

Installation Instructions for EZflow Systems in South Carolina



The South Carolina Department of Environmental Control approved the use of **EZflow** by Infiltrator brand drainfield system as a replacement for conventional drain media in both residential and commercial applications. **EZflow** drainfield systems can be designed and installed for gravity and pressure-dosed effluent disposal, serial/drop box distribution, and equal distribution. Systems for residential single family dwelling units shall be sized in accordance with Title 44, Chapter 55, Article 14 (HB 3939). Systems for commercial use shall be sized in accordance with Reg. 61-56.

The South Carolina Department of Health and Environmental Control, Division of Onsite Wastewater Management hereby approves the **EZflow** products with geotextile fabric added for use in South Carolina. It will be sized the same as the existing product designs. This approval includes all **EZflow** system designs.

Infiltrator Systems Inc. shall certify installers during or prior to their first installation as having passed **EZflow** Certification Training. This designation certifies that the installer has passed **EZflow** Certified Training as required by Title 44, Chapter 55, Article 14 (HB3939).

Materials and Equipment needed

- **EZflow** Bundles
- **EZflow** Barrier Paper
- **EZflow** Internal Pipe Couplers
- Pipe for Header and Inlet
- Backhoe
- Laser, Transit, or Level
- Shovel & Rake

Installation Instructions

The instructions for installation of **EZflow** products are given below. This product must be installed in accordance with the appropriate state regulations and codes, as well as the local health department's current design manual.

In cases where linear footage required is not in multiples of 10, the installer may (a) reduce the product to the needed length and refasten the netting to the pipe or, (b) use an additional 5 or 10 feet of product to exceed the required trench length.

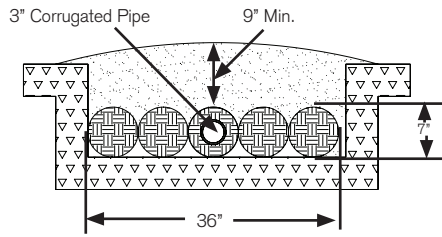
1. After the local health department has determined sizing, configuration, and layout for the **EZflow** systems, stake or mark with paint the location of trenches and lines. Be careful to set correct tank, invert pipe, header line or distribution box and trench bottom elevations before installation of pipe bundles. All sites shall meet applicable site, soil, and construction criteria in accordance with the Regulation 61-56, Individual Waste Disposal Systems.
2. If smearing or glazing of trench sidewalls and bottom has occurred in clay soils, it is recommended that these soil surfaces be raked or scarified.
3. 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.

4. Absorption Area Sizing shall be based on Manufacturer's Sizing under Title 44, Chapter 55, Article 14 (HB3939). The total physical trench bottom area shall not be less than 300 square feet for any residential system and must provide a reserve area of at least 50% of the installed system. Absorption trenches shall be placed on contour. The lateral separation of the trenches shall not be less than 7 feet between each trench. The bottom of each absorption trench shall conform to state regulations.
5. Remove plastic **EZflow** stretch wrap prior to placing bundles in the trench(es). Remove any plastic wrap in the trench before system is covered.
6. 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.
7. The top of each GEO cylinder contains a filter fabric pre-manufactured in between the netting and aggregate. The fabric is inserted to prevent soil intrusion. The installer shall make sure that the fabric is on top and is in contact with the fabric contained in the adjacent cylinder before backfilling.
8. Header or lead lines from distribution box or device will be connected to the top or center-most pipe bundle in each trench or inserted into the pipe.
9. **EZflow** EPS bundles are flexible and can fit in curved trenches as may be necessary to avoid trees, boulders, or other obstacles.
10. If not using a GEO product, **EZflow** systems require covering over the top of the system with an untreated building paper.
11. The soil cover over the nitrification field should be to a depth of at least nine inches.
12. Backfill should be of native soil. Soil within 6" of the EPS bundles shall be loosely placed and not compacted.
13. The finished grade over the nitrification field should be landscaped to prevent the ponding of surface water.
14. The trench top shall be compacted to minimize settling. The trench top shall also be shaped or mounded to ensure surface water runoff.

Repeat steps 1 thru 14 for each required trench.

Approved EZflow Products (Title 44, Chapter 55, Article 14 (HB3939) for Residential)

EZflow 0705H/0705H-GEO Shallow and Ultra Shallow 6" Gravel Replacement

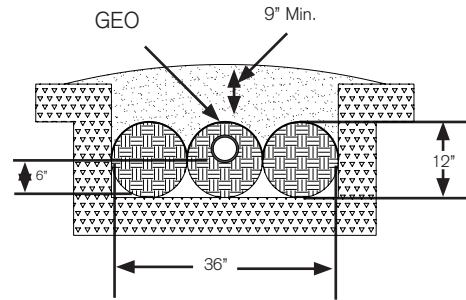


EXAMPLE: 900 sq ft. required
 $900 \text{ sf} \div 2.67 \text{ sf per lf} = 337 \text{ lf required}$

Properties and Specifications

Approved Sizing	2.67 sf/lf
Percent Trench Length Reduction	25%
Minimum Inlet Invert Height	2.0 in.

EZflow 1203H/1203H-GEO

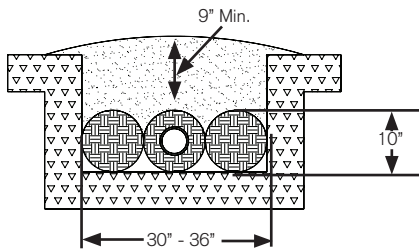


EXAMPLE: 900 sq ft. required
 $900 \text{ sf} \div 4.5 \text{ sf per ft} = 200 \text{ lf required}$

Properties and Specifications

Approved Sizing	4.5 sf/lf
Percent Trench Length Reduction	33%
Minimum Inlet Invert Height	6.0 in.

EZflow 1003H/1003H-GEO 9" Gravel Replacement

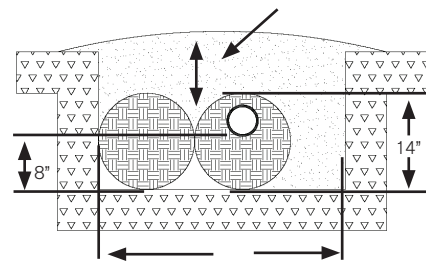


EXAMPLE: 900 sq ft. required
 $900 \text{ sf} \div 3.07 \text{ sf per ft} = 293 \text{ lf required}$

Properties and Specifications

Approved Sizing	3.07 sf/lf
Percent Trench Length Reduction	25%
Minimum Inlet Invert Height	3.0 in.

EZflow 1402H/1402H-GEO

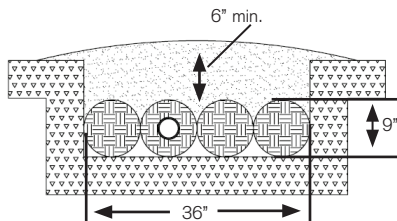


EXAMPLE: 900 sq ft. required
 $900 \text{ sf} \div 3.49 \text{ sf per ft} = 258 \text{ lf required}$

Properties and Specifications

Approved Sizing	3.49 sf/lf
Percent Trench Length Reduction	14%
Minimum Inlet Invert Height	8.0 in.

EZflow 0904H/0904H-GEO 9" Gravel Replacement

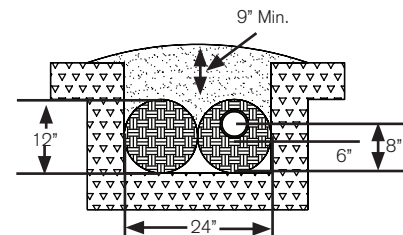


EXAMPLE: 900 sq ft. required
 $900 \text{ sf} \div 3.00 \text{ sf per ft} = 300 \text{ lf required}$

Properties and Specifications

Approved Sizing	3.00 sf/lf
Percent Trench Length Reduction	0%
Minimum Inlet Invert Height	2.5 in.

EZflow 1202H/1202H-GEO

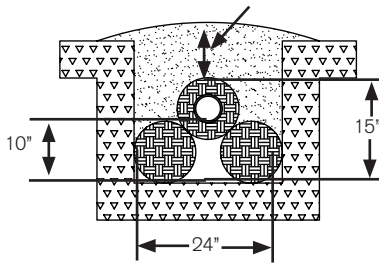


Properties and Specifications

Approved Sizing	3.00 sf/lf
Percent Trench Length Reduction	0%
Minimum Inlet Invert Height	6.0 in.

Approved EZ_{flow} Products for Residential and Commercial Applications

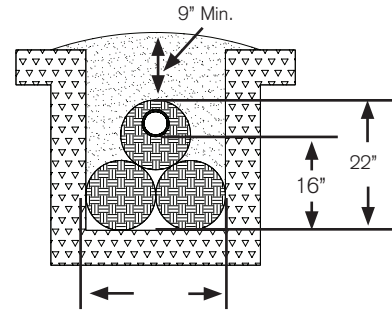
EZ_{flow} 1003T/1003T-GEO



Properties and Specifications

Approved Sizing	2.26 sf/lf
Minimum Inlet Invert Height	10.0 in.

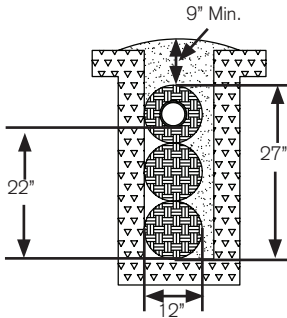
EZ_{flow} 1203T/1203T-GEO



Properties and Specifications

Approved Sizing	3.19 sf/lf
Minimum Inlet Invert Height	16.0 in.

EZ_{flow} 1003V/1003V-GEO

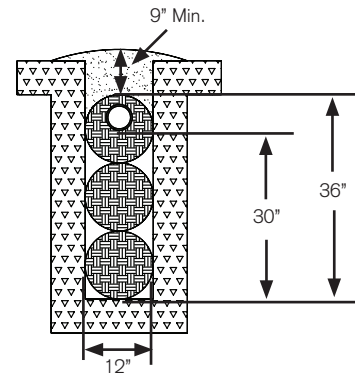


EXAMPLE: 900 sq ft. required
 $900 \text{ sf} \div 3.33 \text{ sf per ft} = 270 \text{ lf required}$

Properties and Specifications

Approved Sizing	3.33 sf/lf
Minimum Inlet Invert Height	22.0 in.

EZ_{flow} 1203V/1203V-GEO

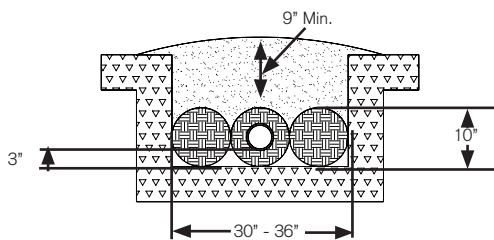


EXAMPLE: 900 sq ft. required
 $900 \text{ sf} \div 3.95 \text{ sf per ft} = 228 \text{ lf required}$

Properties and Specifications

Approved Sizing	3.95 sf/lf
Minimum Inlet Invert Height	30.0 in.

EZ_{flow} 1003H/1003H-GEO

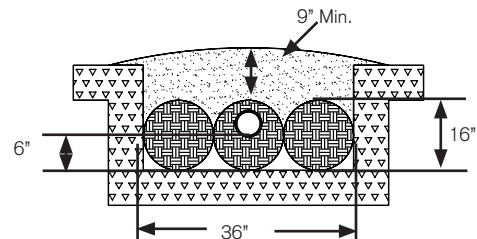


EXAMPLE: 900 sq ft. required
 $900 \text{ sf} \div 3.07 \text{ sf per ft} = 293 \text{ lf required}$

Properties and Specifications

Approved Sizing	3.07 sf/lf
Minimum Inlet Invert Height	3.0 in.

EZ_{flow} 1203H/1203H-GEO



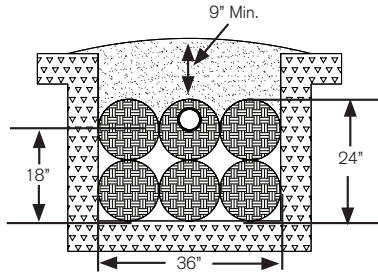
EXAMPLE: 900 sq ft. required
 $900 \text{ sf} \div 4.54 \text{ sf per ft} = 198 \text{ lf required}$

Properties and Specifications

Approved Sizing	4.54 sf/lf
Minimum Inlet Invert Height	6.0 in.

South Carolina State Approved **EZ_{flow}** Products (cont'd)
for Residential and Commercial Applications

EZ_{flow} 1206H/1206H-GEO

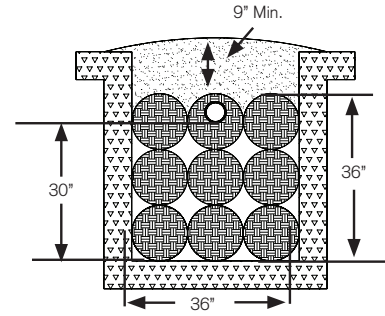


EXAMPLE: - 900 sq ft. required
900 sf ÷ 3.94 sf per ft = 228 lf required

Properties and Specifications

Approved Sizing	3.94 sf/lf
Minimum Inlet Invert Height	18.0 in.

EZ_{flow} 1209H/1209H-GEO

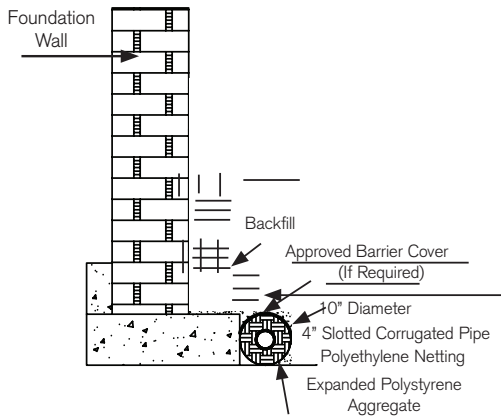


EXAMPLE: - 900 sq ft. required
900 sf ÷ 4.83 sf per ft = 186 lf required

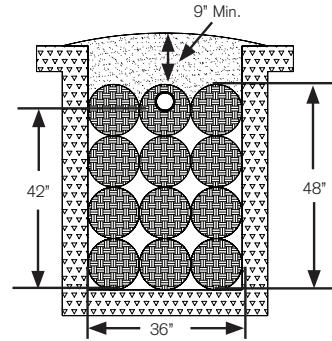
Properties and Specifications

Approved Sizing	4.83 sf/lf
Minimum Inlet Invert Height	30.0 in.

Foundation Drain Detail



EZ_{flow} 1212H/1212H-GEO



EXAMPLE: - 900 sq ft. required
900 sf ÷ 6.02 sf per ft = 150 lf required

Properties and Specifications

Approved Sizing	6.02 sf/lf
Minimum Inlet Invert Height	42.0 in.



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