Introduction

The SB2 system is an advanced alternative to gravel filled soil absorption trenches for septic tanks. SB2 corrugated polyethylene tubing is encased in a factory installed Drain Guard® protective wrap. It is available in both 8-inch and 10-inch inside diameters, and in 20-foot lengths.

Site Factors & System Layout

1. SB2 may be used on any site suitable for conventional gravel drainfield lines.
2. High water tables and/or slowly permeable soils severely effect the performance of all soil absorption systems.
3. SB2 systems can utilize any method of effluent distribution used in conventional systems, i.e. distribution boxes, hillside boxes, serial distribution, manifolds, etc. For systems utilizing serial distribution, the SB2 should be installed with each line following the contour of the land. Individual lines are to be joined with a connecting lateral that provides a one inch maximum head on the upper line (Figure 1). This insures that the upper line is full to capacity before any effluent can overflow into the next line.

4. All plumbing connections between the house and the SB2 drainfield, including the septic tank, should be identical to those specified in the local regulations for conventional gravel systems.
5. All setbacks and distances from soil absorption lines to property lines, wells, lake shores, seasonal groundwater, bedrock, etc., should be specified as is required in the local rules and regulations for conventional gravel systems.
6. SB2 can be used in conjunction with any locally approved septic tank or aerobic unit.
Trench Excavation

1. Recommended trench width for the SB2 gravel-less drainfield is 18-24 inches. Tight soils may require a 24-inch wide trench to insure proper backfill around the bottom and sides of the SB2 (Figure 2).

2. Trench depth is normally 18-24 inches to allow for 6-12 inches of native soil backfill. No gravel is required. The trench must be deep enough to insure that the flow line of the septic tank is at least one inch above the top of the SB2 (Figure 3).

3. Trench lengths should not exceed the maximum allowable lengths for conventional gravel systems. The trench bottom should be level with a maximum slope of 1” per 100 lineal feet.

Pipe Installation

1. The factory installed black shipping bag must be removed prior to placement in the trench.

2. The 20-foot lengths of SB2 must be placed in the trench with the green stripe up and joined with ADS split couplings. The Drain Guard® should then be pulled over the joint to reduce soil infiltration.

3. Either plain end caps or optional inspection/cleaning ports (Figure 4) can be used at the end of each line.

4. SB2 lines should be held in place during initial backfilling to prevent movement of the pipe in the trench.

5. A loose granular soil backfill will enhance the performance of the SB2 in slowly permeable soils.

6. Large clumps and rocks should not be used as backfill.

7. All drainfield installations should be seeded as soon as possible to prevent soil erosion due to rainfall.