

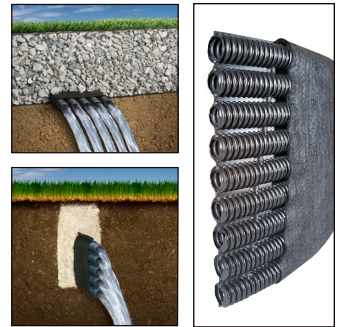
# Drainage System Overview



## What is Multi-Flow:

Multi-flow is a closed-core geocomposite drain, (tall/narrow or flat/wide). It's surrounded by a four ounce, nonwoven, needle punched geotextile fabric filter, which separates the core from backfill. Specific connectors are also made for the drain, making it attachable to other drainage products.

Its multiple-round-pipes cover a large surface area. Since it is in extensive contact with surrounding saturated soil, drainage takes place quickly. Comparatively, twelve-inch Multi-Flow has twice the surface area, and consequently twice the effectiveness, of a four-inch round pipe.



Multi-Flow is a sub-surface drainage product installed in a variety of projects:

- Athletic Fields
- Synthetic Liners
- Landscape/ Recreational
- Pond/Lagoon
- Containment
- Asphalt/Pavement
- Green Roof

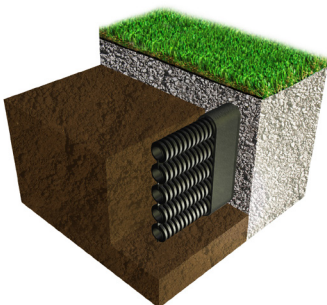
## Installation

**Flexibility:** Multi-flow is flexible making it convenient to work with, suitable for making tight turns, and easily joining to connectors. In fact Multi-Flow can be bent around a 6" radius. When rolled out horizontally Multi-Flow has very little memory, and won't curl back up.

**Durability:** Multi-Flow withstands loads well in excess of 6,000 psf, making it durable for heavy surface loads in shallow installations or earth weight in deep installations.

**Longevity:** Multi-Flow's closed-core geocomposite drain is strong, maintaining water flow. Unlike open-core products, it does not crush from pressure and usage. Primary and secondary filters also keep the drainage channels clean and open. The primary filter is sand backfill, acting as a porous, natural filter. Then, the secondary filter is heavy geotextile fabric, which surrounds Multi-Flow's core. This fabric provides further blinding protection. Its strong, pipe-shaped core and filters ensure long-term drainage.

**Versatility:** Multi-Flow's connectors attach to all types of drainage products. So, it works with any drainage project.



## Design Assistance

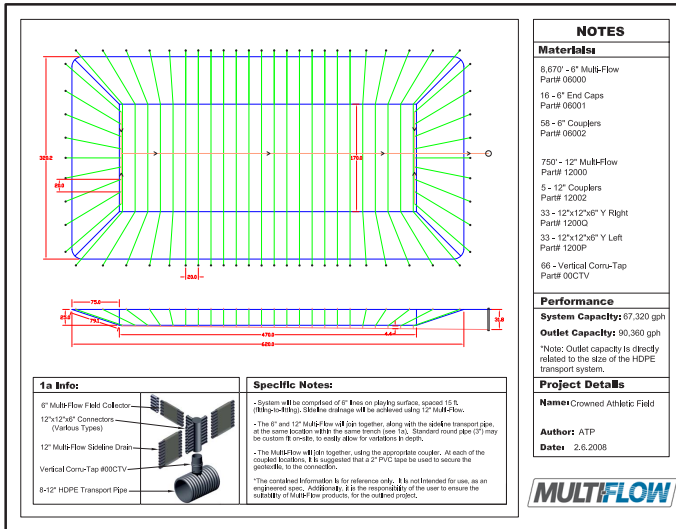
We aim to make planning and using a Multi-Flow drainage system as easy as possible. From a simple review of your plans, to a comprehensive layout, parts take-off, specification and supporting files...we are happy to help. We use the latest technology to support modern files and formats. We are happy to provide (but not limited to) the following consulting services:

- System Layouts
- Aerial Site Views
- Design Details
- Installation Cross-Sections
- 3D Renderings
- Take-Off/Quote Quantities
- Review of Existing Plans/Specs

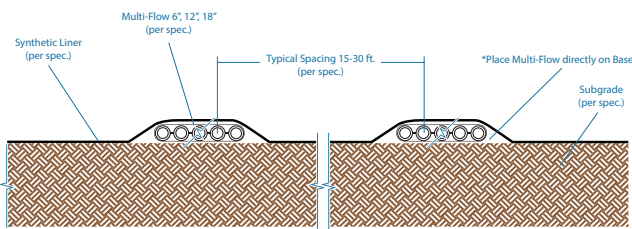
# MULTI-FLOW

# Multi-Flow Drainage Systems Overview

## Layouts



## Design Details

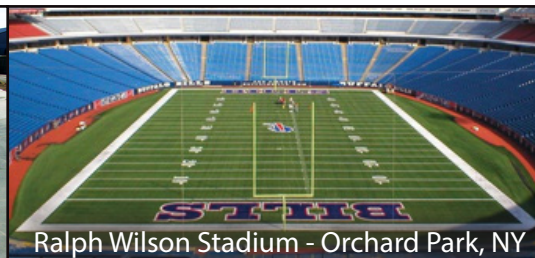


## 3D Renderings



Description	Method	Value
<b>FLOW CORE</b>		
Thickness, inches	ASTM D-1777	1.0
Flow Rate, gpm/ft*	ASTM D-4716	29
Compressive Strength, psf (modified sand method)	ASTM D-1621	6000
Perforations / sq. ft.		>300
<b>TEXTILE</b>		
Weight (oz/sq2)	ASTM D-3776	4
Tensile Strength, lb.	ASTM D-4632	100
Elongation %	ASTM D-4632	50
Puncture, lb	ASTM D-4833	50
Mullen Burst, psi	ASTM D-3786	200
Trapezoidal Tear, lb.	ASTM D-4533	42
Coefficient of Perm, cm/sec	ASTM D-4491	0.1
Flow Rate, gpm/ft2	ASTM D-4491	100
Permittivity, 1/sec	ASTM D-4491	1.8
Apparent Opening Size	ASTM D-4751	70
UV Stability, 500 hrs, %	ASTM D-4355	70
Seam Strength, lb/ft	ASTM D-4595	100
Fungus	ASTM G-21	None

\* Horizontal Test, gradient = .01, pressure = 10psi for 100 hours  
- Values given represent average roll values



Athletic | Synthetic Liner | Recreational | Containment | Green Roofs

## Overview of Company

Varicore Technologies has been providing drainage products like Multi-Flow, drainage product testing equipment, and drainage design assistance for over 25 years. Give us a call at 800.978.8007 or check us out online at [www.multi-flow.com](http://www.multi-flow.com).

