

Installation Instructions for EZflow Systems in Nevada



Department of Health and Human Services, Health Division, Bureau of Health Protection Services, issued an approval to Infiltrator Systems Inc., **EZflow** Graveless Absorption System. This product is an alternative leach line material to be used as a replacement for approved gravel and pipe components.

1. The **EZflow** product is to be installed in accordance with the manufacturer's instructions and in accordance with the provided sizing chart.

The **EZflow** brands approved for use in the state of Nevada are the 1202H/1202H-GEO, 1203H/1203H-GEO, and the 1204S/1204S-GEO. These models are described below:

1. The 1202H/1202H-GEO consists of two 12" in diameter, EPS bundles, one beside the other in a minimum 36 inch wide trench. One EPS bundle contains a 4" perforated pipe and the other is EPS aggregate only. The perforated pipe is positioned towards the top of the trench. This model is installed in a standard three-foot deep trench.
2. The 1203H/1203H-GEO consists of three 12" in diameter, EPS bundles, one beside the other in a minimum 24 inch wide trench. One EPS bundle contains a 4" perforated pipe and the other two are EPS aggregate only. The perforated pipe is positioned towards the top of the trench. This model is installed in a standard three-foot deep trench.
3. The 1204S/1204S-GEO, consists of two 12" in diameter, EPS bundles, aggregate only, one beside the other in the bottom of a minimum 24 inch wide trench. Two additional EPS bundles are placed on top of the first two. One of these EPS bundles contains a 4" perforated pipe and the other is EPS aggregate only. The perforated pipe is positioned towards the top of the trench. This model is installed in a standard four-foot deep trench.

Materials and Equipment needed

- **EZflow** Bundles
- **EZflow** Internal Pipe Couplers
- **EZflow** Versa Couplers (optional)
- Barrier Material (if not using a GEO product)
- Pipe for Header and Inlet
- Watertight distribution box as needed
- Backhoe

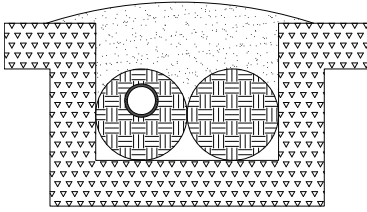
Installation Instructions

1. The instructions for installation of **EZflow** products are given below. This product must be installed in accordance with NAC 444 (Sewage Disposal).
2. In cases where linear footage required is not in multiples of ten, the installer may (a) reduce the product to the needed length and refasten the netting to the pipe or, (b) use an additional 5 or 10 feet of product to exceed the required trench length.
3. After the local health department 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 EPS pipe bundles.

4. All sites shall meet applicable site, soil, location, separation distance and construction criteria as required by NAC 444 (Sewage Disposal).
 5. The top of each 1202H-GEO, 1203H-GEO, and 1204S-GEO cylinder contains a filter fabric pre-manufactured in between the netting and aggregate. The fabric is inserted to prevent soil intrusion. The installer shall make sure that the fabric is positioned upward and is in contact with the fabric contained in the adjacent cylinder before backfilling.
 6. If not using a GEO product, **EZflow** systems require covering over the top of the system with an untreated building paper or other approved barrier materials.
 7. Remove **EZflow** stretch wrap prior to placing bundles in the trench(es). Remove any stretch wrap in the trench before system is covered.
 8. Place **EZflow** bundle(s) in the **EZflow** configuration approved by system design permit specified for the particular site. The top or center-most bundles containing pipe are joined end to end with an internal pipe coupler. Any additional aggregate only bundles that may be required, should be butted against the other aggregate-only bundles and do not require any type of connection.
 9. If smearing or glazing of trench sidewalls and bottom has occurred in soils containing enough clay or silt, it is recommended that these soil surfaces be raked or scarified.
 10. The proper elevation of solid PVC effluent pipe going to each trench should be determined to ensure compliance with the required maximum trench bottom depth as shown on the approved permit. This height may vary dependent on system height and configuration that is used.
 11. Leach lines shall not be installed under driveways, parking areas, or other impervious coverings.
 12. The bottom of the trench shall be level or sloped a maximum of 2 inches per 100 feet.
 13. Excavate trench to permitted/approved width/depth.
 14. Tight lines shall connect leach lines with distribution boxes. Distribution boxes shall meet the criteria of Sec. 68.344.
 15. Soil backfill shall be a minimum of six inches and follow **EZflow** guidelines. Soil within 6" of the bundles shall be loosely placed and not compacted.
 16. Final cover above the effluent trenches shall be graded to reduce infiltrator of surface water and minimize erosion.
- Repeat steps 1 through 16 for each required trench.

Approved EZflow Products

EZflow 1202H

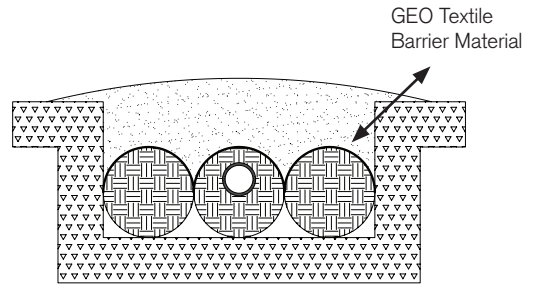


EZflow 1202H

SIZING EXAMPLE: 300 sq. ft. required
 $300 \text{ sf} \div 3.0 \text{ sf/lf} = 100 \text{ lf}$ required

Properties & Specifications	
Overall System Height	12"
Trench Width	24"
Trench Depth	36"
Trench Sizing	3.0 sf/lf

EZflow 1203H-GEO

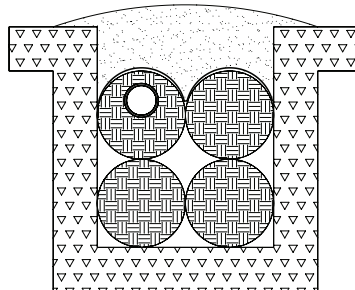


EZflow 1203H

SIZING EXAMPLE: 300 sq. ft. required
 $300 \text{ sf} \div 4.0 \text{ sf/lf} = 75 \text{ lf}$ required

Properties & Specifications	
Overall System Height	12"
Trench Width	36"
Trench Depth	48"
Trench Sizing	4.0 sf/lf

EZflow 1204S



EZflow 1204S

SIZING EXAMPLE: 300 sq. ft. required
 $300 \text{ sf} \div 5.0 \text{ sf/lf} = 60 \text{ lf}$ required

Properties & Specifications	
Overall System Height	24"
Trench Width	24"
Trench Depth	48"
Trench Sizing	5.0 sf/lf

Unit	Dimensions W x H (in.)	Trench Width	Leaching Area (SF/LF)
1202H	24 x 12	24"	3.0
1203H	36 x 12	36"	4.0
1204S	24 x 24	24"	5.0

Nevada Sizing Chart for EZflow Disposal Field Systems		RING INDUSTRIAL GROUP, LP												
		SEPTIC TANK SIZE												
		1000 Gallon Tank 3 BRs or less (Maximum Fixture Units Served: 0-20)		1200 Gallon Tank 4 BRs (Maximum Fixture Units Served: 21-25)		1500 Gallon Tank 5 or 6 BRs (Maximum Fixture Units Served: 26-33)								
Percolation Rate (Min./Inch)	Square Feet Gravel Required	1202H-GEO 2'W x 1'H x 10'L		1204S & 1204S-GEO 2'W x 2'H x 10'L		1203H & 1203H-GEO 3'W x 1'H x 10'L		Square Feet Gravel Required		Sizing 3.0 SF/LF		Sizing 5.0 SF/LF		Design Application Rate (Gal / SF)
		Sizing 3.0 SF/LF	Sizing 5.0 SF/LF	Sizing 3.0 SF/LF	Sizing 5.0 SF/LF	Sizing 3.0 SF/LF	Sizing 5.0 SF/LF	Sizing 3.0 SF/LF	Sizing 5.0 SF/LF	Sizing 3.0 SF/LF	Sizing 5.0 SF/LF			
10 or less	SF	438	438	438	438	525	525	525	525	938	657	657	657	1.6
	Units	15	9	11	11	18	11	14	14		22	14	17	
11-15	SF	538	538	538	538	646	646	646	646	1154	808	808	808	1.3
	Units	18	11	14	14	22	13	17	17		27	17	21	
16-20	SF	636	636	636	636	764	764	764	764	1364	955	955	955	1.1
	Units	22	13	16	16	26	16	20	20		32	20	24	
21-25	SF	700	700	700	700	840	840	840	840	1500	1050	1050	1050	1.0
	Units	24	14	18	18	28	17	21	21		35	21	27	
26-30	SF	778	778	778	778	933	933	933	933	1667	1167	1167	1167	0.9
	Units	26	18	20	20	32	19	24	24		39	24	20	
31-40	SF	875	875	875	875	1050	1050	1050	1050	1875	1313	1313	1313	0.8
	Units	30	18	22	22	35	21	27	27		44	27	33	
41-50	SF	1000	1000	1000	1000	1200	1200	1200	1200	2143	1500	1500	1500	0.7
	Units	34	21	26	26	40	24	30	30		51	31	38	
51-60	SF	1167	1167	1167	1167	1400	1400	1400	1400	2500	1750	1750	1750	0.6
	Units	39	24	30	30	47	28	35	35		59	35	44	

Note: For percolation rates above (slower) than 60 min./in. an engineered design is required per NAC 444.8354-9.

Combines design sidewall height for 1201H is 1.0 ft, 1204S is 3.0 Ft, 1203H is 1.0 Ft.

The maximum length of a distribution line may not exceed 110 linear feet and a minimum of two trenches of equivalent lengths are required per NAC 444.8354.3.

Absorption beds - If the **EZflow** System is used in conjunction with an absorption bed, the bed must comply with the requirements relating to the sizing for absorption beds set forth in NAC 444.8358 and 444.836) and should not use this sizing chart.

After the system has been completely covered, only drive across the trenches when completely necessary. Never drive along the leach trench lines. To avoid additional soil compaction, prevent any heavy equipment from driving across or along the leach field area.

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

Maintenance

The owner of the system shall at all times properly operate and maintain the onsite sewage disposal system. Only sanitary sewage shall be introduced into the system.

EZ_{flow} Inspection

An inspection is required by the Department prior to backfilling.

Septic tank, header pipe, distribution box, leach trench bottom, grade, depth, and cover shall be in accordance with County Manual, criteria or policy and shall be installed per **EZ_{flow}** Manufacturer's Installation Guide.



INFILTRATOR[®]
systems inc.

6 Business Park Road • Old Saybrook, CT 06475 • 800.689.7759