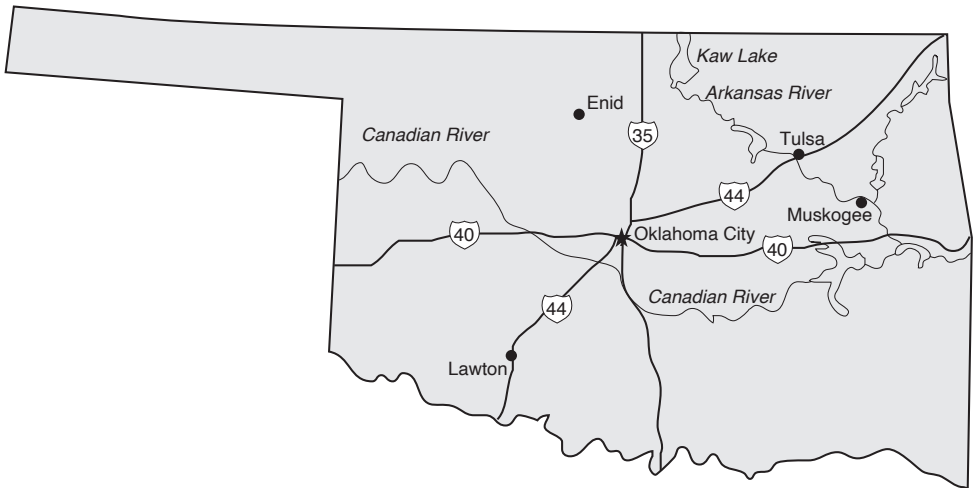
INFILTRATOR
water technologies

Design and Installation Manual for Chambers, EZflow, Septic Tanks, and Risers in Oklahoma



MADE IN THE USA

The purpose of this manual is to provide specific design and installation information pertinent to the use of Infiltrator Water Technologies products in Oklahoma. Each revised version of this manual supersedes the previous version.

Infiltrator products must be installed in accordance with Title 252. Department of Environmental Quality Chapter 641. Individual and Small Public Onsite Sewage Treatment Systems.

For more detailed design information, please contact Infiltrator Water Technologies at (800) 221-4436

Oklahoma

Infiltrator Products in Oklahoma

CHAMBERS	2
EZFLOW	22
INFILTRATOR TANKS	30
EZSNAP RISERS	39
WARRANTIES	44

Oklahoma

Quick4 Equalizer 36 Chambers

The Quick4 Equalizer 36 chamber can be installed in a 24-inch-wide trench and offers advanced contouring capability with its Contour Swivel Connection™. The MultiPort™ Endcap with its six molded-in high and low inlets allow for maximum piping flexibility. The Invert Adapter allows for a change in invert height from 6” to either 9” or 10”, and easily fits into the top inlet/outlets of the endcap.

Quick4 Equalizer 36 Chamber nominal chamber specifications

Size	22”W x 48”L x 12”H
Storage Capacity	32 gal
Invert Elevation	6”

QUICK4 EQUALIZER 36 AND QUICK4 MULTIPORT ENDCAP

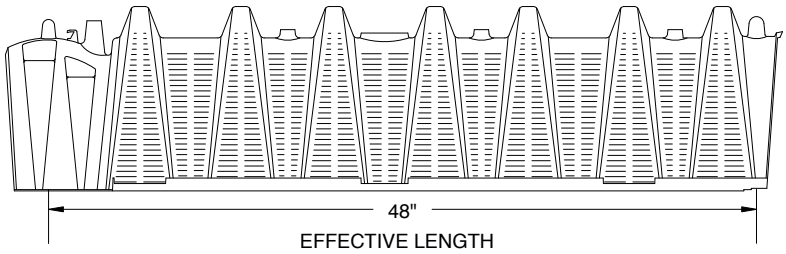


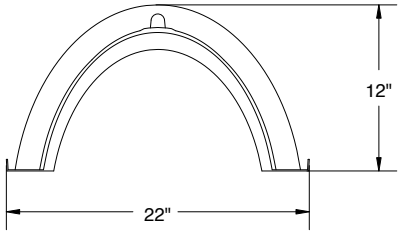
INVERT ADAPTER



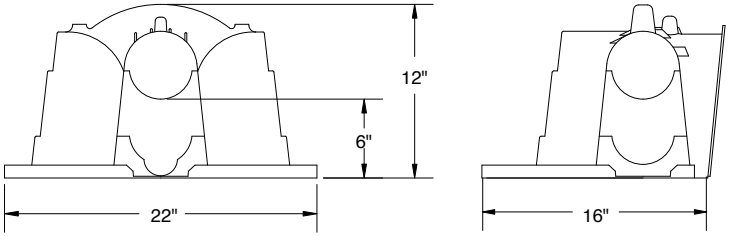
Quick4 Equalizer 36 Chamber (not to scale)

SIDE AND END VIEWS

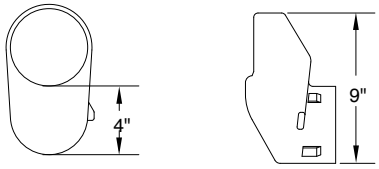




MULTIPORT ENDCAP SIDE AND END VIEWS



INVERT ADAPTER



SYSTEM SIZING – SOIL PROFILE

Chamber System Sizing

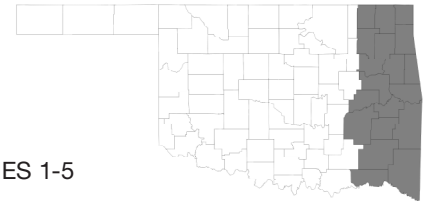


Table 1: QUICK4 EQUALIZER 36 SOIL PROFILE TRENCH SIZING - NET EVAPORATION ZONES 1-5

Soil Group	NUMBER OF BEDROOMS IN RESIDENCE MINIMUM NUMBER OF QUICK4 EQUALIZER 36 CHAMBERS AND TRENCH LENGTH							
	Two or Fewer		Three		Four		Each Additional Bedroom	
	Chambers	Trench Length (lf)	Chambers	Trench Length (lf)	Chambers	Trench Length (lf)	Chambers	Trench Length (lf)
1	Prohibited							
2	30	120	40	160	49	196	10	40
2a	48	192	63	252	78	312	15	60
3	64	256	85	340	104	416	19	76
3a	94	376	125	500	157	628	30	120
4	125	500	165	660	207	828	40	160
5	Prohibited							

NOTES

1. Table 1 shows the minimum sizing based on Infiltrator Water Technologies requirements when designed in Net Evaporation Zones 1-5 using a soil profile description. There is no warranty implied, or granted on any system installation, which does not comply with these minimum sizing requirements.
2. Any properly certified installer can install the Quick4 Equalizer 36 Chamber and self-inspect their own septic system.
3. It is at the contractor's 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.
4. If the system is installed in a gopher-prone area, the installation of wire mesh (chicken wire) on the bottom of each trench before installing any Infiltrator chambers is recommended.

COUNTIES LOCATED IN NET EVAPORATION ZONES 1-5 INCLUDE

ADAIR
CHEROKEE
CHOCTAW
CRAIG
DELAWARE
HASKELL
LATIMER
LEFLORE
McCURTAIN
MCINTOSH
MAYES
MUSKOGEE
NOWATA
OTTAWA
PITTSBURG
PUSHMATAHA
ROGERS
SEQUOYAH
WAGONER

SYSTEM SIZING – SOIL PROFILE

Chamber System Sizing

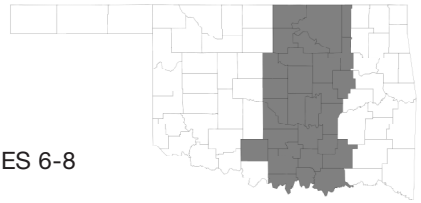


Table 2: QUICK4 EQUALIZER 36 SOIL PROFILE TRENCH SIZING - NET EVAPORATION ZONES 6-8

Soil Group	NUMBER OF BEDROOMS IN RESIDENCE MINIMUM NUMBER OF QUICK4 EQUALIZER 36 CHAMBERS AND TRENCH LENGTH							
	Two or Fewer		Three		Four		Each Additional Bedroom	
	Chambers	Trench Length (lf)	Chambers	Trench Length (lf)	Chambers	Trench Length (lf)	Chambers	Trench Length (lf)
1	Prohibited							
2	30	120	40	160	49	196	10	40
2a	48	192	63	252	78	312	15	60
3	64	256	85	340	104	416	19	76
3a	94	376	125	500	157	628	30	120
4	125	500	165	660	207	828	40	160
5	Prohibited							

NOTES

1. Table 2 shows the minimum sizing based on Infiltrator Water Technologies requirements when designed in Net Evaporation Zones 6-8 using a soil profile description. There is no warranty implied, or granted on any system installation that does not comply with these minimum sizing requirements.
2. Any properly certified installer can install the Quick4 Equalizer 36 Chamber and self-inspect their own septic system.
3. It is at the contractor's 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.
4. If the system is installed in a gopher-prone area, the installation of wire mesh (chicken wire) on the bottom of each trench before installing any Infiltrator chambers is recommended.

COUNTIES LOCATED IN NET EVAPORATION ZONES 6-8 INCLUDE

ATOKA
BRYAN
CARTER
CLEVELAND
COAL
CREEK
GARVIN
HUGHES
JOHNSTON
KAY
LINCOLN
LOGAN
LOVE
MCCLAIN
MARSHALL
MURRAY
NOBLE
OKFUSKEE
OKLAHOMA
OKMULGEE
OSAGE
PAWNEE
PAYNE
PONTOTOC
POTTAWATOMIE
SEMINOLE
STEPHENS
TULSA
WASHINGTON

SYSTEM SIZING – SOIL PROFILE

Chamber System Sizing

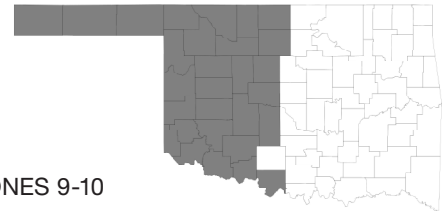


Table 3: QUICK4 EQUALIZER 36 SOIL PROFILE TRENCH SIZING - NET EVAPORATION ZONES 9-10

Soil Group	NUMBER OF BEDROOMS IN RESIDENCE MINIMUM NUMBER OF QUICK4 EQUALIZER 36 CHAMBERS AND TRENCH LENGTH							
	Two or Fewer		Three		Four		Each Additional Bedroom	
	Chambers	Trench Length (lf)	Chambers	Trench Length (lf)	Chambers	Trench Length (lf)	Chambers	Trench Length (lf)
1	Prohibited							
2	29	116	38	152	47	188	10	40
2a	44	176	58	232	73	292	15	60
3	60	240	79	316	97	388	19	76
3a	88	352	117	468	145	580	30	120
4	115	460	155	620	193	772	40	160
5	Prohibited							

NOTES

1. Table 3 shows the minimum sizing based on Infiltrator Water Technologies requirements when designed in Net Evaporation Zones 9-10 using a soil profile description. There is no warranty implied, or granted on any system installation that does not comply with these minimum sizing requirements.
2. Any properly certified installer can install the Quick4 Equalizer 36 Chamber and self-inspect their own septic system.
3. It is at the contractor's 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.
4. If the system is installed in a gopher-prone area, the installation of wire mesh (chicken wire) on the bottom of each trench before installing any Infiltrator chambers is recommended.

COUNTIES LOCATED IN NET EVAPORATION ZONES 9-10 INCLUDE

ALFALFA
BEAVER
BECKHAM
BLAINE
CADDO
CANADIAN
CIMARRON
COMANCHE
COTTON
CUSTER
DEWEY
ELLIS
GARFIELD
GRADY
GRANT
GREER
HARMON
HARPER
JACKSON
JEFFERSON
KINGFISHER
KIOWA
MAJOR
ROGER MILLS
TEXAS
TILLMAN
WASHITA
WOODS
WOODWARD

SYSTEM SIZING – SOIL PERCOLATION TEST

Chamber System Sizing

Table 4: QUICK4 EQUALIZER 36 SOIL PERCOLATION TEST TRENCH SIZING

Soil Percolation Rate (min/inch)	NUMBER OF BEDROOMS IN RESIDENCE MINIMUM NUMBER OF QUICK4 EQUALIZER 36 CHAMBERS AND TRENCH LENGTH							
	Two or Fewer		Three		Four		Each Additional Bedroom	
	Chambers	Trench Length (lf)	Chambers	Trench Length (lf)	Chambers	Trench Length (lf)	Chambers	Trench Length (lf)
0-15	40	160	54	216	68	272	14	56
16-30	63	252	83	332	103	412	20	80
31-45	85	340	113	452	140	560	28	112
46-60	118	472	158	632	198	792	40	160
61-75	155	620	208	832	260	1,040	53	212
>75	Prohibited							

NOTES

1. Table 4 shows the minimum sizing based on Infiltrator Water Technologies requirements using a soil percolation test. There is no warranty implied, or granted on any system installation that does not comply with these minimum sizing requirements.
2. Any properly certified installer can install the Quick4 Equalizer 36 Chamber and self-inspect their own septic system.
3. It is at the contractor's 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.
4. If the system is installed in a gopher-prone area, the installation of wire mesh (chicken wire) on the bottom of each trench before installing any Infiltrator chambers is recommended.

QUICK4 CHAMBERS

Quick4 Plus Equalizer 36 LP Chambers

The Quick4 Plus Equalizer 36 Low Profile (LP) chamber can be installed in a 24-inch-wide trench. This chamber is 4 inches shorter than the Quick4 Equalizer 36 model, allowing for shallower installation where a shallow groundwater table, impervious conditions, or other restrictions limit vertical separation distance. The Quick4 Plus All-in-One 8 and the Quick4 Plus Endcaps are available with this chamber, providing increased flexibility in system configurations. The Invert Adapter allows for a change in invert height from 3.3” to either 6.6” or 7.3”, and easily fits into the inlet/outlets of the end caps.

Quick4 Plus Equalizer 36 LP Chamber nominal chamber specifications

Size	22”W x 48”L x 8”H
Storage Capacity	20 gal
Invert Elevation	3.3”

QUICK4 PLUS EQUALIZER 36 LP AND QUICK4 PLUS ENDCAP



QUICK4 PLUS ALL-IN-ONE 8 ENDCAP

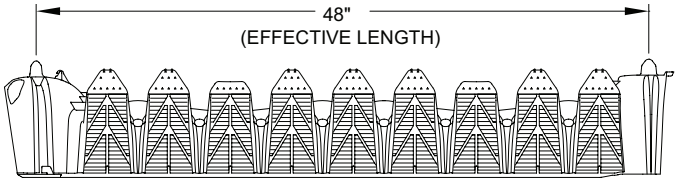


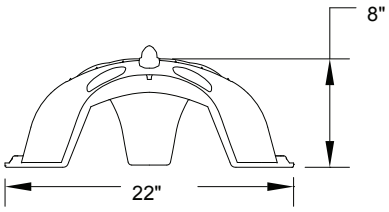
INVERT ADAPTER



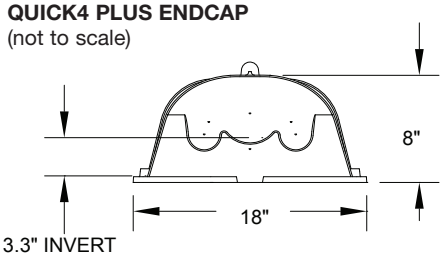
Quick4 Plus Equalizer 36 LP Chamber (not to scale)

SIDE AND END VIEWS

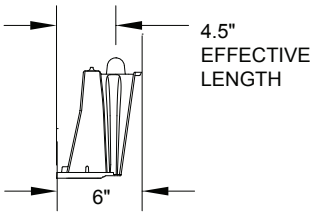




QUICK4 PLUS ENDCAP
(not to scale)

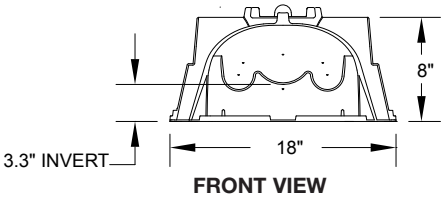


FRONT VIEW

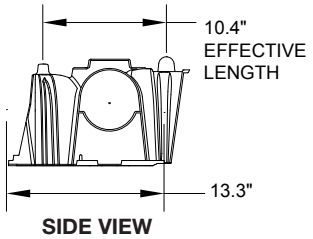


SIDE VIEW

ALL-IN-ONE 8 ENDCAP SIDE AND END VIEWS

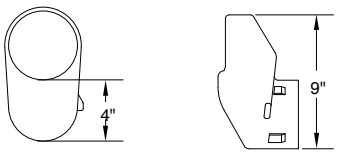


FRONT VIEW



SIDE VIEW

INVERT ADAPTER



SYSTEM SIZING – SHALLOW EXTENDED SUBSURFACE ABSORPTION

Chamber System Sizing

Table 5: QUICK4 PLUS EQUALIZER 36 LP SOIL PROFILE SHALLOW EXTENDED SUBSURFACE ABSORPTION FIELDS

Soil Group	NUMBER OF BEDROOMS IN RESIDENCE MINIMUM NUMBER OF QUICK4 PLUS EQUALIZER 36 LP CHAMBERS AND TRENCH LENGTH							
	Two or Fewer		Three		Four		Each Additional Bedroom	
	Chambers	Trench Length (lf)	Chambers	Trench Length (lf)	Chambers	Trench Length (lf)	Chambers	Trench Length (lf)
1	Prohibited							
2	65	260	85	340	105	420	20	80
2a	100	400	133	532	165	660	33	132
3	135	540	180	720	225	900	45	180
3a	200	800	265	1060	330	1320	65	260
4	265	1,060	353	1,412	440	1,760	88	352
5	Prohibited							

NOTES

1. Table 5 shows the minimum sizing based on Infiltrator Water Technologies requirements for an individual shallow extended subsurface absorption field when designed using a soil profile description. There is no warranty implied, or granted on any system installation that does not comply with these minimum sizing requirements.
2. Any properly certified installer can install the Quick4 Plus Equalizer 36 LP Chamber and self-inspect their own septic system.
3. It is at the contractor's 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.
4. If the system is installed in a gopher-prone area, the installation of wire mesh (chicken wire) on the bottom of each trench before installing any Infiltrator chambers is recommended.

Quick5 Equalizer 36 Chambers

The Quick5 Equalizer 36 chamber can be installed in a 24-inch-wide trench and offers advanced contouring capability with its Contour Swivel Connection™. The MultiPort™ Endcap with its six molded-in high and low inlets allow for maximum piping flexibility. The Invert Adapter allows for a change in invert height from 6" to either 9" or 10", and easily fits into the top inlet/outlets of the endcap.

Quick5 Equalizer 36 Chamber nominal chamber specifications

Size	22"W x 60"L x 12"H
Storage Capacity	42 gal
Invert Elevation	6"

QUICK5 EQUALIZER 36 AND QUICK5 MULTIPORT ENDCAP

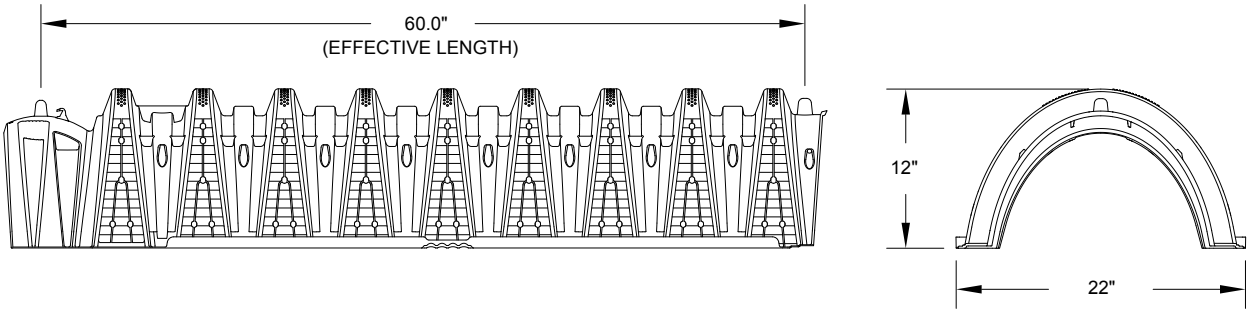


INVERT ADAPTER

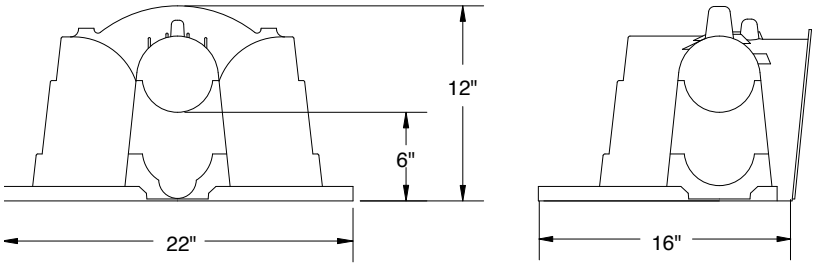


Quick5 Equalizer 36 Chamber (not to scale)

QUICK5 EQUALIZER 36 CHAMBER SIDE AND END VIEWS
(Not to scale)

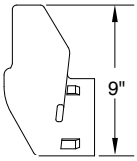


MULTIPORT ENDCAP SIDE AND END VIEWS
(Not to scale)



Effective Length When Connected

INVERT ADAPTER(Not to scale)



SYSTEM SIZING – SOIL PROFILE

Chamber System Sizing

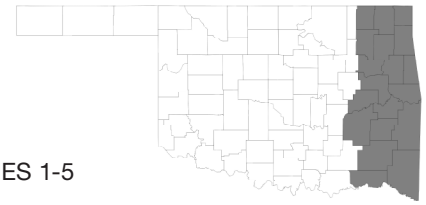


Table 7: QUICK5 EQUALIZER 36 SOIL PROFILE TRENCH SIZING - NET EVAPORATION ZONES 1-5

Soil Group	NUMBER OF BEDROOMS IN RESIDENCE MINIMUM NUMBER OF QUICK5 EQUALIZER 36 CHAMBERS AND TRENCH LENGTH							
	Two or Fewer		Three		Four		Each Additional Bedroom	
	Chambers	Trench Length (lf)	Chambers	Trench Length (lf)	Chambers	Trench Length (lf)	Chambers	Trench Length (lf)
1	Prohibited							
2	24	120	32	160	39	195	8	40
2a	38	190	50	250	62	310	12	60
3	51	255	68	340	83	415	15	75
3a	75	375	100	500	125	625	24	120
4	100	500	132	660	165	825	32	160
5	Prohibited							

NOTES

1. Table 7 shows the minimum sizing based on Infiltrator Water Technologies requirements when designed in Net Evaporation Zones 1-5 using a soil profile description. There is no warranty implied, or granted on any system installation, which does not comply with these minimum sizing requirements.
2. Any properly certified installer can install the Quick5 Equalizer 36 Chamber and self-inspect their own septic system.
3. It is at the contractor's 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.
4. If the system is installed in a gopher-prone area, the installation of wire mesh (chicken wire) on the bottom of each trench before installing any Infiltrator chambers is recommended.

COUNTIES LOCATED IN NET EVAPORATION ZONES 1-5 INCLUDE

ADAIR
CHEROKEE
CHOCTAW
CRAIG
DELAWARE
HASKELL
LATIMER
LEFLORE
McCURTAIN
MCINTOSH
MAYES
MUSKOGEE
NOWATA
OTTAWA
PITTSBURG
PUSHMATAHA
ROGERS
SEQUOYAH
WAGONER

SYSTEM SIZING – SOIL PROFILE

Chamber System Sizing

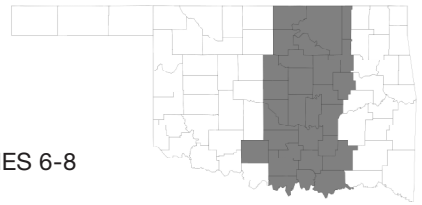


Table 8: QUICK5 EQUALIZER 36 SOIL PROFILE TRENCH SIZING - NET EVAPORATION ZONES 6-8

Soil Group	NUMBER OF BEDROOMS IN RESIDENCE MINIMUM NUMBER OF QUICK5 EQUALIZER 36 CHAMBERS AND TRENCH LENGTH							
	Two or Fewer		Three		Four		Each Additional Bedroom	
	Chambers	Trench Length (lf)	Chambers	Trench Length (lf)	Chambers	Trench Length (lf)	Chambers	Trench Length (lf)
1	Prohibited							
2	24	120	32	160	39	195	8	40
2a	38	190	50	250	62	310	12	60
3	51	255	68	340	83	415	15	75
3a	75	375	100	500	125	625	24	120
4	100	500	132	660	165	825	32	160
5	Prohibited							

NOTES

1. Table 8 shows the minimum sizing based on Infiltrator Water Technologies requirements when designed in Net Evaporation Zones 6-8 using a soil profile description. There is no warranty implied, or granted on any system installation that does not comply with these minimum sizing requirements.
2. Any properly certified installer can install the Quick5 Equalizer 36 Chamber and self-inspect their own septic system.
3. It is at the contractor's 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.
4. If the system is installed in a gopher-prone area, the installation of wire mesh (chicken wire) on the bottom of each trench before installing any Infiltrator chambers is recommended.

COUNTIES LOCATED IN NET EVAPORATION ZONES 6-8 INCLUDE

ATOKA
BRYAN
CARTER
CLEVELAND
COAL
CREEK
GARVIN
HUGHES
JOHNSTON
KAY
LINCOLN
LOGAN
LOVE
MCCLAIN
MARSHALL
MURRAY
NOBLE
OKFUSKEE
OKLAHOMA
OKMULGEE
OSAGE
PAWNEE
PAYNE
PONTOTOC
POTTAWATOMIE
SEMINOLE
STEPHENS
TULSA
WASHINGTON

SYSTEM SIZING – SOIL PROFILE

Chamber System Sizing

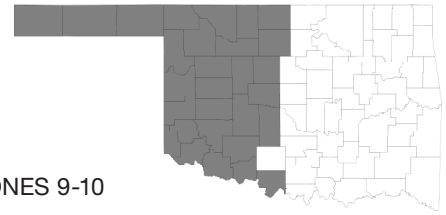


Table 9: QUICK5 EQUALIZER 36 SOIL PROFILE TRENCH SIZING - NET EVAPORATION ZONES 9-10

Soil Group	NUMBER OF BEDROOMS IN RESIDENCE MINIMUM NUMBER OF QUICK5 EQUALIZER 36 CHAMBERS AND TRENCH LENGTH							
	Two or Fewer		Three		Four		Each Additional Bedroom	
	Chambers	Trench Length (lf)	Chambers	Trench Length (lf)	Chambers	Trench Length (lf)	Chambers	Trench Length (lf)
1	Prohibited							
2	23	115	30	150	39	185	8	40
2a	35	175	46	230	58	290	12	60
3	48	240	63	315	77	385	15	75
3a	70	350	93	465	116	580	24	120
4	92	460	124	620	154	770	32	160
5	Prohibited							

NOTES

1. Table 9 shows the minimum sizing based on Infiltrator Water Technologies requirements when designed in Net Evaporation Zones 9-10 using a soil profile description. There is no warranty implied, or granted on any system installation that does not comply with these minimum sizing requirements.
2. Any properly certified installer can install the Quick5 Equalizer 36 Chamber and self-inspect their own septic system.
3. It is at the contractor's 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.
4. If the system is installed in a gopher-prone area, the installation of wire mesh (chicken wire) on the bottom of each trench before installing any Infiltrator chambers is recommended.

COUNTIES LOCATED IN NET EVAPORATION ZONES 9-10 INCLUDE

ALFALFA
BEAVER
BECKHAM
BLAINE
CADDO
CANADIAN
CIMARRON
COMANCHE
COTTON
CUSTER
DEWEY
ELLIS
GARFIELD
GRADY
GRANT
GREER
HARMON
HARPER
JACKSON
JEFFERSON
KINGFISHER
KIOWA
MAJOR
ROGER MILLS
TEXAS
TILLMAN
WASHITA
WOODS
WOODWARD

SYSTEM SIZING – SOIL PERCOLATION TEST

Chamber System Sizing

Table 10: QUICK5 EQUALIZER 36 SOIL PERCOLATION TEST TRENCH SIZING

Soil Percolation Rate (min/inch)	NUMBER OF BEDROOMS IN RESIDENCE MINIMUM NUMBER OF QUICK5 EQUALIZER 36 CHAMBERS AND TRENCH LENGTH							
	Two or Fewer		Three		Four		Each Additional Bedroom	
	Chambers	Trench Length (lf)	Chambers	Trench Length (lf)	Chambers	Trench Length (lf)	Chambers	Trench Length (lf)
0-15	32	160	43	215	54	270	11	55
16-30	50	250	66	330	82	410	16	80
31-45	68	340	90	450	112	560	22	110
46-60	94	470	126	630	158	790	32	160
61-75	124	620	166	830	208	1,040	42	210
>75	Prohibited							

NOTES

1. Table 10 shows the minimum sizing based on Infiltrator Water Technologies requirements using a soil percolation test. There is no warranty implied, or granted on any system installation that does not comply with these minimum sizing requirements.
2. Any properly certified installer can install the Quick5 Equalizer 36 Chamber and self-inspect their own septic system.
3. It is at the contractor's 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.
4. If the system is installed in a gopher-prone area, the installation of wire mesh (chicken wire) on the bottom of each trench before installing any Infiltrator chambers is recommended.

SYSTEM SIZING – PRESSURE DOSING FIELDS

Chamber System Sizing

Table 11: QUICK5 EQUALIZER 36 SOIL PROFILE INDIVIDUAL AND SMALL PUBLIC LOW PRESSURE DOSING FIELDS

Soil Group	NUMBER OF BEDROOMS IN RESIDENCE MINIMUM NUMBER OF QUICK5 EQUALIZER 36 CHAMBERS AND TRENCH LENGTH							
	"Two Bedrooms 200 gpd"		"Three Bedrooms Average 275 gpd"		"Four Bedrooms Average 350 gpd"		"Five Bedrooms Average 400 gpd"	
	Chambers	Trench Length (lf)	Chambers	Trench Length (lf)	Chambers	Trench Length (lf)	Chambers	Trench Length (lf)
1	Prohibited							
2	24	120	32	160	40	200	48	240
2a	32	160	40	200	48	240	56	280
2a, 3, 3a, & 5	Prohibited							

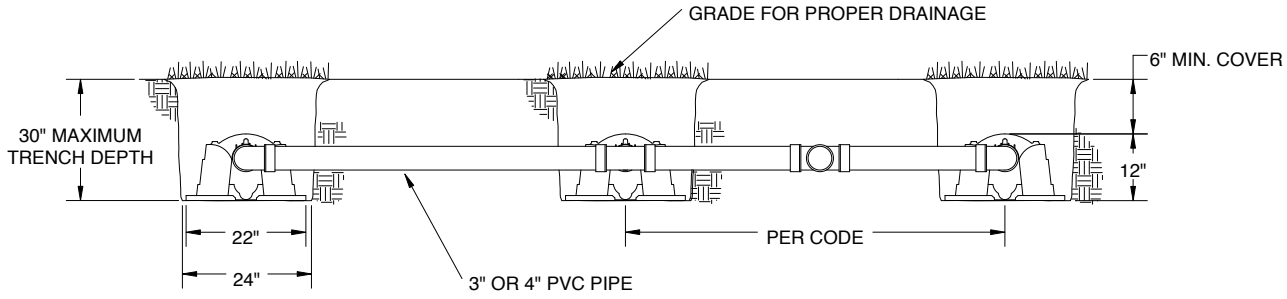
NOTES

1. Table 11 shows the minimum sizing based on Infiltrator Water Technologies requirements for individual and small public low pressure dosing fields. There is no warranty implied, or granted on any system installation that does not comply with these minimum sizing requirements.
2. The number of bedrooms corresponds to the design of an individual low pressure dosing field designed using a soil profile description. Low pressure dosing fields may be allowed in soil groups 2a, 3, 3a and 4 when designed and approved as an alternative onsite sewage treatment system.
3. The average daily flow corresponds to the design of a small public low pressure dosing field designed using a soil profile description. Low pressure dosing fields may be allowed in soil groups 2a, 3, 3a and 4 when designed and approved as an alternative on-site sewage treatment system. Low pressure dosing fields may be allowed for average daily flows over 400 gpd when designed and approved as an alternative on-site sewage treatment system.
4. Any properly certified installer can install the Quick5 Equalizer 36 Chamber and self-inspect their own septic system.
5. It is at the contractor's 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.
6. If the system is installed in a gopher-prone area, the installation of wire mesh (chicken wire) on the bottom of each trench before installing any Infiltrator chambers is recommended.

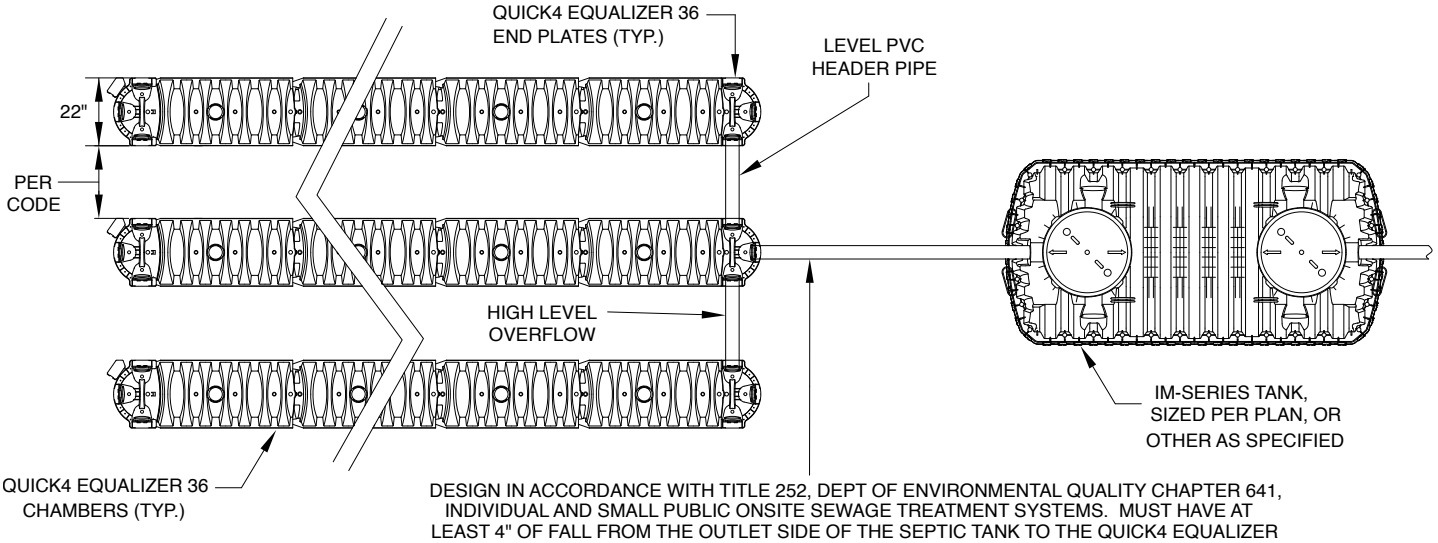
CHAMBER CONFIGURATIONS

Quick5 Equalizer 36 Chamber Level Trench Systems

TYPICAL CROSS SECTION (not to scale)

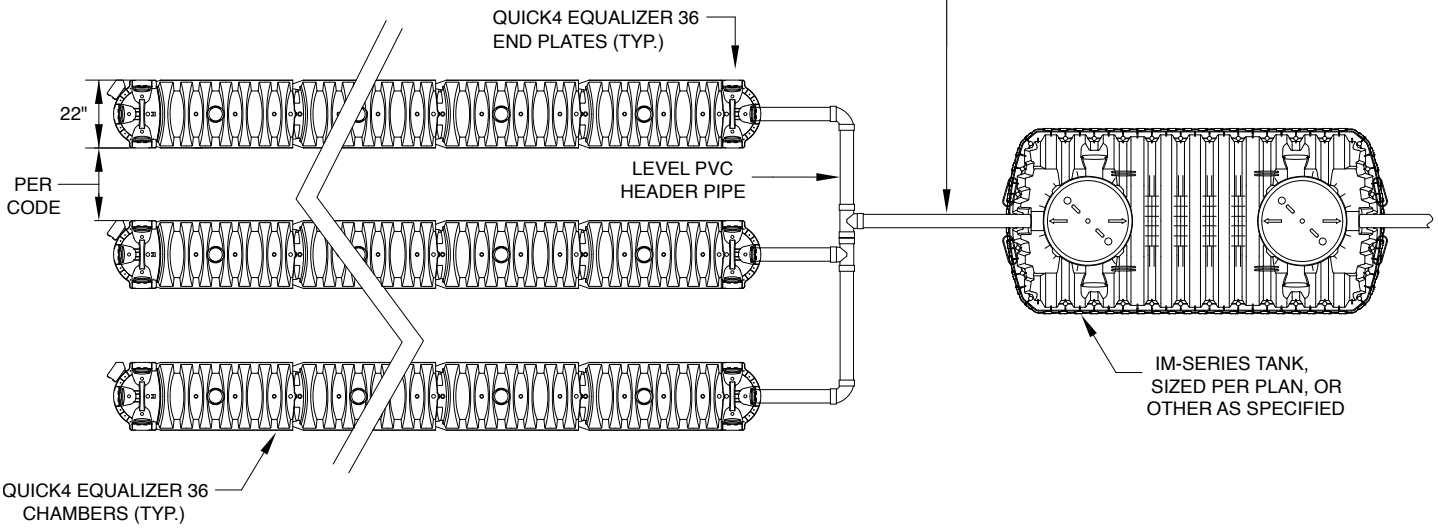


TYPICAL PLAN VIEW (not to scale)



DESIGN IN ACCORDANCE WITH TITLE 252, DEPT OF ENVIRONMENTAL QUALITY CHAPTER 641, INDIVIDUAL AND SMALL PUBLIC ONSITE SEWAGE TREATMENT SYSTEMS. MUST HAVE AT LEAST 4" OF FALL FROM THE OUTLET SIDE OF THE SEPTIC TANK TO THE QUICK4 EQUALIZER 36 CHAMBERS TO MEET CODE.

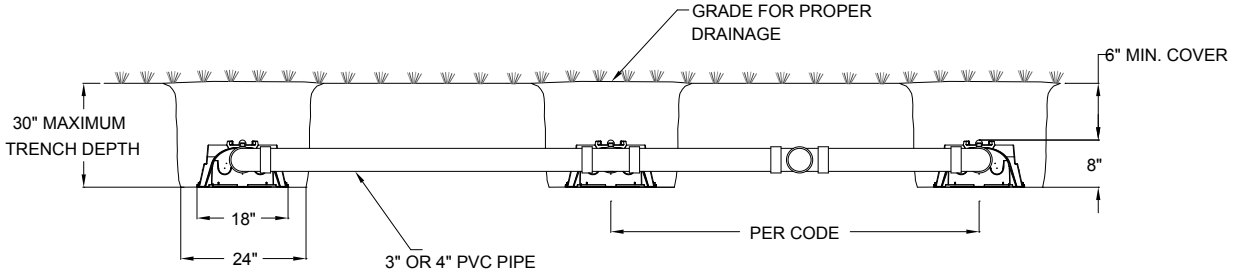
TYPICAL PLAN VIEW (not to scale)



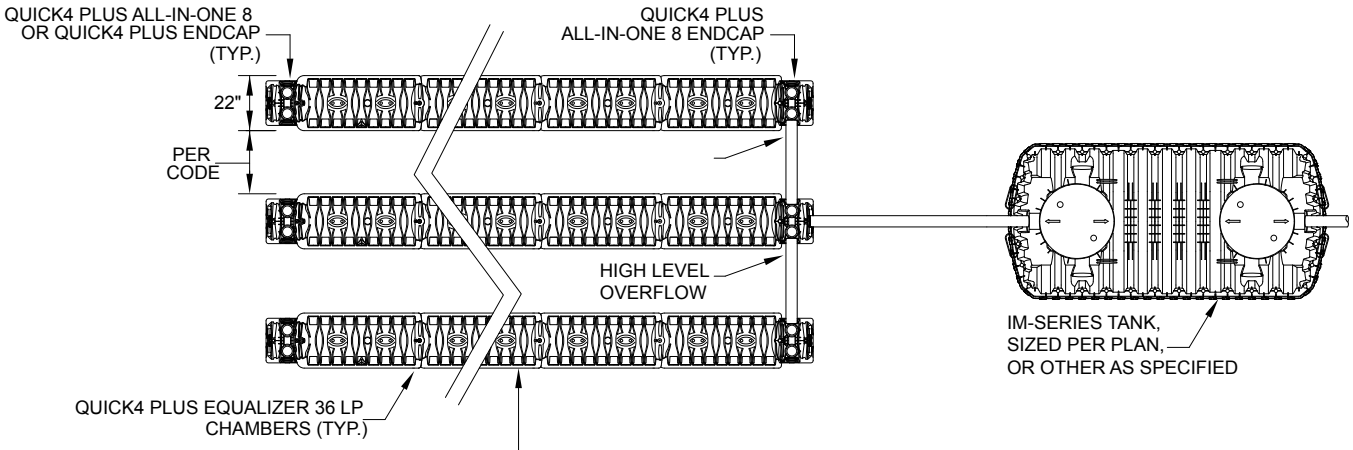
CHAMBER CONFIGURATIONS

Quick4 Plus Equalizer 36 Low Profile Chamber Level Trench System

TYPICAL CROSS SECTION (not to scale)

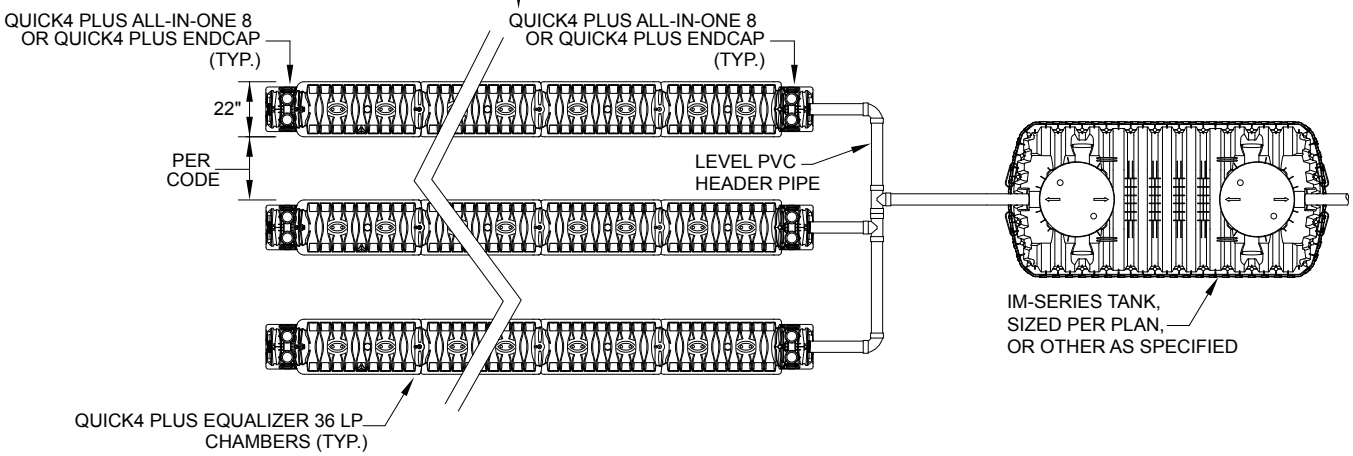


TYPICAL PLAN VIEW (not to scale)



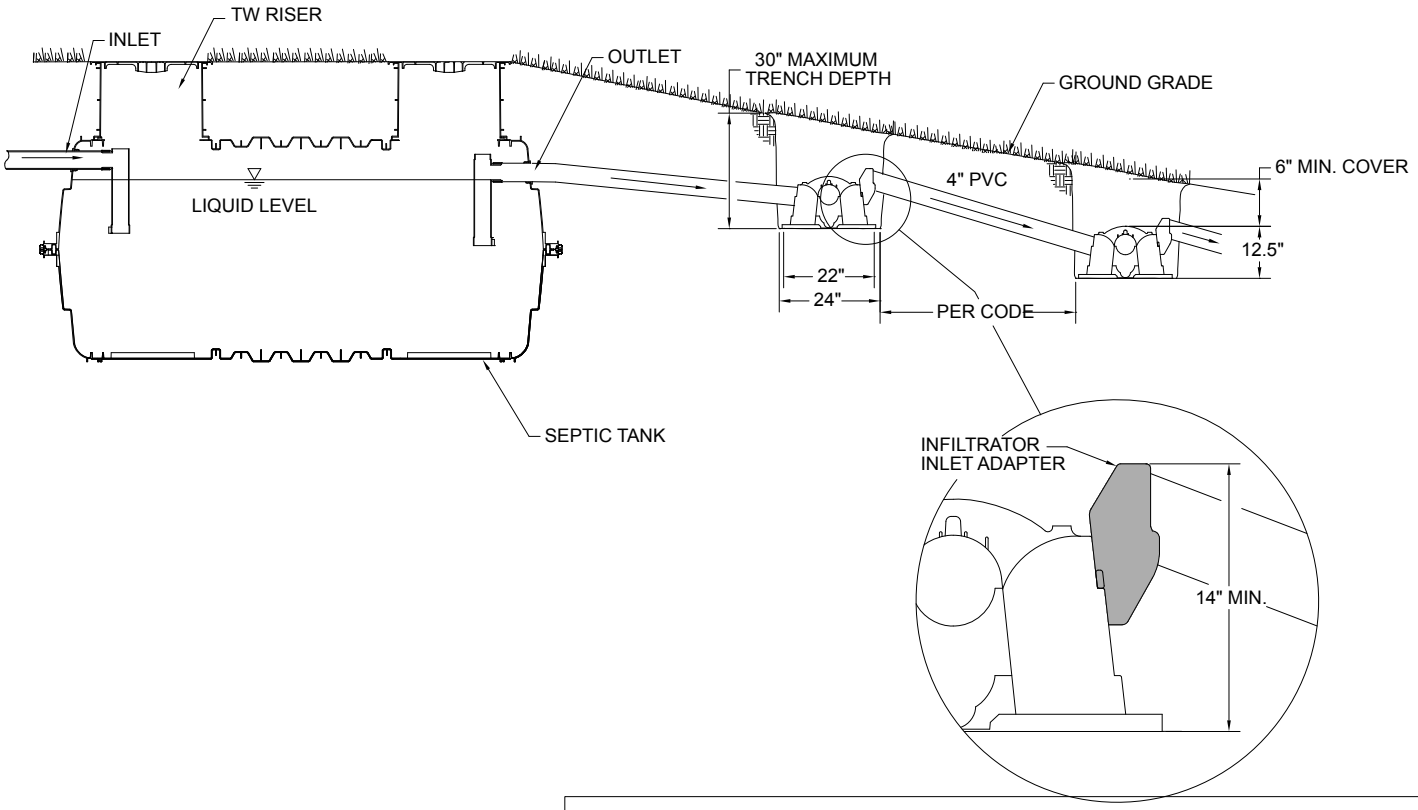
DESIGN IN ACCORDANCE WITH TITLE 252, DEPT OF ENVIRONMENTAL QUALITY CHAPTER 641, INDIVIDUAL AND SMALL PUBLIC ONSITE SEWAGE TREATMENT SYSTEMS. MUST HAVE AT LEAST 4" OF FALL FROM THE OUTLET SIDE OF THE SEPTIC TANK TO THE QUICK4 PLUS EQUALIZER 36 LP CHAMBERS TO MEET CODE.

TYPICAL PLAN VIEW (not to scale)



CHAMBER CONFIGURATIONS

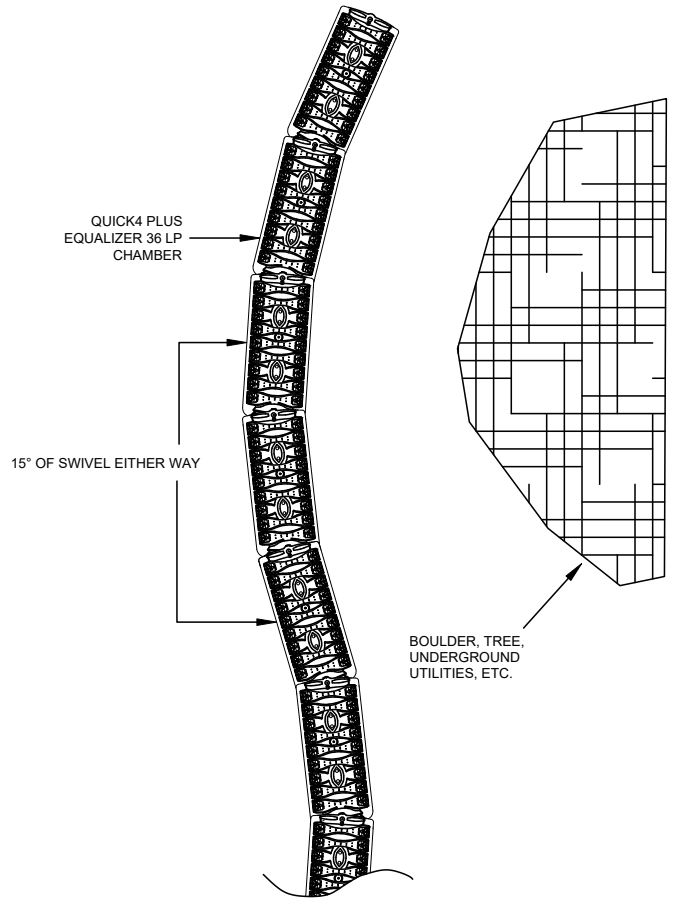
TYPICAL RETENTION SYSTEM ON SLOPING TERRAIN (not to scale)



Turn Design Configuration

Contour Swivel Connection™

The Quick4 Plus Equalizer 36 LP Contour Swivel Connection allows systems to be constructed on sloped sites and avoid obstructions without additional parts or accessories. The chamber easily follows contours or an “S” curve and avoids obstacles without additional parts or accessories. The Quick4 Plus Equalizer 36 LP chamber swivels 10 degrees right or left.



Quick5 Equalizer 36 Chamber Systems

Before You Begin

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

- ☐ Quick5 Equalizer 36 Chambers
- ☐ Screwdriver or Knife
- ☐ Hole Saw
- ☐ PVC pipe and couplings
- ☐ Backhoe
- ☐ Laser, transit or level
- ☐ Invert adapter*
- ☐ Multiport Endcaps
- ☐ Tape Measure
- ☐ Shovel and rake
- ☐ 1 1/2-inch Drywall Screws*
- ☐ Screw gun*
- ☐ Small valve-cover box*
- ☐ 4-inch cap for Inspection port

*Optional

These guidelines for construction machinery must be followed during installation.

- ☐ Avoid direct contact with chambers when using construction equipment. Chambers require a 12-inch minimum of compacted cover to support a wheel load rating of 16,000 lbs/axle or equivalent to an H-10 AASHTO load rating.
- ☐ Only drive across the 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 2-foot 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 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 SDR35, and 4-inch SCH40 pipe.

NOTE: Do not dispose of tear-out in the trench.

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 4 inches. (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 endcap.

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



4. Install splash plate.



5. Insert inlet pipe.

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 warranty.

5. 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.

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.



3.

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 entire sidewall area, making sure the fill covers the louvers.



4. Connect the chambers.

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.

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.

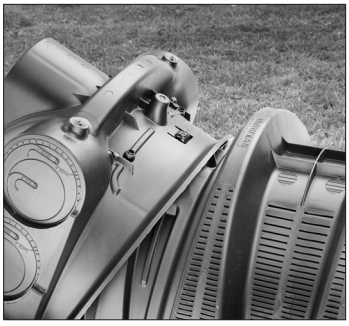
NOTE: Do not dispose of the drilled out piece of plastic in the trench.

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.



7. Attach endcap to chamber.



9. Walking-in the fill.

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: 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.

Quick4 Plus Equalizer 36 LP Chamber System

Before You Begin

The Quick4 Plus Equalizer 36 LP chambers are designed for shallow placement applications. Quick4 Plus Equalizer 36 LP 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 Equalizer 36 LP Chambers
- ☐ Quick4 Plus All-In-One 8 or Quick4 Plus Endcaps
- ☐ Screwdriver or Knife
- ☐ Hole Saw
- ☐ PVC pipe and couplings
- ☐ 1 1/2-inch Drywall Screws*
- ☐ Backhoe
- ☐ Screw gun*
- ☐ Laser, transit or level
- ☐ Small valve-cover box*
- ☐ Shovel and rake
- ☐ 4-inch cap for Inspection port
- ☐ Tape Measure
- ☐ Invert adapter*

*Optional

These guidelines for construction machinery must be followed during installation.

- ☐ Avoid direct contact with chambers when using construction equipment. Chambers require a 12-inch minimum of compacted cover to support a wheel load rating of 16,000 lbs/axle or equivalent to an H-10 AASHTO load rating.
- ☐ Only drive across the 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 systems in wet conditions or in overly moist soils, as this causes machinery to smear the soil.

1. Stake out location of all trenches and lines. Set elevations of tank, pipe, and trench bottom.

2. Install sedimentation and erosion control measures. Temporary drainage swales/berms may be installed to protect site during rainfall.

3. Excavate and level 2-foot-wide trenches with proper center-to-center separation. Verify that trenches are level or have the prescribed slope.

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

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

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

Preparing the End Cap

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

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

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



1. Drill endcap.

OPTIONAL: Fasten the end cap 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 end cap. Insert fully to the internal pipe stop.



5. Insert inlet pipe.

6. Lift and place the end of the next chamber onto the previous chamber by holding it at a 45-degree angle. Line up the chamber end between the connector hook and locking pin at the top of the first chamber. Lower the chamber to the ground to connect the chambers.

NOTE: The connector hook serves as a guide to ensure proper connection and does not add structural integrity to the chamber joint. Broken hooks will not affect the structure or void the warranty.



7. Swivel chambers.

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 end cap. Lift the end cap at a 45-degree angle and align



9. Place end cap outlet end.

the connector hook on the top of the chamber with the raised slot on the top of the end cap. Lower the end cap to the ground and into place.

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

10. To ensure structural stability, fill the sidewall area by pulling soil from the sides of the trench with a shovel. Start at the joints where the chambers connect. Continue backfilling the entire sidewall area, making sure the fill covers the louvers.

11. Pack down fill by walking along the edges of trench and chambers.

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

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

Installing Quick4 Plus All-in-One 8 Endcap as a Mid-line Connection

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 8 Endcap.



1. Drill endcap on side or top.

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

2. With a hole saw, drill an opening on the end of the Quick4 Plus All-in-One 8 Endcap to create an invert at 0.5 inches. This will allow effluent to fill both sides of the chamber line. Snap off the molded splash plate located on the bottom front of the end cap.



2. Drill endcap on end.

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

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

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

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

6. Repeat Steps 1 through 5 for additional trenches.

Installing Optional Inspection Ports

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

Quick4 Plus All-in-One 8 Inspection Port

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

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



2. Pipe in endcap inspection port.

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

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

4. Attach a threaded cap or cleanout assembly onto the protuding pipe at the appropriate height.

5. A small valve cover box may be used if the inspection port is below the desired grade.

Chamber Inspection Port

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

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 protuding 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.

This product has been approved for use as a substitute for conventional pipe and gravel in absorption trenches. The approval of the 1202H-GEO indicates that the product meets the Rules and Regulations Pertaining to Sewage Disposal Systems,

The absorption field product should be installed in 24 inch-wide-trenches with shallow trench bottom depths of 18 inches recommended. 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 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.

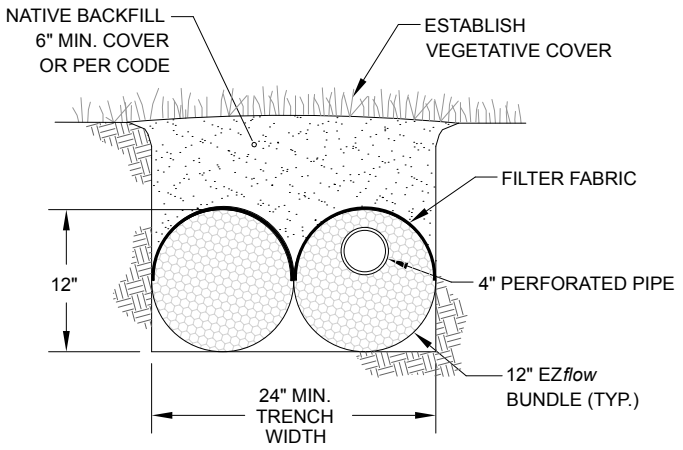
2. The plastic stretch wrap is removed before the ten foot long bundles are placed in the trench(es).

3. 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.

4. 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.

5. Repeat steps 1 through 4 for each required trench.

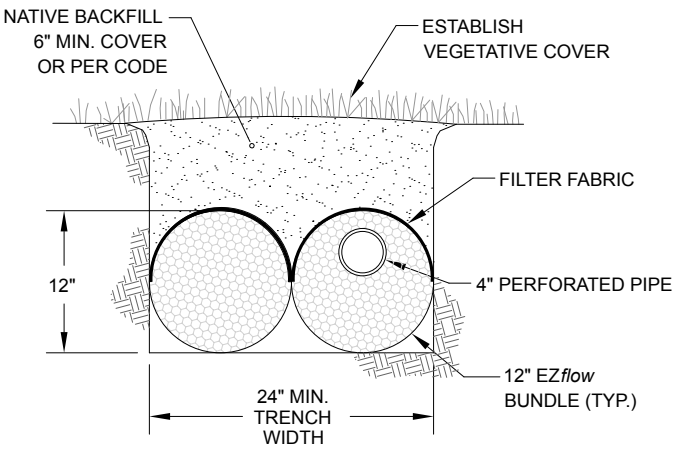
Products 1202H-GEO
Two-foot Wide Trench



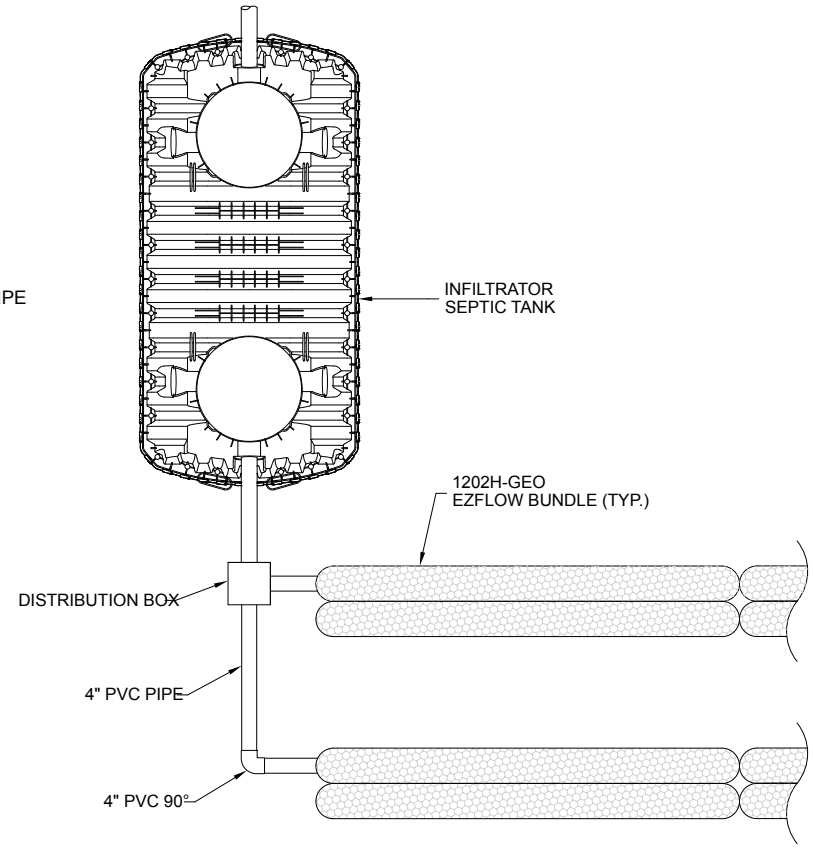
EZFLOW BY INFILTRATOR TRENCH CONFIGURATIONS

EZ 1202H-GEO Trench Configurations

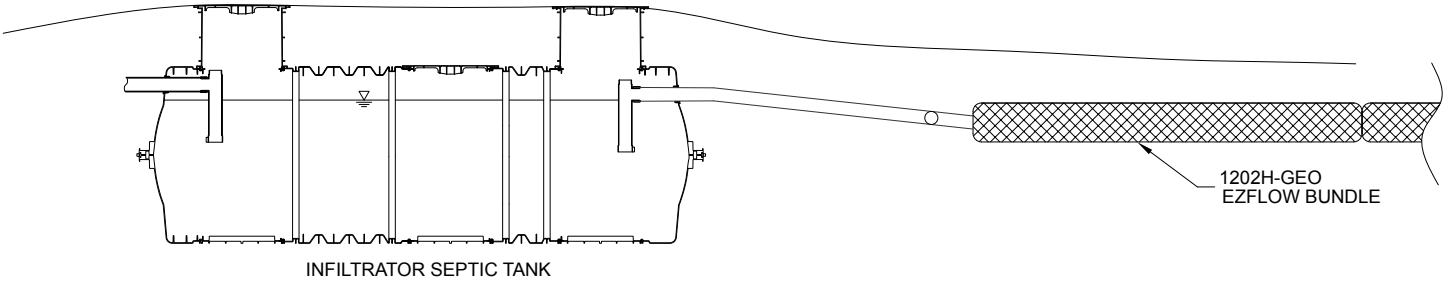
TYPICAL CROSS SECTION
(not to scale)



TYPICAL PLAN VIEW
(not to scale)



TYPICAL SIDE VIEW
(not to scale)



SYSTEM SIZING – SOIL PROFILE

EZflow System Sizing

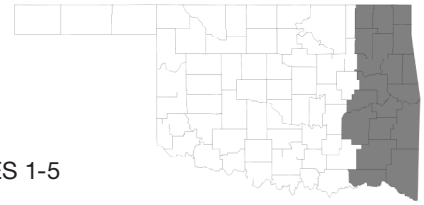


Table 12: EZFLOW 1202H-GEO SOIL PROFILE TRENCH SIZING - NET EVAPORATION ZONES 1-5

Soil Group	NUMBER OF BEDROOMS IN RESIDENCE MINIMUM NUMBER OF EZFLOW 1202H-GEO CHAMBERS AND TRENCH LENGTH							
	Two or Fewer		Three		Four		Each Additional Bedroom	
	1202H-GEO Bundles	Trench Length (lf)	1202H-GEO Bundles	Trench Length (lf)	1202H-GEO Bundles	Trench Length (lf)	1202H-GEO Bundles	Trench Length (lf)
1	Prohibited							
2	12	120	16	160	20	200	4	40
2a	20	200	26	260	31	310	6	60
3	26	260	34	340	42	420	8	80
3a	38	380	50	500	63	630	12	120
4	50	500	66	660	83	830	16	160
5	Prohibited							

NOTES

1. Table 12 shows the minimum sizing based on Infiltrator Water Technologies requirements when designed in Net Evaporation Zones 1-5 using a soil profile description. There is no warranty implied, or granted on any system installation, which does not comply with these minimum sizing requirements.
2. Any properly certified installer can install the EZflow 1202H-GEO and self-inspect their own septic system.
3. If the system is installed in a gopher-prone area, the installation of wire mesh (chicken wire) on the bottom of each trench before installing any Infiltrator chambers is recommended.

COUNTIES LOCATED IN NET EVAPORATION ZONES 1-5 INCLUDE

ADAIR
CHEROKEE
CHOCTAW
CRAIG
DELAWARE
HASKELL
LATIMER
LEFLORE
McCURTAIN
MCINTOSH
MAYES
MUSKOGEE
NOWATA
OTTAWA
PITTSBURG
PUSHMATAHA
ROGERS
SEQUOYAH
WAGONER

SYSTEM SIZING – SOIL PROFILE

EZflow System Sizing

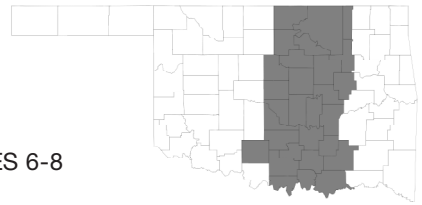


Table 13: EZFLOW 1202H-GEO SOIL PROFILE TRENCH SIZING - NET EVAPORATION ZONES 6-8

Soil Group	NUMBER OF BEDROOMS IN RESIDENCE MINIMUM NUMBER OF EZFLOW 1202H-GEO AND TRENCH LENGTH							
	Two or Fewer		Three		Four		Each Additional Bedroom	
	1202H-GEO Bundles	Trench Length (lf)	1202H-GEO Bundles	Trench Length (lf)	1202H-GEO Bundles	Trench Length (lf)	1202H-GEO Bundles	Trench Length (lf)
1	Prohibited							
2	12	120	16	160	20	200	4	40
2a	19	190	25	250	31	310	6	60
3	26	260	34	340	42	420	8	80
3a	38	380	50	500	63	630	12	120
4	50	500	66	660	83	830	16	160
5	Prohibited							

NOTES

1. Table 13 shows the minimum sizing based on Infiltrator Water Technologies requirements when designed in Net Evaporation Zones 6-8 using a soil profile description. There is no warranty implied, or granted on any system installation that does not comply with these minimum sizing requirements.
2. Any properly certified installer can install the EZflow 1202H-GEO and self-inspect their own septic system.
3. If the system is installed in a gopher-prone area, the installation of wire mesh (chicken wire) on the bottom of each trench before installing any Infiltrator chambers is recommended.

COUNTIES LOCATED IN NET EVAPORATION ZONES 6-8 INCLUDE

ATOKA
BRYAN
CARTER
CLEVELAND
COAL
CREEK
GARVIN
HUGHES
JOHNSTON
KAY
LINCOLN
LOGAN
LOVE
MCCLAIN
MARSHALL
MURRAY
NOBLE
OKFUSKEE
OKLAHOMA
OKMULGEE
OSAGE
PAWNEE
PAYNE
PONTOTOC
POTTAWATOMIE
SEMINOLE
STEPHENS
TULSA
WASHINGTON

SYSTEM SIZING – SOIL PROFILE

EZflow System Sizing

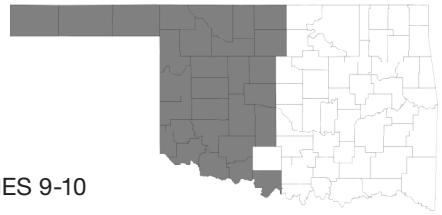


Table 14: EZFLOW 1202H-GEO SOIL PROFILE TRENCH SIZING - NET EVAPORATION ZONES 9-10

Soil Group	NUMBER OF BEDROOMS IN RESIDENCE MINIMUM NUMBER OF EZFLOW 1202H-GEO CHAMBERS AND TRENCH LENGTH							
	Two or Fewer		Three		Four		Each Additional Bedroom	
	1202H-GEO Bundles	Trench Length (lf)	1202H-GEO Bundles	Trench Length (lf)	1202H-GEO Bundles	Trench Length (lf)	1202H-GEO Bundles	Trench Length (lf)
1	Prohibited							
2	12	120	15	150	19	190	4	40
2a	18	180	23	230	29	290	6	60
3	24	240	32	320	39	390	8	80
3a	35	350	47	470	58	580	12	120
4	46	460	62	620	77	770	16	160
5	Prohibited							

NOTES

1. Table 14 shows the minimum sizing based on Infiltrator Water Technologies requirements when designed in Net Evaporation Zones 9-10 using a soil profile description. There is no warranty implied, or granted on any system installation that does not comply with these minimum sizing requirements.
2. Any properly certified installer can install the EZflow 1202H-GEO and self-inspect their own septic system.
3. If the system is installed in a gopher-prone area, the installation of wire mesh (chicken wire) on the bottom of each trench before installing any Infiltrator chambers is recommended.

COUNTIES LOCATED IN NET EVAPORATION ZONES 9-10 INCLUDE

ALFALFA
BEAVER
BECKHAM
BLAINE
CADDO
CANADIAN
CIMARRON
COMANCHE
COTTON
CUSTER
DEWEY
ELLIS
GARFIELD
GRADY
GRANT
GREER
HARMON
HARPER
JACKSON
JEFFERSON
KINGFISHER
KIOWA
MAJOR
ROGER MILLS
TEXAS
TILLMAN
WASHITA
WOODS
WOODWARD

SYSTEM SIZING – SOIL PERCOLATION TEST

EZflow System Sizing

Table 15: EZFLOW 1202H-GEO SOIL PERCOLATION TEST TRENCH SIZING

Soil Percolation Rate (min/inch)	NUMBER OF BEDROOMS IN RESIDENCE MINIMUM NUMBER OF EZFLOW 1202H-GEO CHAMBERS AND TRENCH LENGTH							
	Two or Fewer		Three		Four		Each Additional Bedroom	
	1202H-GEO Bundles	Trench Length (lf)	1202H-GEO Bundles	Trench Length (lf)	1202H-GEO Bundles	Trench Length (lf)	1202H-GEO Bundles	Trench Length (lf)
0-15	16	160	22	220	27	270	6	60
16-30	25	250	33	330	41	410	8	80
31-45	34	340	45	450	56	560	11	110
46-60	47	470	63	630	79	790	16	160
61-75	62	620	83	830	104	1,040	21	210
>75	Prohibited							

NOTES

1. Table 15 shows the minimum sizing based on Infiltrator Water Technologies requirements using a soil percolation test. There is no warranty implied, or granted on any system installation that does not comply with these minimum sizing requirements.
2. Any properly certified installer can install the EZflow 1202H-GEO and self-inspect their own septic system.
3. If the system is installed in a gopher-prone area, the installation of wire mesh (chicken wire) on the bottom of each trench before installing any Infiltrator chambers is recommended.

SYSTEM SIZING – PRESSURE DOSING FIELDS

EZflow System Sizing

Table 16: EZFLOW 1202H-GEO SOIL PROFILE INDIVIDUAL AND SMALL PUBLIC LOW PRESSURE DOSING FIELDS

Soil Group	NUMBER OF BEDROOMS IN RESIDENCE MINIMUM NUMBER OF EZFLOW 1202H-GEO CHAMBERS AND TRENCH LENGTH							
	"Two Bedrooms 200 gpd"		"Three Bedrooms Average 275 gpd"		"Four Bedrooms Average 350 gpd"		"Five Bedrooms Average 400 gpd"	
	1202H-GEO Bundles	Trench Length (lf)	1202H-GEO Bundles	Trench Length (lf)	1202H-GEO Bundles	Trench Length (lf)	1202H-GEO Bundles	Trench Length (lf)
1	Prohibited							
2	12	120	16	160	20	200	24	240
2a	16	160	20	200	24	240	28	280
2a, 3, 3a, & 5	Prohibited							

NOTES

1. Table 16 shows the minimum sizing based on Infiltrator Water Technologies requirements for individual and small public low pressure dosing fields. There is no warranty implied, or granted on any system installation that does not comply with these minimum sizing requirements.
2. The number of bedrooms corresponds to the design of an individual low pressure dosing field designed using a soil profile description. Low pressure dosing fields may be allowed in soil groups 2a, 3, 3a and 4 when designed and approved as an alternative onsite sewage treatment system.
3. The average daily flow corresponds to the design of a small public low pressure dosing field designed using a soil profile description. Low pressure dosing fields may be allowed in soil groups 2a, 3, 3a and 4 when designed and approved as an alternative on-site sewage treatment system. Low pressure dosing fields may be allowed for average daily flows over 400 gpd when designed and approved as an alternative on-site sewage treatment system.
4. Any properly certified installer can install the EZflow 1202H-GEO and self-inspect their own septic system.
5. If the system is installed in a gopher-prone area, the installation of wire mesh (chicken wire) on the bottom of each trench before installing any Infiltrator chambers is recommended.

INSTALLATION INSTRUCTIONS –

The EZflow 1202H-GEO are approved as a new technology system at the specified sizing:

• 1202H-GEO

Any site where EZflow products are installed must meet the same site, soil, soil evaluation, repair area, construction, and all other requirements imposed for a standard gravel drainfield.

Materials and Equipment needed

• EZflow Bundles, EZflow Internal Pipe Couplers

• Pipe for Header and Inlet

• Backhoe

• Rake, Shovel

• Laser, Transit, or Level

Installation Instructions

The instructions for installation of EZflow products are given below. This product must be installed in accordance with Oklahoma design manual.

1. After the local inspector has determined sizing, configuration, and layout for the EZflow systems, stake or mark with paint the location of trenches and lines. Be careful to set correct tank, invert pipe, header line or distribution box and trench bottom elevations before installation of pipe bundles.

2. The disposal field shall utilize the level or serial method of distribution depending on site characteristics.

3. Disposal field trenches shall follow ground surface contours so that variations in trench depth will be minimized.

4. A minimum of 5-feet of undisturbed earth, between the septic tank and the nearest trench is required.

• 1202H-GEO

5. Excavate trenches to depth shown on approved permit and to width, based on EZflow aggregate system selected.

NOTE: If precepitation falls onto the excavation and evidence of soil washing in the excavation of the subsurface seepage system exists, that portion of the seepage system damaged shall be reconstructed to conform to this Section.

6. The top of bundles in the subsurface seepage field shall be at least one inch below the invert of the outlet pipe from septic tank or distribution box in gravity flow systems.

7. Remove plastic shipping wrap prior to placing bundles in the trench(es). Remove any plastic wrap in the trench before system is covered.

8. Place bundle(s) in the configuration approved by system design permit specified for the particular site. The budnles containing pipe are joined end to end with an internal pipe coupler. Any additional aggregate budnles that may be required, should be butted against the other aggregate-only budnles and do not require any type of connection device.

9. The top of each GEO cylinder contains a filter fabric premanufac- tured 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 and is in contact with the fabric contained in the adjacent cylinder before backfilling.

10. If not using a GEO product, EZflow systems require covering over the top of the system with a biodegradable material approved by the manufacturer.

11. The bottom of the subsurface seepage field, each trench and its distribution line shall be level. Level for this part shall mean plus or minus 1/2 inch in any direction over the entire area of the subsurface seepage system.

12. EZflow EPS bundles are flexible and can fit in curved trenches as may be necessary to avoid trees, boulders, or other obstacles.

13. EZflow systems are not required to be looped. When EZflow sys- tems are not looped, the end of the distribution pipe shall be capped.

14. There shall be a minimum of 6” and a maximum of 24” of earth backfill over the EZflow EPS aggregrate bundles.

15. Soil material exvacated from trenches should be used in backfilling and soil cover must be crowned or sloped over the absorption field so as to promote surface runoff, until initial settling has taken place. Soil within 6” of EPS bundles shall be loosely placed and not compacted.

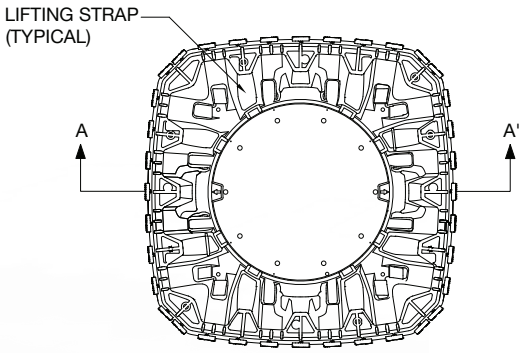
Repeat steps 1 through 15 for each required trench.

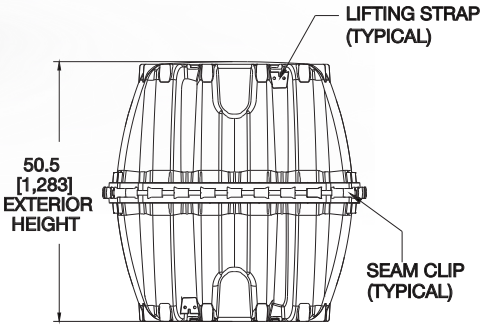
The area of the disposal field shall not be used for vehicular traffic, parking, or underground utilities, to include water lines. Doziers, trucks, and other heavy vehicles shall not be allowed to run over the septic tank, field lines or other parts of the system to avoid addiitonal compaction of soil.

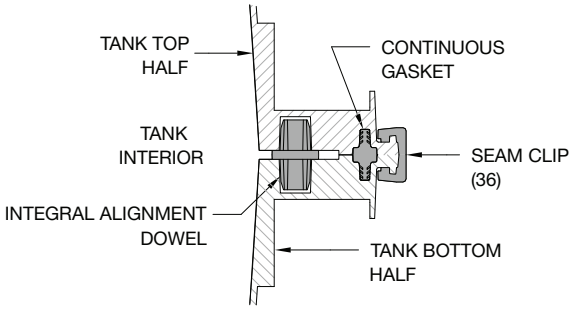
Sod or seed the drainfield area to control erosion, as may be required by Permit or local policy.

IM-300 TANK









The IM-300 is an injection molded two piece mid-seam plastic tank. The IM-300 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-300 will be assembled and sold through a network of certified Infiltrator distributors.

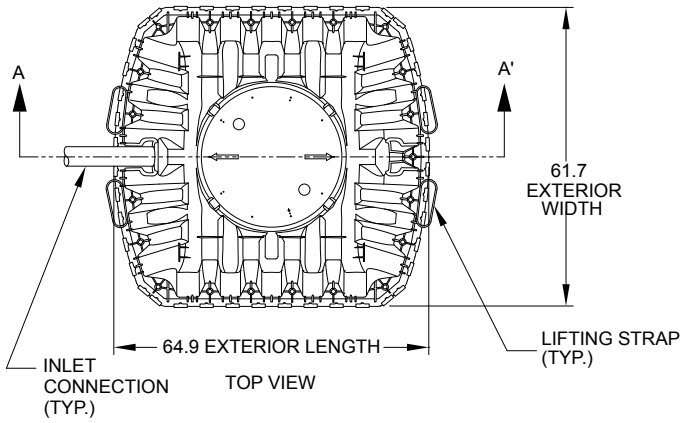
Parameter	Value
Working capacity	272 gal (1,029 L)
Total capacity	314 gal (1,188 L)
Length	50.9" (1,293 mm)
Width	50.9" (1,293 mm)
Height	50.5" (1,283 mm)
Invert Height	43.25" (1,098 mm)
Liquid Level	41.25" (1,048 mm)
Invert Drop	2" (50.8 mm)
Compartments	1
Maximum burial depth	52" (1,321 mm)
Minimum burial depth	6" (152 mm)
Maximum pipe diameter	4" (102 mm)
Weight	110 lbs (50 kg)

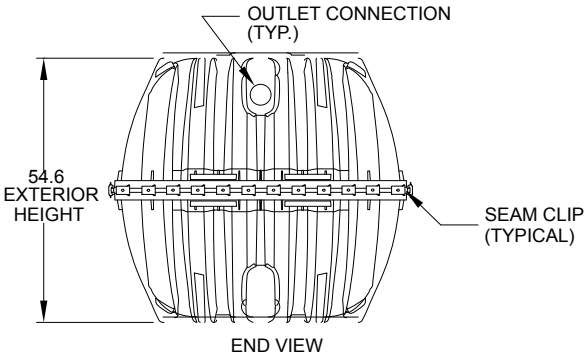
IM-540 TANK

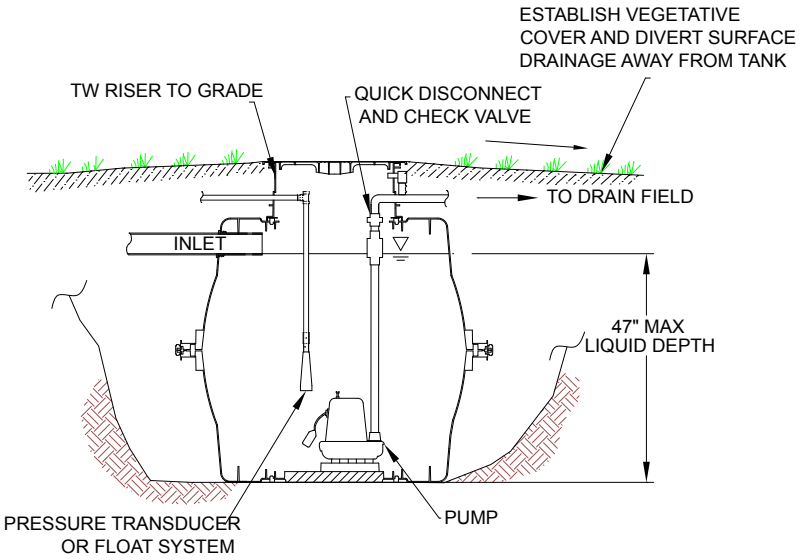


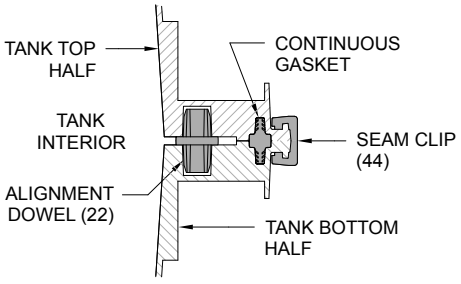
The IM-540 is an injection molded two-piece mid-seam plastic tank. The IM-540 injection molded plastic design allows for a mid-seam joint that has precise dimensions for accepting an engineered EPDM gasket. Infiltrator's gasket design utilizes technology from the sanitary sewer pipe industry to deliver 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.

Parameter	Value
Total capacity	552 gal (2,089 L)
Nominal wall thickness	0.2 in (5.1 mm)
Length	64.9 in (1,648 mm)
Width	61.7 in (1,567 mm)
Height	54.6 in (1,387 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)



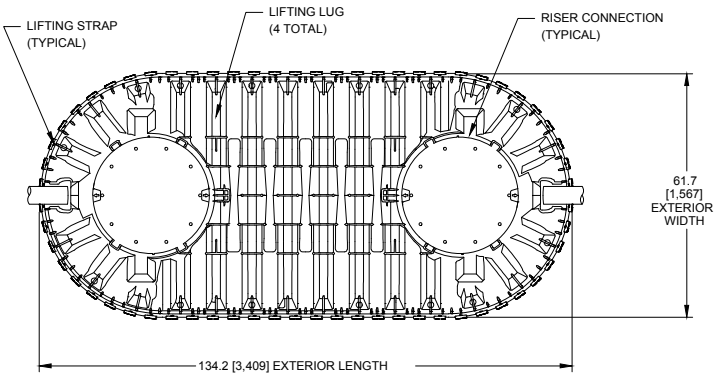


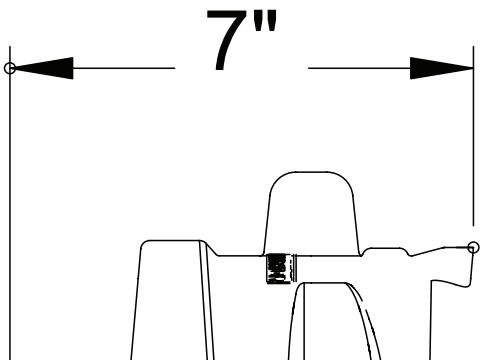




CM-1060 SEPTIC TANK

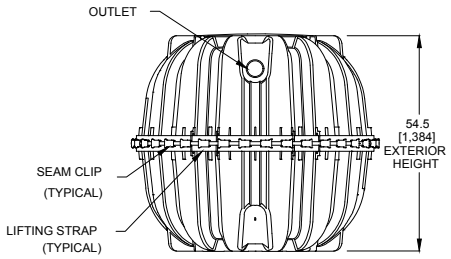


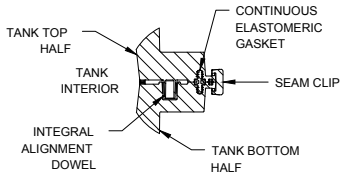




The CM-1060 Septic Tank by Infiltrator Water Technologies comes in one size and may be used as a septic or pump tank. The IM-1060 can be a single or dual compartment septic tank and includes access port lids and 4" diameter pipe grommets that accommodate SDR 35 or SCH 40 pipe. Inlet and outlet tees are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

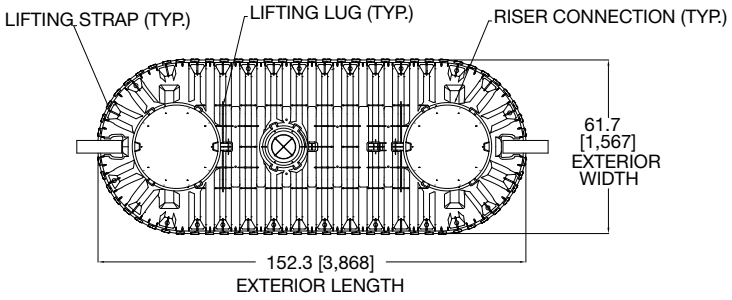
Parameter	Value
Working capacity	1,111 gal (4,207 L)
Total capacity	1,309 gal (4,956 L)
Airspace	17.8%
Nominal wall thickness	134.2” (3,409 mm)
Length	61.7” (1,567 mm)
Width	2.3 to 1
Length-to-width ratio	54.5” (1,384 mm)
Height	44” (1,118 mm)
Liquid level	3” (76 mm)
Invert drop	2
Fiberglass supports	1 or 2
Alignment dowels	48” (1,219 mm)
Locking clips	6” (152 mm)
Compartments	4” (102 mm)
Maximum burial depth	331 lbs (151 kg)
Minimum burial depth	0.5 ft (0.2 m)
Maximum pipe diameter	4 in (100 mm)
Weight	315 lbs (143 kg)

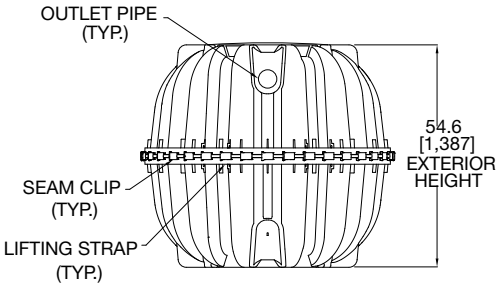




IM-1250 SEPTIC TANK

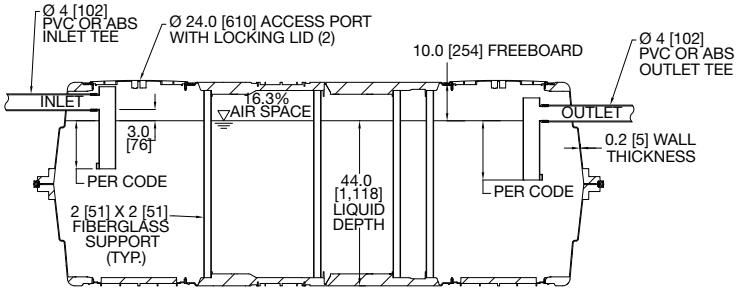


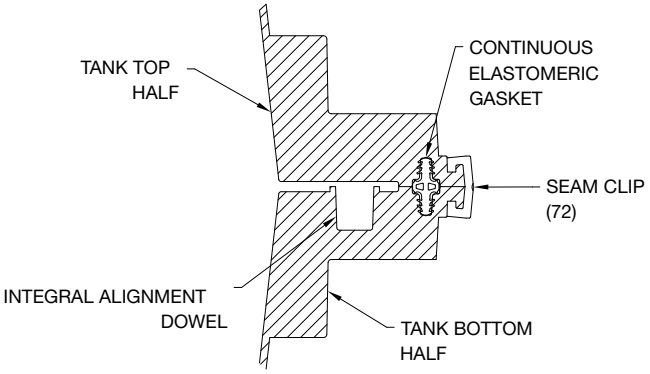




The IM-1250 is an injection molded two-piece mid-seam polypropylene tank. The injection molded design of the IM-1250 allows for a mid-seam joint that has precise dimensions for accepting an engineered EPDM gasket. The engineered mid-seam joint accepts a continuous loop EPDM gasket. Infiltrator's EPDM gasket design utilizes technology and materials from the sanitary sewer pipe industry to deliver a reliable watertight seal. The two-piece design is permanently fastened using a system of molded-in alignment dowels and locking seam clips. The IM-1250 is assembled and sold through a network of certified Infiltrator distributors.

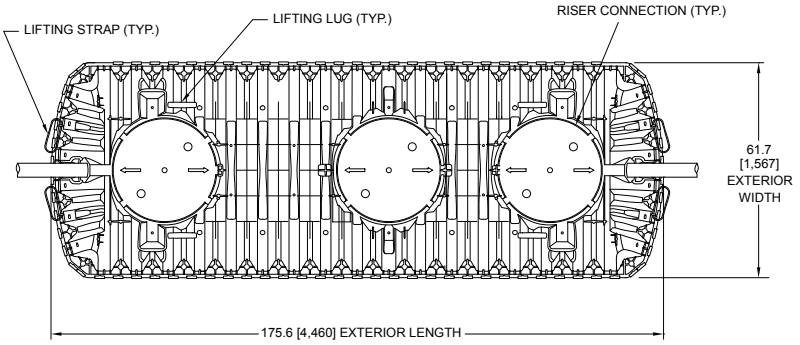
Parameter	Value
Working capacity	1,278 gal (4,839 L)
Total capacity	1,480 gal (5,602 L)
Length	154" (3,911 mm)
Width	61.7" (1,567 mm)
Height	54.6" (1,387 mm)
Liquid level	44" (1,118 mm)
Invert drop	3" (76 mm)
Fiberglass supports	4
Compartments	1 or 2
Maximum burial depth	48" (1,219 mm)
Minimum burial depth	6" (152 mm)
Maximum pipe diameter	4" (102 mm)
Weight	405 lbs (184 kg)

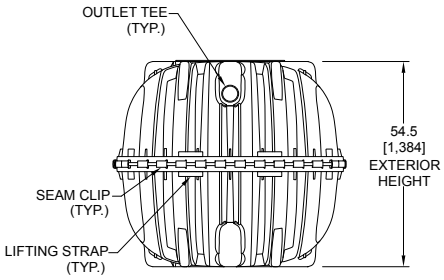




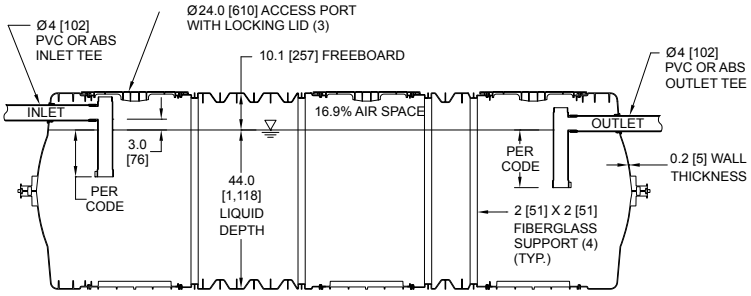
IM-1530 SEPTIC TANK



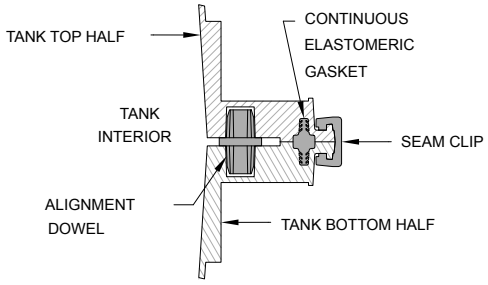




The IM-1530 Septic Tank by Infiltrator Water Technologies comes in one size and may be used as a septic or pump tank. The IM-1530 can be a single or dual compartment septic tank and includes access port lids and 4" diameter pipe grommets that accommodate SDR 35 or SCH 40 pipe. Inlet and outlet tees are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



Parameter	Value
Working capacity	1,537 gal (5,818 L)
Total capacity	1,787 gal (6,765 L)
Airspace	16.9%
Length	176 in (4460 mm)
Width	62 in (1,567 mm)
Length-to-width ratio	2.8 to 1
Height	55 in (1,384 mm)
Liquid level	44 in (1,118 mm)
Invert drop	3 in (76 mm)
Fiberglass supports	4
Alignment dowels	46
Locking clips	86
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	501 lbs (228 kg)



Infiltrator IM- and CM-Series Septic Tank General Installation Instructions

BEFORE YOU BEGIN

Infiltrator Water Technologies' tanks must be installed according to state and/or local regulations and approvals, which supersede the manufacturer's installation instructions. If unsure of the installation requirements for a specific site, contact the health department or permitting authority. The IM- and CM-Series models referred to in this document include the IM-540, IM-1060, CM-1060, and IM-1530.

WARNING: IMPLOSIONS MAY CAUSE SERIOUS INJURY
Follow Infiltrator Water Technologies' vacuum test instructions

MATERIALS AND EQUIPMENT NEEDED

- ☐ IM- or CM-Series tank
- ☐ Access port lid(s)*
- ☐ 10 screws per lid*
- ☐ 2 inlet/outlet gaskets (included)
- ☐ Inlet/outlet tees*
- ☐ Tape measure
- ☐ Pipe, risers, etc.
- ☐ Socket wrench
- ☐ Excavator
- ☐ Shovel
- ☐ Level
- ☐ 5-inch-diameter (125 mm) hole saw
- ☐ Utility knife
- ☐ PVC pipe glue with primer

*tee and lid inclusion varies by state/province

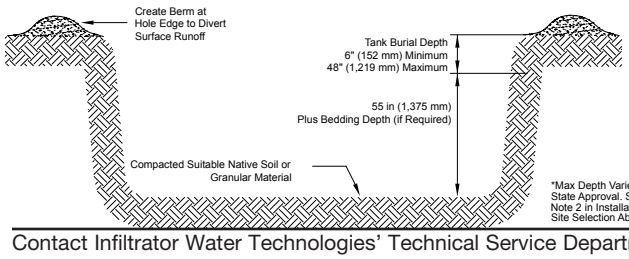
INSTALLATION SITE SELECTION

1. Do not install the tank in vehicular traffic areas. The tank is designed for non-traffic applications.
2. The allowable soil cover depth is 6 to 48* inches (150 to 1,200 mm).
   *18-inch (450 mm) max. in Florida for Cat. 3 tanks; 48-inch (1,200 mm) max. in Florida for Cat. 4 tanks; and 36-inch (900 mm) max. in Massachusetts, New Hampshire, North Carolina, and Oregon.
3. The tank shall not be installed where the subsurface water level outside the tank exceeds the height of the outlet pipe saddle. See page 4 illustration. See installation terminology on page 4 for Indiana installations.

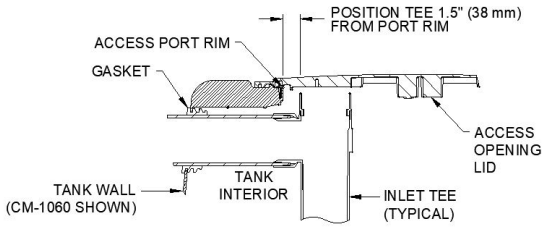
EXCAVATING AND PREPARING THE SITE

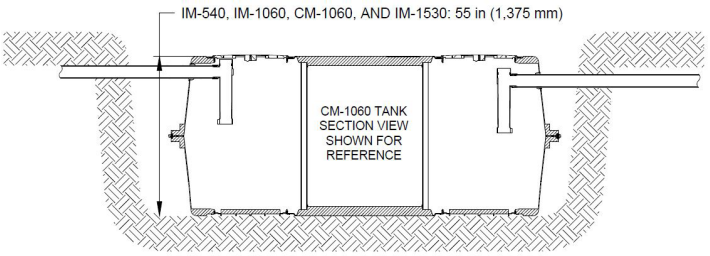
1. Unless buoyancy control measures are required, the excavation width and length should be 18 to 36 inches (450 to 900 mm) larger than the tank on each side or sized as necessary to ensure proper backfill compaction, as outlined in Steps 5-10 of "Backfilling the Tank" in this document. See Infiltrator IM- and CM-Series Tank Buoyancy Control Guidance document, available online at www.infiltratorwater.com, for specific excavation requirements when installing with buoyancy control measures.
2. Excavation depth shall account for the 55-inch (1,375 mm) tank height. Also account for 4 inches (100 mm) of bedding (if required) and cover depth (permissible cover depth is 0.5 to 4 feet (150 to 1,200 mm) of soil).
   Note: If the water level outside the tank exceeds the height of the outlet pipe saddle, tank structural integrity may be compromised. See page 4 for maximum allowable subsurface water elevation guidelines. See page 4 note. Indiana Installations: If the depth of the uninterrupted saturated soil conditions cannot be determined from the site soil evaluation report or other site-related data and other information indicates the possible presence of a perched ground water table, tank installation is permissible. See installation terminology on page 4.
3. Inspect bottom of excavation to verify suitability of native soil for tank installation. Soils with large, protruding, or sharp stones or other similar objects that may damage the tank are not suitable.
4. The tank may be installed either in suitable native soil (see Backfilling the Tank section) or a minimum 4-inch (100 mm) layer of well-graded granular soil having particles less than 3 inches (75 mm) in diameter, or maximum 0.5-inch (13 mm) diameter crushed stone.
5. Create a uniform, compacted, level surface to ensure that the bottom of the tank is evenly supported. Verify that the installation surface is flat.

INSTALLING THE TANK



1. Inspect the tank for damage before installation.
2. If the tank inlet and outlet penetrations are not drilled, drill holes using the drill points provided at each of the inlet and outlet ports according to Table 3 in the Inlet and Outlet Hole Locations section. The inlet and outlet may be drilled on either the sides or ends of the tank, as required based on applicable codes and site conditions.*
   * Kentucky and West Virginia tanks are factory-drilled. Florida and Oregon tanks must be factory- or distributor-drilled.
3. The gaskets supplied with the tank are compatible with Schedule 40 and SDR 35 pipe using a 5-inch-diameter (125 mm) hole saw.
4. Install the rubber gaskets at the inlet and outlet.
5. Using all four of the tank's integral lifting lugs, lower tank into excavation.
6. Slide the inlet and outlet pipes* through the gaskets. Soapy lubricant may be used to slide the pipe in.
   *For North Carolina, the inlet pipe shall be a straight pipe with no tee.
7. Horizontally position the tee 1½ inches (38 mm) from the access port rim, allowing the tee to fit into the recess in the access port lid (see detail).
8. Install lids and risers (see Installing Risers section) as necessary. Rotate lid over access opening until it indexes to tank and drops into position.

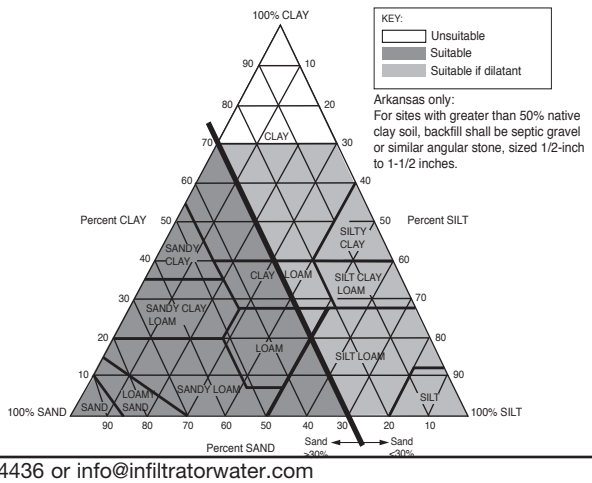




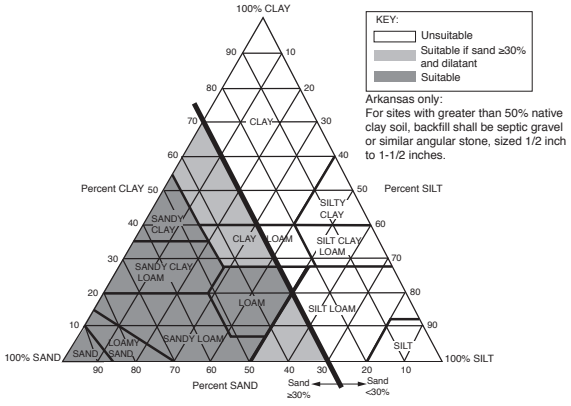
BACKFILLING THE TANK

Note: Infiltrator tanks do not require filling with water prior to backfill placement. Water filling and backfilling to the tank mid-height is required if the tank is left in either an open or backfilled excavation that may fill with water from rain or other sources.

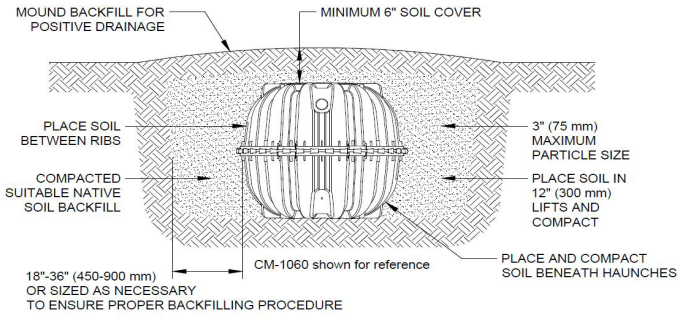
1. Backfill with suitable native soil (max. 3-inch (75-mm) stone diameter). If native soil is unsuitable, replace unsuitable fraction with suitable soil. If suitable soil is not locally available, contact Infiltrator for assistance.
2. Suitable soil shall include soil textural classes defined in the United States Department of Agriculture soil triangle.
   a) For a tank soil cover depth of 0.5 to 2.0 feet (150 to 600 mm), suitable soil textures include:



b) For a tank soil cover depth that is greater than 2.0 feet and up to 4.0 feet (600 to 1,200 mm), suitable soil textures include:



3. Backfill should not have stones greater than 3 inches (75 mm) in diameter or excessive clods that do not break apart during placement and compaction. Backfill must be capable of occupying the spaces between the tank ribs and beneath the haunches.
   Note: Rounded screened aggregate (e.g., pea gravel) is not a suitable backfill.
4. Standard field soil classification methods shall be used to determine the soil textural class.
   Note: Under most circumstances, the determination of soil dilatancy will not be required. Dilatancy shall be determined in the field using a test that does not require specialized equipment, per ASTM D2488, Section 14.3.
5. Place and compact soil by walking-in beneath the haunches of the tank.
   Note: Compacting soil beneath the haunches is critical for tank structural integrity.
6. Place backfill around the four sidewalls in an alternating manner, so that the backfill height along the four sidewalls is maintained within a 12-inch (300-mm) tolerance.
7. Do not backfill top of tank before sidewalls are completely backfilled.
8. Continue to place backfill along the sidewalls in 12-inch (300-mm) lifts. Place backfill between the ribs on the sidewalls such that the space between the ribs is completely filled with soil.
9. Compact backfill material either by walking-in, hand tamping or mechanical compaction (includes backhoe bucket). If mechanical compaction is used, such as a walk-behind tamper or backhoe bucket, a single pass is recommended. Compact each lift prior to placement of next lift. Compact backfill from tank walls to excavation sidewalls.
10. Complete backfilling and grade the area.
11. A minimum 6-inch (150-mm) depth of suitable soil must be placed over the top of the tank. The balance of backfill placed to finish grade above the tank may be either suitable or unsuitable soil.
12. Establish a strong stand of erosion-resistant vegetation.
    Grade to prevent the backfilled excavation from filling with surface runoff. If the subsurface water level in the backfilled excavation exceeds the height of the outlet pipe saddle, tank structural integrity may be compromised. See page 4 for illustration.



SHORT AND LONG-TERM GROUNDWATER CONTROL

It may be necessary to implement groundwater control measures during tank installation. Maintain dry conditions by expanding the excavation to create a short-term groundwater collection sump for temporary placement of a dewatering pump if needed. Long-term groundwater control measures such as underdrains and interceptor trenches may be sensible if the site is amenable to construction of a control system and such systems are not prohibited by regulation or law, and the tank location is not subject to flooding. Underdrains and groundwater interceptor trenches may prevent the need for tank buoyancy control measures.

INSTALLING UNDER SHALLOW GROUNDWATER CONDITIONS

Buoyancy control measures may be required if the tank is to be installed with less than 12 inches (300 mm) of soil backfill cover, and where the water level outside the tank (See Table 1, Note 4) has the potential to rise 30 inches (750 mm) or more above the elevation of the tank bottom. Otherwise, no control measures are required (see Table 1). The need for buoyancy control measures must be determined based on backfill cover depth and height of water outside of tank above the tank bottom according to Table 1. Refer to Infiltrator IM- and CM-Series Tank Buoyancy Control Guidance document for more information.

Table 1: Tank models[1] and conditions requiring buoyancy control[2]

Subsurface water height above tank bottom[4]	Soil cover depth above tank[3]	
	6 in (150 mm) to 12 in (300 mm)	12 in (300 mm) or greater
Above outlet pipe saddle	Do not install tank	Do not install tank
36 in (900 mm) to outlet pipe saddle	All models	None
30 in (750 mm) to 36 in (900 mm)	IM-1530	None
Less than 30 in (750 mm)	None	None

1. IM-540, IM-1060, CM-1060 and IM-1530.
2. See Infiltrator IM- and CM-Series Tank Buoyancy Control Guidance document for detailed information on the use of controls.
3. No controls are required for soil cover depths exceeding 12 in (300 mm).
4. The tank shall not be installed where uninterrupted saturated soil conditions could be present from the tank bottom to a height above that of the outlet pipe saddle. See page 4 illustration. For Indiana installations, if the depth of the uninterrupted saturated soil conditions cannot be determined from the site soil evaluation report or other site-related data and other information indicates the possible presence of a perched ground water table, no buoyancy controls are required. See installation terminology on page 4.

INSTALLING RISERS

1. Compatible risers include 24-inch (600 mm) diameter products such as the Infiltrator EZsnap, TW-Riser, and EZset by Infiltrator, PolyLok®, Inc., and Tuf-Tite® Corporation, in addition to 24-inch (600 mm) diameter corrugated HDPE and IPEX Ultra Rib® PVC pipe. Follow Infiltrator's IM- and CM-Series Tank Riser Connection Guidance Document.
2. In Oregon only, watertightness testing shall include filling with water at least 2 inches above riser connection, with no more than 1 gallon leakage per 24 hours, per OAR 340-073-0025(3).

INSTALLING PUMPS AND RELATED EQUIPMENT

Pumps may be supported on a stable, level 16x16-inch (400x400-mm) platform positioned on the bottom of the tank. One 16x16-inch block or two 8x16-inch (200 -mm x 400-mm) side-by-side blocks may be used. Limit block height to account for pump height and liquid levels during pump cycles. Block(s) should be placed below an access opening and level upon the tank bottom. For two blocks, orient them perpendicular to ribs on the tank bottom, if present, for stability.

Installation of products such as electrical conduit and wiring, pumps, water level control equipment, valves, siphon equipment, etc. shall be in accordance with the product manufacturer's instructions and compliant with applicable state or local rules and regulations. Appurtenances shall be fastened to the tank riser system and not the tank body or access opening rim. Where possible, appurtenances shall be installed to facilitate maintenance and repair access via the tank access openings.
Note: Prefabricated pump vaults may be installed.

GENERAL SPECIFICATIONS

- Failure to comply with installation instructions will void warranty.
- Prior to ground disturbance, check for subsurface obstructions and utilities in conformance with applicable requirements.
- Operating water temperature shall be less than 100° F (40° C).
- In cold conditions, handle and backfill tank with care to prevent impact damage.
- Tanks are not fire resistant. Store away from ignition sources.
- Removal of structural bulkheads is prohibited; removal of locking clips on the tank mid-seam connection is also prohibited.
- Only suitable for potable applications if the tank bears the NSF/ANSI 61 certification mark. Otherwise, tank is recommended for use in septic, rainwater/ stormwater storage, holding, and pump applications, or other non-potable uses.
- Infiltrator tanks shall not be installed above ground. Contact Infiltrator if the 6-inch (150-mm) minimum soil cover depth cannot be met.

Table 2: Nominal Volume Chart

Liquid height above tank bottom[1]		Liquid volume in tank at indicated height (measured from tank bottom to liquid surface)[1]							
		IM-540		IM-1060		CM-1060		IM-1530	
in	cm	U.S. Gal	Liters	U.S. Gal	Liters	U.S. Gal	Liters	U.S. Gal	Liters
1	3	3	11	3	11	5	21	17	64
2	5	8	30	13	49	17	64	34	128
3	8	14	53	28	106	31	119	51	192
4	10	21	80	46	174	50	188	68	256
5	13	29	109	65	246	70	263	94	357
6	15	37	141	86	326	91	344	122	463
7	18	46	173	107	405	113	429	152	573
8	20	55	207	129	488	137	517	180	681
9	23	64	243	152	575	160	608	212	802
10	25	74	279	176	666	185	700	245	928
11	28	84	317	200	757	210	795	280	1,061
12	30	94	356	225	852	236	892	312	1,182
13	33	105	396	251	950	262	991	351	1,328
14	36	116	437	277	1,049	288	1,091	387	1,463
15	38	127	480	303	1,147	315	1,192	422	1,597
16	41	138	523	330	1,249	342	1,293	464	1,756
17	43	150	566	357	1,351	369	1,396	500	1,892
18	46	161	611	384	1,454	396	1,499	537	2,034
19	48	173	656	411	1,556	423	1,602	575	2,177
20	51	186	702	438	1,658	451	1,706	614	2,322
21	53	198	749	465	1,760	478	1,811	652	2,468
22	56	210	796	493	1,866	506	1,916	690	2,612
23	58	223	843	521	1,972	534	2,022	729	2,758
24	61	235	891	549	2,078	562	2,129	770	2,914
25	64	248	940	577	2,184	591	2,236	808	3,058
26	66	261	988	605	2,290	619	2,344	847	3,208
27	69	274	1,038	633	2,396	648	2,453	887	3,356
28	71	287	1,088	662	2,506	677	2,563	928	3,513
29	74	300	1,137	691	2,616	706	2,671	968	3,665
30	76	313	1,185	719	2,722	734	2,778	1,007	3,814
31	79	326	1,233	747	2,828	762	2,885	1,048	3,966
32	81	338	1,281	775	2,934	790	2,991	1,087	4,113
33	84	351	1,328	802	3,036	818	3,096	1,126	4,262
34	86	363	1,375	830	3,142	846	3,201	1,165	4,410
35	89	375	1,421	857	3,244	873	3,305	1,204	4,557
36	91	387	1,466	884	3,346	901	3,409	1,242	4,701
37	94	399	1,511	911	3,449	928	3,512	1,280	4,846
38	97	411	1,555	938	3,551	955	3,614	1,318	4,988
39	99	422	1,598	965	3,653	982	3,716	1,355	5,131
40	102	433	1,640	992	3,755	1,008	3,817	1,393	5,272
41	104	444	1,681	1,018	3,854	1,035	3,917	1,430	5,412
42	107	455	1,722	1,044	3,952	1,061	4,016	1,466	5,550
43	109	465	1,761	1,069	4,047	1,087	4,113	1,502	5,685
44	112	475	1,799	1,094	4,141	1,111	4,207	1,537	5,817
45	114	485	1,836	1,118	4,232	1,136	4,302	1,572	5,950
46	117	494	1,871	1,142	4,323	1,160	4,393	1,604	6,070
47	119	503	1,905	1,165	4,410	1,184	4,481	1,638	6,201
48	122	512	1,938	1,187	4,493	1,206	4,566	1,667	6,310
49	124	520	1,970	1,208	4,573	1,228	4,648	1,697	6,422
50	127	528	1,999	1,228	4,648	1,248	4,724	1,724	6,527
51	130	535	2,027	1,247	4,720	1,267	4,794	1,749	6,621
52	132	542	2,050	1,265	4,789	1,282	4,851	1,766	6,684
53	135	547	2,071	1,278	4,838	1,293	4,896	1,777	6,726
54	137	551[2]	2,087	1,287	4,872	1,300[2]	4,922	1,785[2]	6,758

1. Liquid height measured from lowermost inside surface at bottom of corrugation in tank to the liquid surface elevation.
2. The total capacity of the IM-540 tank is 552 gallons; the total capacity of the CM-1060 is 1,309, the total capacity of the IM-1530 tank is 1,787 gallons.
3. To determine liquid volume between liquid heights, subract the Table 2 volume indicated for the upper and lower heights. Example: CM-1060 volume between 50 in (127 cm) and 40 in (102 cm) = 1,248 gal (4,724 L) - 1,008 gal (3,817 L) = 240 gal (907 L).

INLET AND OUTLET HOLE LOCATIONS

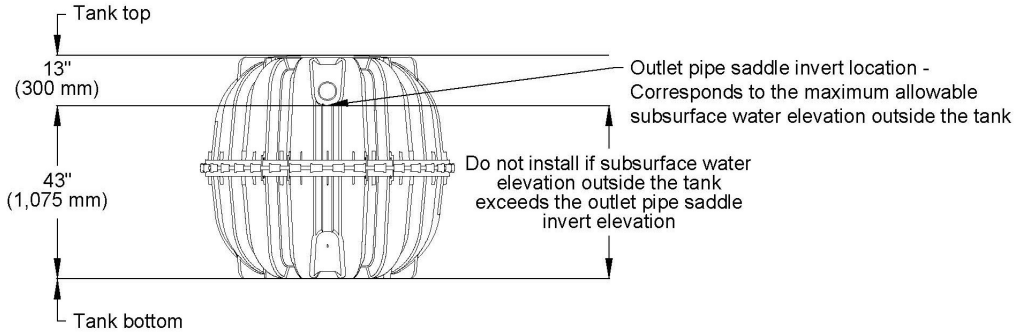
Drill height marks are provided on all Infiltrator tank models to guide inlet and outlet hole drilling. A single drill height mark is provided at each end or side port on tanks (example illustrated below). Holes may be drilled at the end or side inlet and outlet locations, as allowed by state and/or local regulations. The drill height mark indicates the center point location for the hole saw. The pilot drill bit on the hole saw should be positioned at the center of the drill height mark to align the hole saw properly. Table 3 provides drilling and invert information by regulatory jurisdiction for the installation of 4-inch-diameter (100 mm) pipe.

Table 3: Inlet and Outlet Hole Locations[1]

Jurisdiction[2]	Inlet Drill Location	Outlet Drill Location	Invert Drop (in) [mm]	Inlet Invert Height (in) [mm]		Outlet Invert Height[3] and Liquid Level (in) [mm]
				Above Inside Bottom of Tank[3]	Above Excavation Base[4]	
IM-540 and IM-1530						
All	All	All	3.00 [76]	47.00 [1,194]	47.20 [1,199]	44.00 [1,118]
CM-1060						
All Except Florida	All	All	3.00 [76]	47.00 [1,194]	47.20 [1,199]	44.00 [1,118]
Florida	End	End	2.00 [51]	46.00 [1,168]	46.20 [1,174]	44.00 [1,118]
IM-1060						
All	End	End	3.00 [76]	47.00 [1,194]	47.20 [1,199]	44.00 [1,118]
	Side	Side	3.00 [76]	47.50 [1,207]	47.70 [1,212]	44.50 [1,130]
	Side	End	3.50 [89]	47.50 [1,207]	47.70 [1,212]	44.00 [1,118]
	End	Side	2.50 [64]	47.00 [1,194]	47.20 [1,199]	44.50 [1,130]

1. State, provincial, and local regulatory requirements supersede Table 3 information.
2. Kentucky and West Virginia tanks are factory-drilled. Florida and Oregon tanks must be factory- or distributor-drilled.
3. Invert heights are measured from the lowest interior surface at the bottom of the tank to the invert.
4. Invert heights are measured from the base of the excavation to the invert.

Limitations When Subsurface Water is Present Above the Tank Bottom



Installation Terminology

1. "Subsurface water" refers to a water-saturated zone of soil. Do not install if subsurface water is continuous from the tank bottom elevation to any point above the outlet pipe saddle elevation.
2. "Uninterrupted saturated soil" refers to water-saturated soil with no gaps in the saturated condition. An example of a gap in the saturated condition is a perched water table, when two water-saturated soil zones are interrupted by an unsaturated soil zone. Do not install if uninterrupted saturated soil is present from the tank bottom elevation to any point above the outlet pipe saddle elevation.
3. A perched water table is allowable above the outlet pipe saddle elevation only if unsaturated soil is present between the perched water table and tank bottom elevation.

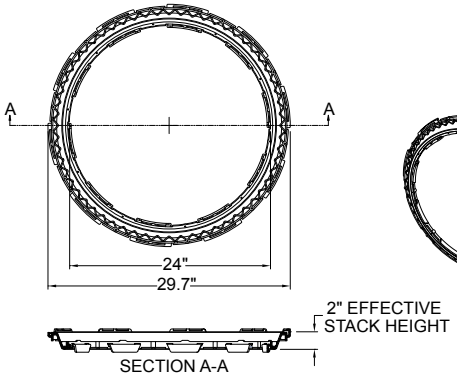
EZSNAP RISERS

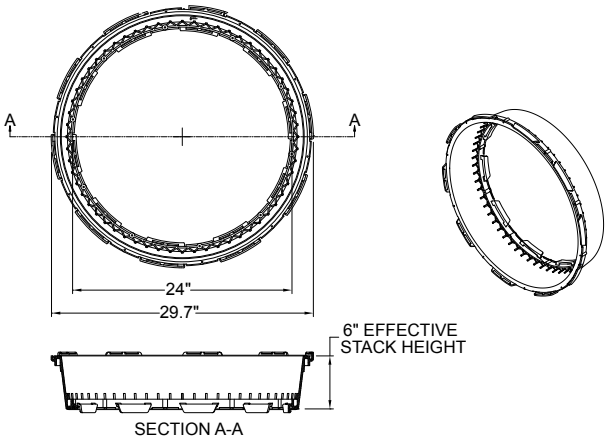
Click And Lock Riser Technology

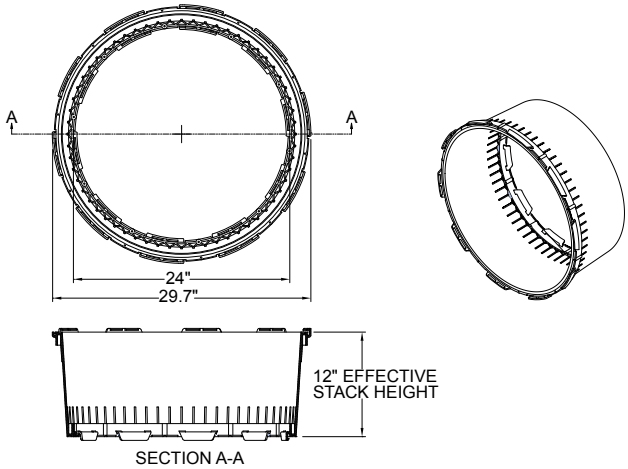
The EZsnap riser is designed to create an easy-to-assemble watertight riser system for septic tanks, pump tanks, and cisterns. The EZsnap Riser features click and lock technology eliminating the need for assembly tools, sealant/caulk and hardware. The 24” diameter EZsnap Riser is available in 2”, 6” and 12” tall sections that nest together making for efficient storage and shipping.



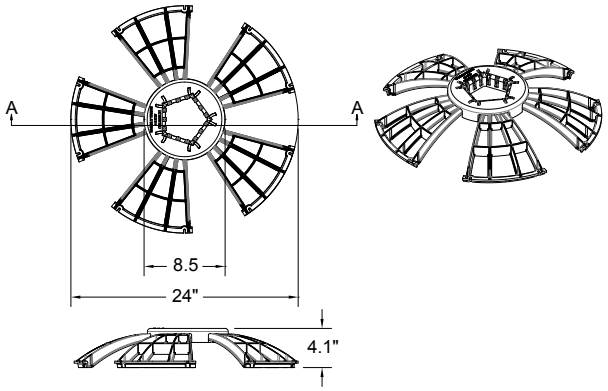
EZsnap Riser Specifications



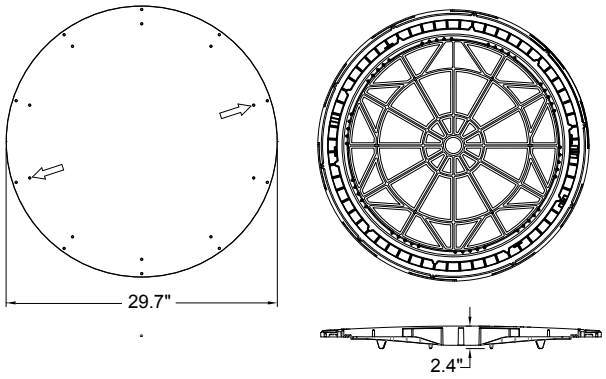




EZsnap Safety Star Specifications



EZsnap 24” Lid Specifications



Infiltrator IM- and CM-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- and CM-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.
Note: The method of PVC and HDPE riser construction shown in this document is not allowed under Florida regulations.

Parts and Supplies

The parts and supplies necessary for installation of a riser system on Infiltrator IM- and CM-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 any of the following parts and supplies.

IM- and CM-Series Riser Products	
Item	**Item Number**
EZsnap Tank Pipe Adapter Ring	SNAPPAR-2400
EZsnap 24" x 2" Riser (Green)	SNAPIS-2402
EZsnap 24" x 6" Riser (Green)	SNAPIS-2406
EZSnap 24" x 12" Riser (Green)	SNAPIS-2412
EZsnap 24" Safety Lid System	SNAPSAFT-2400
24" Riser Lid (Green)	IMLID-2400
Adheasive Sealant	ISI-1500 (or E6100 as equivalent)
Infiltrator Safety Star	SNAPSAFT-2400


Risers nest together for efficient shipping.

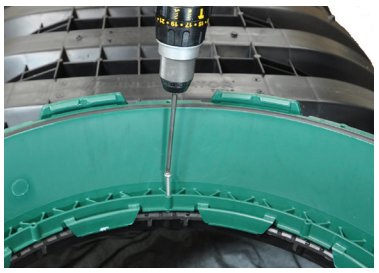
Materials and Equipment Needed for EZsnap Riser Installation

- Rubber mallet
- Screw gun
- Ten #14 x 2" stainless steel tank-to-riser screws (supplied with EZsnap Riser)
- Ten #14 x 2" stainless steel lid screws with washers (supplied with IM and CM-Series tanks)
- 7/16" hex nut driver screw gun bit
- #3 square head Robertson driver bit, 6" (150 mm) length
- #2 Phillips driver bit, 6" (150 mm) length
- 3/8" hex nut driver screw gun bit
- Rags

Note: Install riser assembly prior to backfilling tank.
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 is 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.


Use mallet to engage the rest of the tabs.


Screws required for riser to tank connection only.

Riser-to-Tank Connection

Insert the EZsnap Riser narrow end down into the tank opening. Rotate the riser until 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. Using a rubber mallet pound downward on the top of the riser to engage the remaining tabs. It is helpful to move around the circumference of the tank opening while engaging tabs. **A screwed connection is only required for the tank-to-riser interface, created using the ten #14 x 2" stainless steel tank-to-riser screws supplied with the EZsnap Riser.** Tighten screws in a star pattern, alternately tightening screws on opposite sides of the EZsnap Riser.


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

Riser-to-Riser Connection

The EZsnap Risers come in multiple heights to align with the desired finished grade. Each riser is tapered to have a large end and small end align with like-diameter ends of riser segments. Rotate until the tabs on the upper riser segment drop 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 striking the top surface of the riser if manual pressure is not adequate.

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" (600 mm) opening.



1. Install the Safety Star at the EZsnap narrow riser-to-riser connection closest to the ground surface. A minimum of a 6" (150 mm) riser is required to accommodate the Safety Star and attach the lid properly.

2. Fasten the Safety Star in place using #14 x 2" stainless steel screws (supplied with the EZsnap Risers).



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 both the narrow and the wide end of the riser. To install, set the lid on top of the uppermost riser segment and rotate until the riser tabs recess into the receiving pockets on the lid. The lid will drop downward approximately 1/2" (13 mm) and stop rotating when seated properly. With the lid properly seated, the screw pilot holes are in alignment.



Set lid on uppermost riser segment and rotate to receiving pocket on riser.

Use the ten #14 x 2" stainless steel lid screws with washers provided with the tank to fasten the lid to the riser. There are nine hexagonal head stainless steel bolts and one #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 bolt patterns. Adjust the screw gun settings to prevent stripping-out the pilot holes. Do not over-tighten screws.



Prior to backfilling, fasten the lid to the riser with screws provided.

Materials and Equipment Needed for Riser Pipe Installation

- Screw gun
- Caulk gun and ISI-1500 sealant or equivalent
- Marker or marking pencil
- Brush
- Rags
- Infiltrator Pipe Adapter Ring (SNAPPAR-2400)
- Adhesive-backed gasket (supplied with SNAPPAR-2400)
- Ten #14 x 2" stainless steel lid screws with washers (supplied with lid)
- Ten #14 x 2" stainless steel SNAPPAR-2400-to-tank screws (supplied with SNAPPAR-2400)
- Four #12 x 1/2" (for IPEX, Ultra-Rib™ PVC pipe) or #12 x 1¼ (for HDPE pipe) stainless steel screws (not provided)
- 7/16" hex nut driver screw gun bit
- #3 square head Robertson driver bit, 6" (150 mm) length
- #2 Phillips driver bit, 6" (150 mm) length
- 3/8" hex nut driver screw gun bit

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

Note: Method not allowed in Florida

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

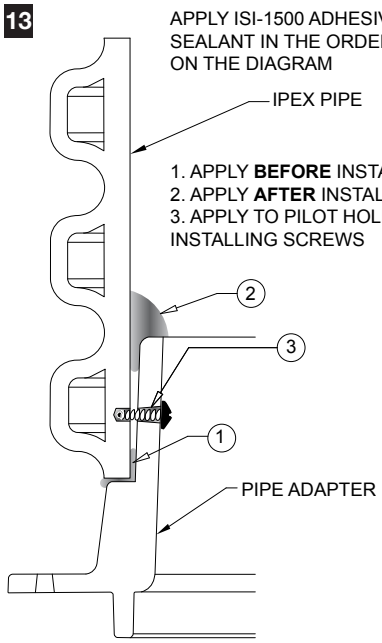
1. Install riser assembly prior to backfilling tank.

2. Cut IPEX pipe along an inner corrugation to allow lid to fit properly, taking care that the cut is smooth and even.









3. Apply two continuous 3/8" (10 mm) beads of adhesive sealant to the smaller of the two standing ribs closest to the screw pilot holes on the top surface of the tank opening. Add an extra dab of sealant in each screw hole. Sealant thickness must fill gap beneath Infiltrator Pipe Adapter Ring.
4. Align the Infiltrator Pipe Adapter Ring with the tank opening by lining up the arrows on the Infiltrator 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 tank opening using ten #14 x 2" stainless steel SNAPPAR-2400-to-tank screws. Tighten in a star pattern. Repeat the star pattern at least twice, without over-tightening screws.
6. Mark four evenly distributed 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 four 1/8" (3.5-mm) pilot holes at marked locations on the Infiltrator Pipe Adapter Ring.
8. Apply one bead of adhesive sealant to the first taper on the Infiltrator Pipe Adapter Ring.
9. Place the IPEX pipe over the Infiltrator Pipe Adapter Ring until it is seated at the base of the flange.
10. Insert adhesive sealant into the four pre-drilled pilot holes.
11. Fasten IPEX pipe to Infiltrator Pipe Adapter Ring using four #12 x 1/2" stainless steel screws from the inside of pipe.
12. Tighten screws in a star pattern, tightening screws alternately 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 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. Pre-drill 1/8" (3.5-mm) pilot holes on the inner set of templated locations on the lid. Fasten using the ten factory-supplied #14 x 2" stainless steel lid screws with washers.



Note: When using the Infiltrator lid, apply the factory-supplied, adhesive-backed 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-hour sealant cure time before testing or putting into service.

24” (600-mm) HDPE Pipe

Note: Method not allowed in Florida
Note: The 24” (600-mm) HDPE pipe must be installed using the Infiltrator Pipe Adapter Ring.
1. Install riser assembly prior to backfilling tank.
2. Cut IPEX pipe along an inner corrugation to allow lid to fit properly, taking care that the cut is smooth and even.
3. Apply two continuous 3/8” (10 mm) beads of adhesive sealant to the smaller of the two standing ribs closest to the screw pilot holes on the top surface of the tank opening. Add an extra dab of sealant in each screw hole. Sealant thickness must fill gap beneath Infiltrator Pipe Adapter Ring.
4. Align the Infiltrator Pipe Adapter Ring with the tank opening by lining up the arrows on the Infiltrator 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 tank opening using ten #14 x 2” stainless steel SNAPPAR-2400-to-tank screws. Tighten in a star pattern. Repeat the star pattern at least twice, without over-tightening screws.
6. Mark four evenly distributed locations on inside of the 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 four 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 the HDPE pipe to the Infiltrator Pipe Adapter Ring using four #12 x 1¼” 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 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 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. Pre-drill 1/8” (3.5-mm) pilot holes on the inner set of templated locations on the lid. Fasten using the ten factory-supplied #14 x 2” stainless steel lid screws with washers.
Note: When using the Infiltrator lid, apply the factory-supplied, adhesive-backed 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-hour sealant cure time before testing or putting into service.

Backfilling Tank and Risers

Backfill tank and risers in lifts in accordance with Infiltrator IM- and CM-Series Septic Tank General Installation Instructions, supporting all sides of the risers as the backfill height increases.
Note: Always install and secure lids prior to backfill placement.

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- and CM-Series 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 installation. Please contact the appropriate riser manufacturer for concerns associated with anything that does not involve the tank-to-riser connection.

WARRANTY - CHAMBERS

INFILTRATOR WATER TECHNOLOGIES STANDARD LIMITED WARRANTY

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

(b) THE WARRANTY IN SUBPARAGRAPH (a) IS EXCLUSIVE. THERE ARE NO OTHER WARRANTIES WITH RESPECT TO THE CHAMBERS AND END CAPS, INCLUDING NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE. THE WARRANTY DOES NOT EXTEND TO INCIDENTAL, CONSEQUENTIAL, SPECIAL, OR INDIRECT DAMAGES. THE COMPANY SHALL NOT BE LIABLE FOR PENALTIES OR LIQUIDATED DAMAGES, INCLUDING LOSS OF PRODUCTION AND PROFITS, LABOR AND MATERIALS, OVERHEAD COSTS, OR OTHER LOSS OR EXPENSE INCURRED BY PURCHASER. SPECIFICALLY EXCLUDED FROM WARRANTY COVERAGE ARE DAMAGE TO THE UNITS DUE TO ORDINARY WEAR AND TEAR, ALTERATION, ACCIDENT, MISUSE, ABUSE, OR NEGLECT OF THE UNITS; THE UNITS BEING SUBJECTED TO STRESSES GREATER THAN THOSE PRESCRIBED IN THE INSTALLATION INSTRUCTIONS; THE PLACEMENT BY PURCHASER OF IMPROPER MATERIALS INTO THE PURCHASER'S SYSTEM; OR ANY OTHER EVENT NOT CAUSED BY THE COMPANY. FURTHERMORE, IN NO EVENT SHALL THE COMPANY BE RESPONSIBLE FOR ANY LOSS OR DAMAGE TO THE PURCHASER, THE UNITS, OR ANY THIRD PARTY RESULTING FROM ITS INSTALLATION OR SHIPMENT. PURCHASER SHALL BE SOLELY RESPONSIBLE FOR ENSURING THAT THE INSTALLATION OF THE SYSTEM IS COMPLETED IN ACCORDANCE WITH ALL APPLICABLE LAWS, CODES, RULES, AND REGULATIONS.

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

(d) All types of chamber systems must be installed in full compliance with the latest version of the product installation requirements. The system must be in full compliance with all aspects of the state regulations and codes.
e. WHEN WORKING IN FINE AND VERY FINE SANDS (LOAMY SAND AND SANDY LOAM SOILS WITH LOW MOISTURE CONTENT) IT IS AT THE CONTRACTORS' DISCRETION TO COVER THE CHAMBERS WITH A VERY FINE FILTER CLOTH (0.040 MIL) (ASTM D 4571) PRIOR TO BACKFILLING THE SYSTEM. A THICKER FILTER FABRIC OVER THE CHAMBERS MAY DEVELOP A BIOMAT IN THE CLOTH, WHICH PREVENTS THE EXFILTRATION OF EFFLUENT FROM THE CHAMBERS INTO THE SOIL. ANY OTHER FILTER FABRIC USED WILL VOID THIS WARRANTY.

NOTE: Any chamber systems constructed with less than our minimum sizing requirements will not be covered by any product warranties.

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

(f) 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.

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

WARRANTY - EZFLOW

INFILTRATOR WATER TECHNOLOGIES STANDARD LIMITED WARRANTY

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., 4 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.

WARRANTY - TANKS

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.

INFILTRATOR
water technologies

4 Business Park Road
P.O. Box 768
Old Saybrook, CT 06475
(860) 577-7000 • Fax (860) 577-7001
(800) 221-4436
www.infiltratorwater.com
info@infiltratorwater.com

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