

Multi-Flow Product Catalog



Multi-*FLOW*
Professional Drainage Systems

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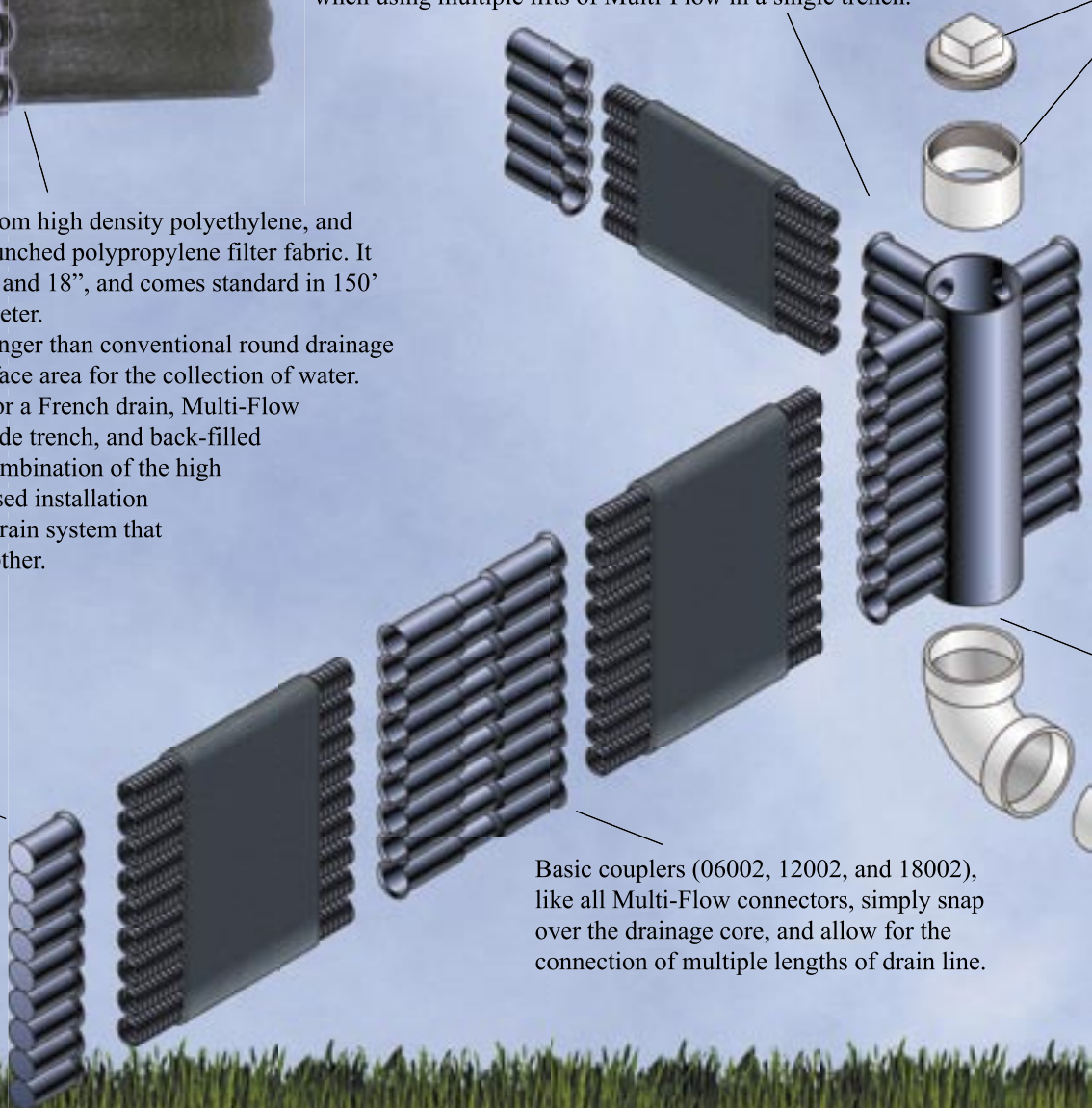


Multi-Flow offers a variety of multi-purpose reducing connectors (06005 - 0600N, 12005 - 1200Q, and 18005 - 1800Q) that allow for complete flexibility in the design of drainage patterns. These connectors can even be stacked on each other when using multiple lifts of Multi-Flow in a single trench.

Multi-Flow is manufactured from high density polyethylene, and factory wrapped in a needle-punched polypropylene filter fabric. It is available in 3 sizes, 6", 12", and 18", and comes standard in 150' lengths. Rolls have a 55" diameter.

Multi-Flow is many times stronger than conventional round drainage pipes, and has much more surface area for the collection of water. When used as a replacement for a French drain, Multi-Flow is typically installed in a 4" wide trench, and back-filled with clean coarse sand. The combination of the high quality drain core and sand based installation method results in a complete drain system that outperforms and outlasts any other.

Multi-Flow end caps (06001, 12001, and 18001) prevent infiltration of soil, and are used to close either (or both) end(s) of the drainage lines.



Basic couplers (06002, 12002, and 18002), like all Multi-Flow connectors, simply snap over the drainage core, and allow for the connection of multiple lengths of drain line.

Sand Filter

Fabric Filter



Any multi-purpose connector can be converted to an inspection port by installing a PVC adapter and plug. In many cases a 3" PVC extension is added to bring the port to the surface.

Short to intermediate lengths of drain line can be discharged into round pipes with the use of a Multi-Flow end outlet. (06004, 12004, and 18004)

Single-sided multi-purpose outlets (0600M, 1200M, and 1800M) provide a simple way to connect horizontally installed Multi-Flow to a transport system. A multi-purpose coupler (06009, 12009, or 18009) could be used in the same way to transfer water collected from two sides. Typical horizontal installations include synthetic turf, under pavers, and anywhere involving vertical limitations.

Side outlets (6003, 12003, and 18003) provide a simple way to connect a Multi-Flow system to round pipe exiting at a 90 degree angle. Typical uses include roadway, runway, or other applications that demand long runs of drainage system with frequent discharge locations.

Any multi-purpose connector can be field converted to discharge from the bottom into 3" PVC pipe or other conduits.

Collection Pipe

Outlet Connector



Endcap



#06001 Closes off an end of a 6" Multi-Flow drainage line



#12001 Closes off an end of a 12" Multi-Flow drainage line



#18001 Closes off an end of an 18" Multi-Flow drainage line

Coupler



#06002 Couples two sections of 6" Multi-Flow



#12002 Couples two sections of 12" Multi-Flow



#18002 Couples two sections of 18" Multi-Flow

Side Outlet



#06003 Couples two lines of Multi-Flow and outlets at 90° into a 3" pipe



#12003 Couples two lines of Multi-Flow and outlets at 90° into a 4" pipe



#18003 Couples two lines of Multi-Flow and outlets at 90° into a 4" pipe



End Outlet



#06004 Terminates a line of 6" Multi-Flow, outletting it into a 3" pipe



#12004 Terminates a line of 12" Multi-Flow, outletting it into a 4" pipe



#18004 Terminates a line of 18" Multi-Flow, outletting it into a 4" pipe

Multi-Purpose Connectors



All of the multi-purpose connectors can be used as outlets. Inspection ports can also be attached to any multi-purpose connector. 3-inch PVC or ABS fittings (tees, wyes, reducers, etc) can be connected by simply removing the cap on either end. Varicore stocks a limited number of these components. These can be seen on page 11.

Basic Connectors



The end outlet and side outlet make it possible to install the transport system at the same depth as the bottom of the collector system. Simply cut open the flange membrane to the desired size with a utility knife and insert the transport pipe.

Wye



#06005 6" to 6" with a 6" at 45° to the left or right



#12005 12" to 12" with a 12" at 45° to the left or right



#18005 18" to 18" with an 18" at 45° to the left or right



Double Wye



#06006 6" to 6" with a 6" at 45° to the right, and a 6" at 45° to the left



#12006 12" to 12" with a 12" at 45° to the right, and a 12" at 45° to the left



#18006 18" to 18" with an 18" at 45° to the right, and an 18" at 45° to the left

Tee



#06007 6" to 6" with a 6" at 90° to the left or right



#12007 12" to 12" with a 12" at 90° to the left or right



#18007 18" to 18" with an 18" at 90° to the left or right

Cross



#06008 6" to 6" with a 6" at 90° to the right, and a 6" at 90° to the left



#12008 12" to 12" with a 12" at 90° to the right, and a 12" at 90° to the left



#18008 18" to 18" with an 18" at 90° to the right, and an 18" at 90° to the left



Coupler



#06009 6" to 6" Used to couple two 6" lines when a bottom outlet is desired



#12009 12" to 12" Used to couple two 12" lines when a bottom outlet is desired



#18009 18" to 18" Used to couple two 18" lines when a bottom outlet is desired

Single-sided



#0600M 6" from one side only. Used to outlet a 6" line from the bottom vertically or from the side horizontally.



#1200M 12" from one side only. Used to outlet a 12" line from the bottom vertically or from the side horizontally.



#1800M 18" from one side only. Used to outlet an 18" line from the bottom vertically or from the side horizontally.

90°



#0600N 6" to 6" at a 90° to the right or left. Used when a bottom outlet is desired



#1200N 12" to 12" at a 90° to the right or left. Used when a bottom outlet is desired



#1800N 18" to 18" at a 90° to the left or right. Used when a bottom outlet is desired



Double Wye



#1200A 12" to 6" with a 6" at 45° to the right, and a 6" at 45° to the left



#1800A 18" to 6" with a 6" at 45° to the right, and a 6" at 45° to the left



#1800G 18" to 12" with a 12" at 45° to the right, and a 12" at 45° to the left

Wye Left



#1200B 12" to 6" with a 6" at 45° to the left



#1800B 18" to 6" with a 6" at 45° to the left



#1800E 18" to 12" with a 12" at 45° to the left

Wye Right



#1200C 12" to 6" with a 6" at 45° to the right



#1800C 18" to 6" with a 6" at 45° to the right



#1800F 18" to 12" with a 12" at 45° to the right



Step Down



#1200D 12" to 6" reducing coupling



#1800D 18" to 6" reducing coupling



#1800H 18" to 12" reducing coupling

Tee



#1200E 12" to 12" with a 6" at 90° to the right or left



#1800I 18" to 18" with a 6" at 90° to the right or left



#1800J 18" to 18" with a 12" at 90° to the right or left

Double Wye



#1200F 12" to 12" with a 6" at 45° to the right, and a 6" at 45° to the left



#1800K 18" to 18" with a 6" at 45° to the right, and a 6" at 45° to the left



#1800L 18" to 18" with a 12" at 45° to the right, and a 12" at 45° to the left



Wye Left



#1200P 12" to 12" with a 6" at 45° to the left



#1800P 18" to 18" with a 6" at 45° to the left

Wye Right



#1200Q 12" to 12" with a 6" at 45° to the right



#1800Q 18" to 18" with a 6" at 45° to the right

Horizontal Connectors 90°--12-inch



#1201N Connects 12" to 12" at 90°.

Tee --12-inch



#12017 Connects 12" to 12" with an additional lines of 12" at a 90° to the right or the left

Cross --12-inch



#12018 Connects 12" to 12" with two additional lines of 12" at 90° to the right and left

Double Wye -- 6-inch



#06016 Connects 6" to 6" with two additional lines of 6" at 45° to the right and left. Includes an optional bottom outlet into a 4" PVC pipe

Cross -- 6-inch



#06018 Connects 6" to 6" with two additional lines of 6" at 90° to the right and left. Includes an optional bottom outlet into a 4" PVC pipe

Photos of the 6-inch horizontal fittings are shown from what is normally used as the bottom side of the fitting, in order to display the outlet membrane. The 12-inch horizontal fittings are connectors only and do not include the outlet option.



Transport Pipe Connectors



#08RTP Rigi-Tap Connection to 8" rigid pipe



#10RTP Rigi-Tap Connection to 10" rigid pipe



#00CTV Corru-Tap Connection from vertical Multi-Flow to corrugated pipe



#06CTH Corru-Tap
Connection from 6" horizontal Multi-Flow to corrugated pipe



#12CTH Corru-Tap
Connection from 12" horizontal Multi-Flow to corrugated pipe

Miscellaneous Components



#Tape 2" X 108' PVC Pipe Tape



#ABS001 3" Female Adapter with Cleanout Plug



#ABS002 3" 45° Elbow



#ABS003 3" 90° Elbow



#ABS004 3" to 4" Bushing



#ABS005 3" to 3" Coupler



#ABS006 3" to 4" 90° Elbow



#ABS007 4" to 4" with 3" at 90°



#ABS008 3" to 3" with 3" at 90°



#ABS009 3" to 4" Reducer

Multi-Flow Technical Properties

Property	Test Method	Value
Core		
Flow Rate, gpm/ft**	ASTM D-4716	29*
Compressive Strength, psf (sand method)	ASTM D-1621	6000
Thickness, inches	ASTM D-1777	1.0
Perforations/sq ft	-----	>300
Geotextile		
Weight (oz/yd ²)	ASTM D-3776	4.0
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/ft ²	ASTM D-4491	100
Permittivity, 1/sec.	ASTM D-4491	1.8
A.O.S. Max US Std Sieve	ASTM D-4751	70
UV Stability, 500 hrs., %	ASTM D-4355	70
Seam Strength, lb./ft.	ASTM D-4595	100
Fungus	ASTM G-21	No Growth

Values represent minimum average roll values.

* Horizontal installation.

** At gradient = 0.1, compressive force = 10psi for 100 hours.



Multi-Flow is available in three sizes: 6 inch, 12 inch, and 18 inch. Standard 150-foot lengths are shipped in fifty-five inch diameter rolls.



