



ICC Evaluation Service, Inc.
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The Subcommittee on Evaluation has reviewed the data submitted for compliance with the Standard Building Code®, the Standard Plumbing Code®, the Florida Building Code - Building, the International Private Sewage Disposal Code, and the International One and Two Family Dwelling Code and submits to the Building Official or other authority having jurisdiction the following report. The Subcommittee on Evaluation, and ICC-ES and its staff are not responsible for any errors or omissions to any documents, calculations, drawings, specifications, tests or summaries prepared and submitted by the design professional or preparer of record that are listed in the Substantiating Data Section of this report.

REPORT NO.: 2226

EXPIRES: See the current EVALUATION REPORT INDEX

CATEGORY: FOUNDATION SYSTEMS

SUBMITTED BY:

RING INDUSTRIAL GROUP
EZ FLOW BRANDS
65 INDUSTRIAL PARK ROAD
OAKLAND, TENNESSEE 38060

1. PRODUCT TRADE NAME

- 1.1 EZflow 0701
1.2 EZflow 1001
1.3 EZflow 1201

2. SCOPE OF EVALUATION

Footing drain and septic tank drain lines

3. USES

Footing and foundation drainage and septic tank drain lines.

4. DESCRIPTION

4.1 EZflow 0701

The EZflow 0701 is a prefabricated drainage system designed to replace stone aggregated subsurface drains. It consists of a 3 inch (51 mm) diameter perforated corrugated plastic pipe surrounded by 2 inches (51 mm) of aggregate. The aggregate is an expanded polystyrene (EPS) and is held in place with a polyethylene netting. The aggregate is treated with calcium stearate. It is supplied in 10 foot (3 m) long sections.

4.2 EZflow 1001

The EZflow 1001 is a prefabricated drainage system designed to replace stone aggregated subsurface drains. It consists of a 4 inch (102 mm) diameter perforated corrugated plastic pipe surrounded by 3 inches (76 mm) of aggregate. The aggregate is an expanded polystyrene and is held in place with a polyethylene or geo-textile netting. The aggregate is treated with calcium stearate. It is supplied in 10 foot (3 m) long sections.

4.3 EZflow 1201

The EZflow 1201 is a prefabricated drainage system designed to replace stone aggregated subsurface drains. It consists of a 4 inch (102 mm) diameter perforated corrugated plastic pipe surrounded by 4 inches (102 mm) of aggregate. The aggregate is an expanded polystyrene and is held in place with a polyethylene or geo-textile netting. The aggregate is treated with calcium stearate. It is supplied in 10 foot (3 m) long sections.

4.4 Septic Tank Drain Lines

EZflow 1001 and EZflow 1201 may be used for septic tank drain lines. When used as septic tank drain lines, one or more bundles of only EPS aggregate are placed in the trench with the drain lines.

5. INSTALLATION

5.1 General

The manufacturer's published installation instructions shall be strictly adhered to and a copy of these instructions shall be available at all times on the jobsite during installation.

5.2 Foundation Drains

The EZflow 0701 is installed on foundation walls that are up to five concrete masonry units high [42 inches (1067 mm)]. The maximum allowable length of the drain is 220 feet (67 m).

The EZflow 1001 is installed on foundation walls that are up to 20 concrete masonry units high [170 inches (4318 mm)].

The EZflow 1201 is installed on foundation walls that are greater than 20 concrete masonry units high [170 inches (4318 mm)].

5.3 Septic Tank Drain Lines

See the manufacturer's installation instructions to determine the required length of the drain for the applicable installation configuration.

FINAL REPORT

ICC-ES legacy reports are not to be construed as representing aesthetics or any other attributes not specifically addressed, nor are they to be construed as an endorsement of the subject of the report or a recommendation for its use. There is no warranty by ICC Evaluation Service, Inc., express or implied, as to any finding or other matter in this report, or as to any product covered by the report.



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**6. SUBSTANTIATING DATA**

- 6.1 Manufacturer's specifications, drawings, and installation instructions.
- 6.2 Engineering calculations titled "Flow Calculations for a Twelve-Inch Gravel Trench and EZflow 1201, 1001, and 601", dated January 18, 2002, signed and sealed by Robert A. Beem, P.E.
- 6.3 Technical paper titled "Sizing of a Geosynthetic Drainage System Used in Septic Tank Drainfields", by J.P. Giroud, K.L. Soderman, and K.O. Pankow; signed and sealed by K.O. Pankow, P.E.

**7. CODE REFERENCES***Standard Building Code - 1999 Edition*

Section 103.7	Alternate Materials and Methods
Section 1814.3	Dampproofing
Section 2603.3	Protection from Termite Damage

*Standard Plumbing Code - 1994 Edition with 1995/1996/1997 Revisions*

Section 103.7	Alternate Materials and Methods
Section E106	Disposal Fields

*International Private Sewage Disposal Code - 1997 Edition*

Section 105.2	Alternate Materials, Methods and Equipment
Section 505.1.1	Distribution Pipe
Section 605	Installation of Conventional Soil Absorption Systems

*International One and Two Family Dwelling Code - 1998 Edition*

Section 108	Alternate Materials and Systems
Section 317.5	Termite Damage
Section 323.4	Foam Plastic Protection
Section 401.3	Drainage
Section 405	Foundation Drainage
Section 3808	Drain Lines

*Florida Building Code, Building - 2001 Edition*

Section 103.7	Alternate Materials and Methods
Section 1814.3	Dampproofing
Section 2603.3	Protection from Termite Damage

**8. COMMITTEE FINDINGS**

The Subcommittee on Evaluation in review of the data submitted finds that, in their opinion, EZflow 0701, EZflow 1001, and EZflow 1201 as described in this report conform with or are suitable alternates to that specified in the *Standard Building Code*, the *Standard Plumbing Code*, the *Florida Building Code - Building*, the *International Private Sewage Disposal Code*, and the *International One and Two Family Dwelling Code* or Supplements thereto.

**9. LIMITATIONS**

- 9.1 An approved filter membrane shall be used with EZflow foundation drain systems in accordance with the code.
- 9.2 Where required by Section 2603.3 of the *Standard Building Code*, an approved method of protecting the foam plastic from subterranean termite damage shall be provided.
- 9.3 An untreated 60 lb kraft paper shall be used with EZflow septic tank drain line systems.
- 9.4 Calculations shall be submitted to the authority having jurisdiction showing that the septic tank drain line system provides the required drainage field area when applying for permit.

**10. IDENTIFICATION**

All packaging of EZflow 0701, EZflow 1001, and EZflow 1201 shall bear the manufacturer's name and/or trademark, the SBCCI Public Safety Testing and Evaluation Service, Inc. initials (SBCCI PST & ESI) or seal, and the number of this report for field identification.

**11. PERIOD OF ISSUANCE**

SEE THE CURRENT EVALUATION REPORT INDEX FOR STATUS OF THIS LEGACY EVALUATION REPORT.

For information on this report contact:  
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