TURNER'S SEPTIC SERVICE, INC.

A PREFABRICATED STANDARD DRAINFIELD SYSTEM

PolyRock

Trenches ♦ Beds ♦ Mounds

MANUFACTURED, INSTALLED and DISTRIBUTED
BY
TURNER'S SEPTIC SERVICE, INC.

STATE OF FLORIDA INSTALLATION MANUAL

<u>Turner's Septic Service, Inc. Installations - Florida Specific</u>
<u>Guidelines</u>

Version April 25, 2014 Approved Florida Department of Health, Onsite Sewage Programs

GENERAL STANDARDS FOR ONSITE SEWAGE TREATMENT AND DISPOSAL SYSTEMS PER STATE OF FLORIDA DEPARTMENT OF HEALTH (DOH) UNDER CHAPTER 64E OF THE FLORIDA ADMINISTRATIVE CODE SHALL BE FOLLOWED

- 1. A construction permit for each individual system must be obtained from the health department having jurisdiction prior to the start of construction.
- 2. PolyRock is designed to be installed in any application where a standard subsurface drainfield system is allowed. It may also be used in mound and fill applications. It is not intended for use as a subsurface drainfield system in areas where standard subsurface absorption field systems would be prohibited due to poor permeability, high groundwater, or insufficient depth to bedrock or other such limitations.
- 3. The absorption field size must be calculated using the estimated sewage flows and the soil loading rates for drainfield systems set by the Department in Chapter 64E-6 in the Florida Administrative Code, Standards for Onsite Sewage Treatment and Disposal Systems. One (1) linear foot of Turner Septic Service, Inc.'s PolyRock is equivalent to 4.00 sq. ft. of mineral aggregate and meets all the standards of Chapter 64E-6 in the F.A.C.

<u>TURNER'S SEPTIC SERVICE, INC. INSTRUCTIONS – GENERAL</u> GUIDELINES:

Prior to installation, Turner's Septic Service, Inc. or its representatives must certify the installers of Turner's Septic Service, Inc.'s products as having passed the Turner's Septic Service, Inc. Certified Training Program.

The TURNER'S SEPTIC SERVICE, INC. PolyRock Drainage System comes in 12-inch diameter, 10-foot long cylinders.

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INSTRUCTIONS

1. Before installing the TURNER'S SEPTIC SERVICE, INC. PolyRock Drainage System, the infiltrative surface should be level in all directions (both across and along the infiltrative surface bottom) or with a downward slope not exceeding l-inch per 10-feet with all continuous adjoining cylindrical bundles placed end to end, with central cylinder distribution pipe interconnected, without any dams, stepdowns or other water stops.

Trench systems shall have a minimum 24-inch separation between the sidewalls of adjacent trenches, unless otherwise specified.

- 2. The plastic wrap or bag *must be removed <u>before</u>* the three-cylinder bundles are placed in the trenches or beds.
- 3. Place PolyRock unit(s) in the TURNER'S SEPTIC SERVICE, INC. configuration approved by the System Design Permit specified for the particular site. The center-most cylinder containing pipe is joined end to end to the pipe in the incoming bundle's center cylinder with an internal pipe coupler. Aggregate cylinders with no pipe shall be butted against the other aggregate cylinders with no pipe and do not require any type of connection.
- 4. The center-most TURNER'S SEPTIC SERVICE, INC. PolyRock cylinder in the first bundle at the head of the trench or bed shall be connected to the distribution box or header pipe.

At the distal end of the system, distribution pipes within each TURNER'S SEPTIC SERVICE, INC. PolyRock bundle or bed shall be connected in a continuous circuit, capped, or sealed in accordance with 64E-6 Florida Administrative Code:

NOTE: The TURNER'S SEPTIC SERVICE, INC. PolyRock Drainage System may be used in gravity fed, dosed, lift dosed, and low-pressure distribution systems. In low-pressure dosed systems, the small diameter pipe is placed within the distribution pipe in the center cylinder of each bundle. All sections of 64E-6 Florida Administrative Code apply.

5. TURNER'S SEPTIC SERVICE, INC. PolyRock units can flex and fit in curved trenches as may be necessary to avoid trees, boulders, or other obstacles in the way.

NOTE: TURNER'S SEPTIC SERVICE, INC. product identification labeling should be visible upon installation. This printing will consist of a 3" x 5" decal-type waterproof adhesive vinyl label to be applied on the center bundle which will read, "Turner's Septic Service, Inc., PolyRock, A Prefabricated Drainfield System, Telephone #: 386-649-9994".

- 6. All TURNER'S SEPTIC SERVICE, INC. products shall be covered with geo-textile fabric (Geotex NW-801 non-woven geo-textile or similar) 36-inches wide and the length of the trench. The geo-textile will act as a barrier to prevent soil from infiltrating the system.
- 7. Install cover material. The soil cover over the leaching field should be at least 6 inches in depth.

REPAIRS, MODIFICATIONS AND MAINTENANCE

The TURNER'S SEPTIC SERVICE, INC. PolyRock Drainage System may be used in the repair and/or modification of an existing drainfield.

For repairs and modifications, the TURNER'S SEPTIC SERVICE, INC. Poly Rock Drainage System may be installed in a system comprised of different drainfield media. However, it cannot be directly connected to a different product in the same drainfield line; it must be installed independently in its own line. In bed configuration, lines of different products may be placed side-by-side.

NOTE: Care should be taken that the drainfield bed bottom remains level with respect to the adjacent lines. If the line being repaired/modified is to be replaced with a bundle(s) containing perforated pipe, it should be confirmed prior to installation that its invert will match that of the existing header pipe/distribution box. If additional aggregate needs to be added to achieve either of those objectives, it should comply with subsection 64E-6.014(5)(c)1, F.A.C.

CUTTING INSTRUCTIONS OF TURNER'S SEPTIC SERVICE, INC.'S POLYROCK DRAINAGE CYLINDERS:

Cutting: Should the length of a given line of Turner's Septic Service, Inc.'s PolyRock drainage cylinder need to be adjusted, the individual cylinder units may be cut and ends be refastened. The following steps should be followed with each cylinder:

- 1. The contractor should pre-determine the bundle length that is needed;
- 2. The cylinders should be "tied-off" (tourniquet-style) at this predetermined length;
- 3. The string at the end of the taper at the end of the cylinder should be cut:
- 4. The EPS aggregate from the tie-off to the end of the cylinder should be removed;
- 5. The original tourniquet-style tie-off should be replaced with a permanent non-corrosive tie-off, e.g. nylon cable tie.
- 6. The distribution pipe can then be cut to the appropriate length.

MAINTENANCE:

The TURNER'S SEPTIC SERVICE, INC. PolyRock Drainage System requires no maintenance.

"Jetting" and use of products that inject air into the drainfield in an attempt to renovate flow are not recommended. Contact TURNER'S SEPTIC SERVICE, INC. with questions about use of these types of products.

PRODUCT DESCRIPTION

The following is a description of our Turner's Septic Service, Inc. PolyRock Drainage System: It consists of three, 12-inch diameter cylindrical units - one with a 4-inch diameter perforated plastic pipe surrounded by TURNER'S SEPTIC SERVICE, INC. EPS aggregate and encased in netting, and two similar units without pipe. Upon installation, these units will be covered with geo-textile fabric, 36-inches wide and the length of the cylinders to act as a barrier to deter the soil from falling between units. The netting will be strong enough to retain the shape of the units during system installation and backfilling. The perforated flexible plastic pipe shall meet ASTM F 405 Standard Specifications for Corrugated Plastic Pipe. Each pipe unit will be connected with an internal coupling to allow flow from one unit to the next.

The TURNER'S SEPTIC SERVICE, INC. PolyRock drainage system utilizes wastewater absorption trenches that contain units of loosely bound expanded polystyrene (EPS) in place of rock aggregate. The aggregate shall consist of "TURNER'S SEPTIC SERVICE, INC. aggregate shapes", having a particle density of 1.0 pound per cubic foot or greater, in the form of a cuboid ranging in size from 1 to 1.5 inches square by ¾ inch in thickness. When using the product with off-center pipe (oc), as approved in Florida, the unit shall be placed in the trench with 6-inches of aggregate under the pipe.

Cylindrical units are a nominal 12-inch diameter. The cylindrical units are usually used in 10-foot lengths. The expanded polystyrene (EPS) aggregate is held in a cylindrical shape with high strength polyethylene netting. The netting shall be strong enough to retain the shape of the units during system installation and backfilling, corrosion resistant, and of a mesh size to prevent loss of aggregate. At least one cylindrical unit shall contain a perforated flexible plastic pipe for connection to adjacent sections to form a continuous absorption field system. The perforated flexible plastic pipe shall meet ASTM F 405, Standard Specifications for Corrugated Polyethylene Pipe. A series of three holes, 5/8-inch (5/8") in diameter, spaced 120 degrees around the circumference are located every 4-inches along the lateral length of the pipe. Based on the manufacturer's recommendation, the hole orientation during installation may be random.

Each three-cylinder bundle of Turner's Septic Service, Inc.'s PolyRock Drainage System includes identification. The identification shall be printed on a 3" x 5" label to be placed inside the center bundle so as to be visible once installed in the trench and will appear as shown below:

Turner's Septic Service, Inc. PolyRock

A Prefabricated Drainfield System

Telephone #: 386-649-9994

POLYROCK

(36" WIDTH/12" AGGREGATE/18" DEPTH)