# *Verti-Grid* ™ product data sheet



## **Product Overview**

Product Name: Verti-Grid™ Description: Onsite Wastewater Dispersal Unit Patent Status: Patent Pending

## **Product Description**

Verti-Grid<sup>™</sup> is a modular dispersal component of an onsite wastewater system. Septic effluent is dispersed horizontally, laterally, and vertically into the native soil sidewalls of 4" to 6" narrow trenches excavated with a trenching machine.

### **Product Advantages**

- Capillary Action: Effluent is dispersed and absorbed into vertical sidewalls of narrow trenches by capillary action.
- Aerobic Conditions: Trenches remain unsaturated and aerobic due to increased volume of airspace.
- Reduced Clogging: The bottom of the trench has less biomass buildup and clogging with sidewall absorption.
- **No Stone Installation**: No need for wide trenches or large beds of gravel for distribution or percolation.
- Trencher Installation: 4"-6" wide trenches, minimum separation of 24" on center, and typically less than 30" deep
- Installation Efficiency: Save TIME and MONEY with simplified installation and reduced materials needed.
- Less Disruption: Minimal site disturbance and unwanted soil compaction compared to heavy equipment installs.
- Even Distribution: Effluent is evenly distributed and dispersed from a low-pressure dosing (LPD) system.
- Space Efficiency: Ideal replacement option for drain fields that are failing and have limited additional space.
- Low maintenance: Easy periodic maintenance and modular replacement of damaged septic field section.
- Preferable Alternative: For sites with high water table, differing trench lengths, or variable elevation contours.

# **Product Installation**

- Trenching: Use a 4" or 6" wide trenching machine to excavate trenches.
- **Connecting**: Join modules with cemented PVC couplings or add flexible PVC spa hose as needed for any variations.
- Lateral Flush Assembly: Installed at the end of each lateral for periodic flushing and cleaning of each lateral.
- Backfilling: Use native soil or clean sand for backfill, hand compacted to minimize settling.
- Manifold and Pump: Size according to Design Table 2
- Force-main / Transport Pipe: Size according to Design Table 3
- Pump Requirement: Necessary for pressure distribution to ensure uniform effluent dispersal.
- Design Parameters: Ensure less than 10% variation in effluent distribution.

## **System Layouts**





### **Product Specifications**

**Description**: Dispersal Panel of injection molded PVC with intersecting H & V grids and cells. Includes attached section of Sch 40 Rigid PVC plain end pipe to distribute effluent under low pressure, available in 1/8" or 3/16" orifice sizes. The entire assembly is covered in a porous geotextile fabric with only the ends of the pipe exposed to facilitate the assembly of the grid modules in series installed in the excavated narrow trench.

Grid Panel Size:  $36'' L \times 12'' H \times 2.5'' W$ Pipe Size: ~43'' L x 1'' ID x 1.315'' OD with pipe wall thickness of .133'' Module Weight: 10.2 pounds

Patent Status: Patent Pending

**Routine Checks**: Annual or biennial maintenance by trained professionals. Check pump and controls, measure sludge and scum depths, clean effluent filter, and flush laterals.

### **Contact Information**

Company: Better Dispersal Systems, LLC Contact: Larry Stephens, PE Phone: 517-749-1658 Email: info@betterdispersalsystems.com