXTEND THIS LIMITED WARRANTY.

CONDITIONS AND EXCLUSIONS

There are certain conditions or applications over which Infiltrator has no control. Defects or problems as a result of such conditions or applications are not the responsibility of Infiltrator and are NOT covered under this warranty. They include failure to install the Tank in accordance with instructions or applicable regulatory requirements or guidance, altering the Tank contrary to the installation instructions and disposing of chemicals or other materials contrary to normal tank usage.

The above represents the Standard Limited Warranty offered by Infiltrator. A limited number of states and counties have different warranty requirements. Any purchaser of a Tank 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 a Tank.

WARRANTIES

AQUAWORX REMEDIATOR™

LIMITED WARRANTY - ONE (1) YEAR MATERIALS AND WORKMANSHIP
LIMITED WARRANTY & ONE (1) YEAR PERFORMANCE LIMITED WARRANTY

(a) This limited warranty is extended to the end user of an Aquaworx Remediator™ device. The Aquaworx Remediator™ device manufactured by Infiltrator, when installed and operated in accordance with Infiltrator's installation and operating instructions by a certified Aquaworx™ installer, is warranted to you: (i) against defective materials and workmanship for one (1) year after installation; and (ii) that, exclusive of the start up period, it will resolve surface ponding of effluent or backup of effluent in the home for one (1) year after installation. Aquaworx™ by Infiltrator® will, at its option, (i) repair the defective product, (ii) replace the defective materials or (iii) refund the end user of the Aquaworx Remediator™ device the cost of the device up to a maximum of \$2,000.00. The end user shall, upon request, permit Infiltrator or its agent to remove the device.

(b) YOUR EXCLUSIVE REMEDY WITH RESPECT TO ANY AND ALL LOSSES OR DAMAGES RESULTING FROM ANY CAUSE WHATSOEVER SHALL BE SPECIFIED IN SUBPARAGRAPH (a) ABOVE. WE SHALL IN NO EVENT BE LIABLE FOR ANY CONSEQUENTIAL OR INCIDENTAL DAMAGES OF ANY KIND, HOWEVER OCCASIONED, WHETHER BY NEGLIGENCE OR OTHERWISE. SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THIS LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU. THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS AND YOU MAY ALSO HAVE OTHER RIGHTS WHICH VARY FROM STATE TO STATE.

(c) THIS LIMITED WARRANTY IS THE EXCLUSIVE WARRANTY GIVEN BY AQUAWORX™ BY INFILTRATOR AND SUPERSEDES ANY PRIOR, CONTRARY, ADDITIONAL, OR SUBSEQUENT REPRESENTATIONS, WHETHER ORAL OR WRITTEN. AQUAWORX™ BY INFILTRATOR DISCLAIMS AND EXCLUDES TO THE GREATEST EXTENT ALLOWED BY LAW ALL OTHER WARRANTIES, WHETHER EXPRESS OR IMPLIED, OR STATUTORY, INCLUDING ANY WARRANTY OR MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND ANY IMPLIED WARRANTIES OTHERWISE ARISING FROM COURSE OF DEALING, COURSE OF PERFORMANCE, OR USAGE OF TRADE. NO PERSON (INCLUDING ANY EMPLOYEE, AGENT, DEALER, OR REPRESENTATIVE) IS AUTHORIZED TO MAKE ANY REPRESENTATION OR WARRANTY CONCERNING THIS PRODUCT, EXCEPT TO REFER YOU TO THIS LIMITED WARRANTY. EXCEPT AS EXPRESSLY SET FORTH HEREIN, THIS WARRANTY IS NOT A WARRANTY OF FUTURE PERFORMANCE, BUT ONLY A WARRANTY TO REPAIR/REPLACE OR REFUND.

(d) YOU MAY ASSIGN THIS LIMITED WARRANTY TO A SUBSEQUENT PURCHASER OF YOUR HOME.

CONDITIONS AND EXCLUSIONS

There are certain conditions or applications over which Aquaworx™ by Infiltrator have no control. Defects or problems as a result of such conditions or applications are not the responsibility of Infiltrator and are NOT covered under this warranty. They include any condition or application not set forth in the Aquaworx™ Site Evaluation Checklist, installation of the Aquaworx Remediator™ device by other than a Certified Aquaworx™ Installer and any failure to comply with the installation and operating instructions. YOU MUST PROVIDE A COPY OF YOUR AQUAWORX™ SITE EVALUATION CHECKLIST OR A VALID REPAIR PERMIT WITH ANY CLAIMS.

CLAIMS UNDER THIS LIMITED WARRANTY MUST BE MADE WITHIN 15 DAYS OF THE APPEARANCE OF A DEFECT.

Your local Aquaworx™ certified installer is equipped to handle your warranty claim quickly and efficiently. Because they are located near you and familiar with your purchase and/or project, your local Aquaworx™ certified installer can best expedite the solution to your claim. If within fifteen (15) days, our local Aquaworx™ certified installer has not responded to your request; send a request to Infiltrator in writing at Aquaworx™ Warranty Department, Infiltrator Water Technologies., P.O. Box 768, Old Saybrook, CT 06475. You must include a copy of your Aquaworx™ Site Evaluation Checklist or a valid repair permit with all warranty claims.

Aquaworx™ by Infiltrator recommends that your Aquaworx Remediator device be serviced by an Aquaworx certified installer or other qualified maintenance provider per the following schedule;

Start up (1-3 weeks) – Inspections of all accessible system components for proper fit and function. Verification of solid levels and reduced odors in septic tank and visual inspection for surfacing effluent above leachfield.

Mid Year (6 months) – Inspections of all accessible system components for proper fit and function. Verification of solid levels and reduced odors in septic tank and visual inspection for surfacing effluent above leachfield. Cleaning of air pump filter and inspection of basin assembly, septic tank riser, riser lid and seals.

Year End (12 months) – Inspections of all accessible system components for proper fit and function. Verification of solid levels and reduced odors in septic tank and visual inspection for surfacing effluent above leachfield. Cleaning of air pump filter and inspection of basin assembly, septic tank riser, riser lid and seals. Removal and replacement of Bacterial Catalyst assembly.

WARRANTIES

EZflow, L.P. ("EZflow") hereby extends the following LIMITED WARRANTY to the original purchaser of a new EZflow drainfield system installed by an authorized installer. The EZflow drainfield system is warranted to be free from defects in material and workmanship under normal use, subject to the terms and conditions herein.

WARRANTY ELIGIBILITY:

This Limited Warranty shall extend to the original homeowner and to each subsequent owner of the home during the term of this Limited Warranty. This Limited Warranty covers the performance of the EZflow drainfield system only when properly installed in accordance with EZflow, L.P.'s design specifications, installation instructions, and any applicable state rules or regulations by an authorized installer for use with domestic strength effluent.

OWNER'S OBLIGATIONS AND MAINTENANCE

1. The homeowner must retain proof that septic tank solids (digested sludge) have been properly removed once every thirty-six (36) months.
2. The homeowner must not landscape over the EZflow drainfield system with trees or shrubbery nor erect any structures or place heavy items over the drainfield.
3. Homeowner must retain this Limited Warranty signed by an authorized drainfield system installer and a properly issued Operation Permit.

WHAT IS WARRANTED AND FOR HOW LONG:

The EZflow prefabricated drainfield system is warranted for ONE (1) YEAR from the date of installation to be free from defects in material or workmanship. During the warranty period, EZflow, L.P. shall, at its option, repair or replace any defective system components at no charge for labor or materials. REPAIR OR REPLACEMENT OF THE DEFECTIVE PRODUCT IS THE EXCLUSIVE REMEDY UNDER THIS LIMITED WARRANTY. Any replacement or repair parts are warranted for the remainder of the warranty period or ninety (90) days, whichever is longer. Under this Limited Warranty, EZflow, L.P. will provide only for replacement and installation of defective EZflow drainfield system parts. The homeowner shall be responsible for any other costs, including but not limited to, re-sodding and any permits required for installation.

WHAT IS NOT COVERED BY THIS LIMITED WARRANTY:

1. The septic tank, filters, effluent distribution box(es) or other system components.
2. Improper design or installation, including but not limited to repairs/replacements necessitated due to improper or inaccurate soils analysis, the use of incorrect application rates or inadequate sizing criteria.
3. Landscaping or re-sodding costs.
4. Repair work performed without EZflow, L.P. authorization.
5. Damage caused by unauthorized or improper attachment, alterations or modifications, including but not limited to use of geotextiles or plastic pipe.
6. Damage caused by flood, earthquake or other natural disaster.
7. Damage or failure due to improper maintenance or inadequate maintenance.

8. Failure due to excessive water usage, improper grease disposal or other excessive or improper use.
9. Failure caused by placing structures or plant material over the drainfield or by stresses or vehicular traffic greater than that prescribed in the installation or operation instructions.

NOTICE OF WARRANTY CLAIM:

To obtain warranty service under this Limited Warranty, the homeowner must notify EZflow, L.P. within ninety (90) days after discovery of any defect. Upon notification, EZflow, L.P. will issue an authorization number for investigation, repair, or replacement service. Notify EZflow, L.P., 6 Business Park Road, Old Saybrook, CT 06475 or call Toll Free 1-800-689-7759. EZflow, L.P. will not pay for any costs, repairs, or replacements without prior authorization.

DISCLAIMER OF AND LIMITATION ON WARRANTIES:

OTHER THAN THE EXCLUSIVE WARRANTY SPECIFICALLY SET FORTH HEREIN, NO OTHER EXPRESS OR IMPLIED WARRANTIES HAVE BEEN MADE OR WILL BE MADE BY OR ON BEHALF OF EZFLOW, L.P. EZFLOW, L.P. HEREBY DISCLAIMS AND EXCLUDES ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. THE WARRANTIES AND REMEDIES CONTAINED HEREIN ARE EXCLUSIVE AND DO NOT INCLUDE INCIDENTAL, CONSEQUENTIAL OR SPECIAL DAMAGES, LOSS OF USE, INCONVENIENCE, OR LOSS OR DAMAGE TO PERSONAL PROPERTY, WHETHER DIRECT OR INDIRECT, WHETHER ARISING IN CONTRACT OR IN TORT.

THIS LIMITED WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS. FEDERAL OR STATE LAW MAY GIVE YOU CERTAIN OTHER RIGHTS THAT ARE NOT CONTAINED HEREIN. SEE ADDENDUM

NOTE: When installing EZflow by Infiltrator in sandy conditions, do not over excavate the trench.

**Contact Infiltrator's Technical Services Department
for assistance at 1-800-221-4436 or info@infiltratorwater.com**

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 Water Technologies. Infiltrator is a registered trademark in France. Infiltrator Water Technologies is a registered trademark in Mexico. Contour, MicroLeaching, PolyTuff, ChamberSpacer, MultiPort, PosiLock, QuickCut, QuickPlay, SnapLock and StraightLock are trademarks of Infiltrator Water Technologies. PolyLock is a trademark of PolyLock. TUF-TITE is a registered trademark of TUF-TITE. Ultra-Rib is a trademark of IPEX

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