Introduction to Multi-Flow Drainage Systems
Direct Replacement for the French Drain
Multi-Flow has been solving drainage problems world-wide since 1988:

- Russia .............. oil field
- El Salvador .... highway
- Nova Scotia ...... highway
- Ontario .......... athletic field
- Panama .......... golf course
- Taiwan .......... playground
- Colombia .......... oil field
- Japan ............... sludge
- China ..... Beijing highway
- Indonesia ...... highways
- Mexico .......... highway
- Alberta .......... golf course
- Israel ............. water park
- Hawaii .......... hotel court
because drainage is the same all over the world. 

Water is water. 

Gravity is gravity. 

Variations in the system are needed to address only three factors:

- Rainfall amounts
- Soil types
- User expectations
Five unique features set Multi-Flow apart from all other drainage media:

A. Preferential **Shape**

B. Enclosed **Flow Channels**

C. Superior **Filter Design**

D. Exceptional **Strength**

E. Unparalleled **Flow Rates**
Unique Multi-Flow Features:

A. Preferred Shape
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1. Extra surface area means more water intake area.
1. Extra Surface Area

**Multi-Flow**
- 6” Multi-Flow
  - 168 sq. in. per foot
- 12” Multi-Flow
  - 312 sq. in. per foot
- 18” Multi-Flow
  - 456 sq. in. per foot

**Traditional Round**
- 3” round
  - 113 sq. in. per foot
- 4” round
  - 150 sq. in. per foot
- 6” round
  - 226 sq. in. per foot
1. Extra Surface Area

- Extra surface area means that water has more opportunity to enter the system.
- Product height gives Multi-Flow a profile more likely to intercept the movement of water through the ground.
- More saturated soil is in contact with drainage media.
A. Preferred Shape

1. Extra surface area means more water intake area.

2. Can be installed in a narrow trench or laid flat.
Can Be Installed in a Narrow Trench or Laid Flat

- Smaller, less expensive equipment
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B. Individual and Enclosed Flow Channels

- The geo-textile filter on Multi-Flow is not a structural part of the system. Backfill cannot force the filter into the flow channels.

- Smaller ribs mean a smoother hydraulic flow pattern especially at higher velocities.

- Built-in redundancy: if part of the system is damaged, the rest remains intact.
Multi-Flow’s channels carry water. The geo-textile is simply a filter.
Unique Multi-Flow Features:

A. Preferred Shape

B. Individual and Enclosed Flow Channels

C. Superior Filter Design
C. Superior Filter Design

The Multi-Flow drainage system employs two independents levels of protection for the drainage core.

1. The first line of defense is the sand backfill used to surround the Multi-Flow as it rests in a narrow trench.

2. Secondly, the geo-textile filter that encases the drainage core, keeps the sand from entering.
Multi-Flow comes with a

- factory-wrapped
- 4-ounce
- needle punched
- polypropylene

... fabric filter

This filter lasts longer and performs more effectively than the filters on competing products.
Primary filter: very coarse sand

Very coarse sand serves as an excellent filter for small particles of clay and silt.
Old fashioned French drain systems place the filter outside of the rock. This is fine at first.
But, inevitably they blind and slow down over time.
Eventually, they block altogether.
.8 oz. of silt/clay was removed from this 4 inch square section of blinded French drain filter.
Multi-Flow is the solution to French drain blockage because:

- Multi-Flow welcomes select sand backfill
- And coarse sand dramatically extends the life of the system.
Very coarse sand has an approximate particle size of between 1.0 and 2.0 mm
Unique Multi-Flow Features:

A. Preferred Shape

B. Individual and Enclosed Flow Channels

C. Superior Filter Design

D. Exceptional Strength
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Multi-Flow withstands in excess of 6,000 psf. That is three times the pressure exerted by a typical bulldozer!
Don’t try this with round pipe!
Even at 10,000 PSF, Multi-Flow flow rates are not seriously compromised!
Unique Multi-Flow Features:

A. Preferred Shape
B. Individual and Enclosed Flow Channels
C. Superior Filter Design
D. Exceptional Strength
E. Unparalleled Flow Rates
A line of 6 inch Multi-Flow can carry away 17 gallons of water a minute.

A line of 12 inch Multi-Flow carries 30 gallons of water a minute.

A line of 18 inch Multi-Flow carries 45 gallons of water a minute.
The narrow trench is an obvious benefit for cost and convenience.
Multi-Flow™ prefabricated drainage system provides fairway drainage on Calgary's Carnmoney golf course.
Multi-Flow can be used in civil applications:

Fresh Kills, NY – Landfill De-Watering Project
Deep drain installation (27 ft, +/-), effective in lowering Contaminated ground water level.
Leak Detection and Venting Systems (LDVS)

Agricultural, municipal, wastewater, resource mining, etc.
Civil Applications:

The largest Multi-Flow projects are civil in nature. Desaturation projects, landfill sites, leech piles, mines, and airports.
city streets, auburn, ca
landfills, landfill sites, leach piles, mines, and airports.
landfills, leach piles, mines, and airports.
End outlets and side outlets allow for the discharge of water on the same level as it is collected.

6-inch outlets have a 3” diameter. 12 and 18-inch outlets have a 4” diameter.

Simply cut away the flange membrane to the desired size using a utility knife and insert the transport pipe.
Connecting to corrugated pipe vertically or horizontally is a snap!

8. Connecting to the Transport System – Corru-Tap
Available in three sizes:

- 6-inch
- 12-inch
- 18-inch
Choose Multi-Flow
Multi-Flow is more than just a drainage system.

Multi-Flow is a comprehensive soil water management strategy. This site offers valuable design tools, a wealth of installation advice, and insightful drainage education... showing how Multi-Flow solves drainage problems simply and affordably.

Our knowledgeable design team and our helpful customer service staff are ready to answer any additional questions you might have. Have a look around to get in touch with us to learn more about Multi-Flow drainage systems.

800-978-8007

www.varicore.com

It's the solution.