



Department of Commerce

Safety & Buildings Division

201 West Washington Avenue

P.O. Box 2689

Madison, WI 53701-2689

Approval #

980069-U (Replaces 970045-U)

Wisconsin Material Approval

Material

Geoflex-S, Geoflex-D and GeoVent
Nonmetallic Underground Piping

Manufacturer

Environ Products, Inc.
620 Pennsylvania Drive
Exton, PA 19341

SCOPE OF APPROVAL

Geoflex-S nonmetallic underground carrier piping, Geoflex-D nonmetallic underground carrier piping and secondary containment, and GeoVent flexible vent pipe, manufactured by Environ Products, Inc., were evaluated for use as piping for underground storage tank systems in accordance with s. **ILHR 10.51 (2)** of the Wisconsin Flammable and Combustible Liquids Code.

DESCRIPTION AND USE

Geoflex-S is UL-listed single wall piping available in 3/4, 1-1/2, 2 and 3 inch diameters. It has full compatibility with petroleum products, alcohols and their blends. Geoflex-D is double wall piping with UL-listed primary piping and secondary containment. It has full compatibility with petroleum products, alcohols and their blends.

Geoflex-S and Geoflex-D primary piping consists of four layers, with three being thermoplastic and one being a braided reinforcement. With Geoflex-D, a polyethylene secondary containment jacket forms a fifth layer with a small annular space. Tees and elbow fittings are zinc-coated ductile iron. Couplings and adaptor fittings are stainless steel and are designed to be mechanically joined in the field.

GeoVent flexible vent pipe is used to vent vapors from underground storage tanks. It is used to contain and transfer the vapors and condensate from both petroleum and alcohol-based fuels. It consists of an inner containment layer to resist permeation, a braided reinforcement layer, and an outer layer designed for long-term burial protection. It is not intended to be used to transfer fluids. GeoVent is UL listed for use with petroleum products, alcohols and their blends.

TESTS AND RESULTS

The 3/4, 1-1/2, 2 and 3 inch diameter Geoflex-S; the 1-1/2, 2 and 3 inch diameter Geoflex-D; and the 2 in. diameter GeoVent products have all been tested and listed to the appropriate UL Standard and are eligible for UL Follow-Up Service.

LIMITATIONS OF APPROVAL

Geoflex-S and Geoflex-D carrier piping are approved as meeting the design and construction standards for underground piping as specified in **s. ILHR 10.51 (2)**.

Geoflex and GeoVent piping are approved for installation without the flex connectors specified in **s. ILHR 10.51 (2)(e)**.

Geoflex and GeoVent are approved for underground (buried) installations only. A maximum of 3 inches of low melting point materials may be exposed at the point where the piping enters a sump.

Installation, use and maintenance of all products shall be in accordance with the manufacturer's recommendations and this approval. In the event of conflicts, the more strict requirement shall govern.

Leak detection for the piping system shall be provided in accordance with **s. ILHR 10.60 (2)**. The specific leak detection system must be shown on the plans that are submitted for review in accordance with **s. ILHR 10.10**. Automatic line leak detectors and line tightness testing methods must be specifically approved for use with flexible piping in accordance with **s. ILHR 10.125**. (Note: Evaluation of these leak detection methods with the standard EPA protocol does not demonstrate acceptability for use with flexible piping.)

The Geoflex-D secondary containment jacket is approved for use as a secondary barrier for interstitial monitoring systems in compliance with **s. ILHR 10.61 (7)(b)**.

This approval will be valid through December 31, 2003, unless manufacturing modifications are made to the product or a re-examination is deemed necessary by the department. The Wisconsin Material Approval Number must be provided when plans that include this product are submitted for review.

DISCLAIMER

The department is in no way endorsing or advertising this product. This approval addresses only the specified applications for the product and does not waive any code requirement not specified in this document.

Reviewed by: _____

Approval Date: _____ By: _____

Duane Hubeler, P.E.
Mechanical Code Consultant
Program Development Bureau

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