

FirstFlush

A BMP SOLUTION FOR STORM WATER DRAINAGE



FIRSFLUSH



FirstFlush Filtration

ABT's FirstFlush filtration is custom designed for Clean Water Act compliance

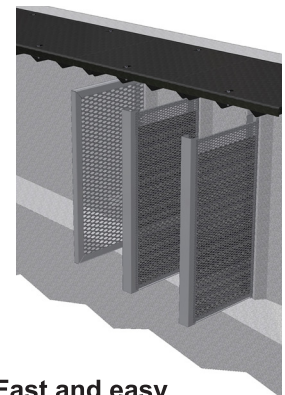
Compliance with Phase Two of the Clean Water Act (CWA), specifically the requirements of the National Pollutant Discharge Elimination System (NPDES) permit program, demands the use of Best Management Practices (BMP). Based on these requirements, ABT offers a family of products called FirstFlush

Both the private and public sector are now compelled to treat storm water runoff from sites such as:

- Parking lots
- Auto sales and repair lots
- Trucking facilities
- Manufacturing yards
- Waterfront cargo ports
- Container terminals
- Roadways
- Curblines
- Vehicle Maintenance facilities

FirstFlush Storm Water Filtration Systems

FirstFlush is the perfect solution when seeking a BMP that must handle sheet flow, control vectors, collect debris, and capture hydrocarbons – all on the same site. Their range of sizes makes them perfect for sites with limited space for treatment structures. Our drive to develop innovative BMP technology to address CWA requirements is a logical extension of our efforts to create solutions for the storm water engineer. For more than 30 years, ABT has brought new thinking to surface drainage design. Our family of FirstFlush products is a perfect example of ABT's approach to problem solving. We designed FirstFlush for sites under 100 acres where specific pollutants – oils, greases, and other hydrocarbons – must be captured without impeding bypass flow, particularly during the first fifteen minutes of rainfall or "first flush" effect. Clearly, any given BMP cannot satisfy every application. FirstFlush products address specific "surgical" type applications, and effective BMP's can be developed using FirstFlush treatment structures alone. However, when FirstFlush units are combined with our PolyDrain or MD/HD line drainage systems, the result is a truly comprehensive collection and treatment system.



Fast and easy maintenance equals maximum BMP effectiveness

Industrial point sources where excessive fuel and petroleum product residues are present – automotive operations, transportation hubs, manufacturing facilities, seaports, container transfer terminals – anywhere sheet flow interception is highly critical.

Industrial point sources where excessive fuel and petroleum product residues are present – automotive operations, transportation hubs, manufacturing facilities, seaports, container transfer terminals – anywhere sheet flow interception is highly critical.

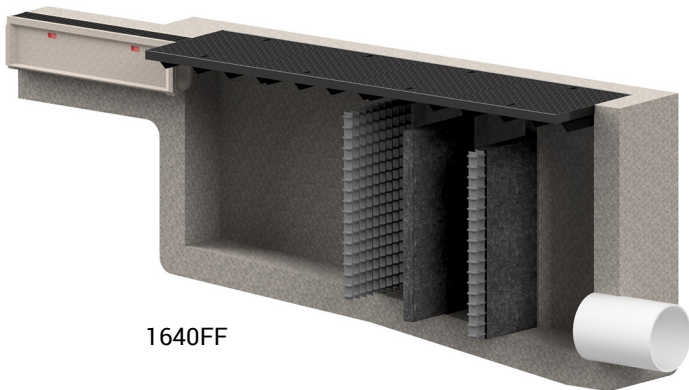
Filtration Performance: The system includes minimum pollutant removal as listed below:
 Pollutant Removal = 97% Hydrocarbons EPA test method 418 for High Levels
 Pollutant Removal = 95 % Suspended solids EPA test method 160.2

Test Method	Parameter	Results Un-Filtered	Results filtered	Detection limit	Units
EPA 1664	Oil & Grease	>1000	6	5	ppm
EPA 160.2	Total Suspended Solids	230	10	5	ppm
NWTPHDX	#2 Diesel Fuel	910	3.4	0.2	ppm
NWTPHDX	Motor Oil	15000	3	0.4	ppm
EPA 6020	Chromium	0.013	0.0044	0.001	ppm
EPA 6010	Copper	0.077	ND*	0.01	ppm
EPA 6010	Lead	0.011	ND*	0.01	ppm
EPA 6010	Zinc	2.1	0.85	0.01	ppm

FirstFlush with ABT Filter Media

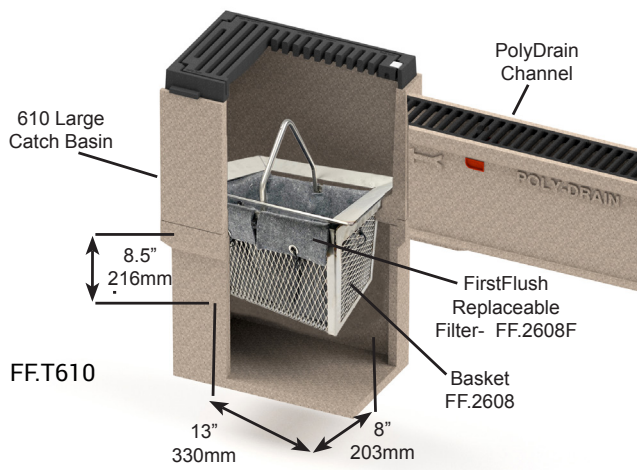
Any system can lose effectiveness quickly without proper maintenance. Ease of installation and maintenance were designed in with highly effective but lightweight screens and filter packages that can be removed and replaced quickly and easily. These products are available in various shapes and sizes, designed to conform to the particular unit; inserts, pillows and filtration packs.

- **Unobstructed flow-rates of .45 CFS per square foot / surface area**
- **Permanently bonded to fabric, does not leach, or diminish over time**



1640FF

The FirstFlush 1640FF, our largest capacity design, uses ABT's patented forming technology to create a highly durable concrete component. As effluent enters, either through an inlet pipe or from a pre-sloped line drain, the first chamber captures solid debris. Stormwater then passes through two removable filter panels before exiting. The pre-sloped bottom eliminates ponding, an excellent feature where vector (mosquito) control is an issue. The 1640FF is provided with solid covers.



FF.T610

This two-part, stackable structure is made of polymer concrete and comes with a grated cover. It can be used in conjunction with PolyDrain line drain or as a stand-alone. The basket insert that holds the replaceable filter has built-in overflow relief. Units are easy to inspect and clean. Basket and filter modules can be retrofit to existing PolyDrain 611 catch basins.

FirstFlush

A BMP Solution for Storm Water Drainage

Q: Can I add a FirstFlush unit to my existing line drains or catch basins?

A: Yes you can. If a standard unit does not fit, contact ABT for a custom design fabrication.

Q: What type of maintenance does FirstFlush require?

A: Regular pavement maintenance (vacuum and debris control) is recommended to maximize the interval of filter change.

Q: How often do I need to change the filters?

A: Depending on the pollutant load, several times to once a year. Monitoring the initial installation closely for the first three months is recommended to determine the frequency of changes.

Q: How do I choose the right FirstFlush product for my application?

A: Existing structures will determine the type and size of the units. New units will generally be sized according to the hydraulic load, invert location, outlet size, and pollutant load. Utility conflicts and available land will also factor in the FirstFlush selection.

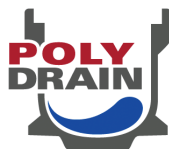
Put the FirstFlush BMP solution to work for you.

For a complete set of specifications on FirstFlush systems, contact ABT at 1-800-438-6057. Or email: abt.sales@abtdrains.com

Visit www.abtdrains.com

ABT designs and manufactures some of the most extensive, reliable, and versatile lines of channel drains, grates, and water management solutions in the industry. If you're an engineer or designer and need performance-based specifications and details for your project, we can help.

Visit www.abtdrains.com for details on all our products.



ABT,® Inc.

PO Box 837
259 Murdock Road
Troutman, NC 28166
www.abtdrains.com
Toll-free: 800.438.6057
Phone: 704.528.9806

DISCLAIMER: The customer and the customer's architects, engineers, consultants and other professionals are completely responsible for the selection, installation, and maintenance of any product purchased from ABT, and EXCEPT AS EXPRESSLY PROVIDED IN ABT'S STANDARD WARRANTIES, ABT MAKES NO WARRANTY, EXPRESS OR IMPLIED, AS TO THE SUITABILITY, DESIGN, MERCHANTABILITY, OR FITNESS OF THE PRODUCT FOR CUSTOMER'S APPLICATION. Copies of ABT's standard warranties are available upon request.

08/28/2023