

FirstFlush

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A BMP Solution for Storm Water Drainage
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Industrial Point Sources



Commercial Sites



Vehicle Maintenance and Storage Facilities

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www.abtdrains.com

Today's Trench Solutions



ABT, INC.

Advanced Building Technologies, Inc.

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**

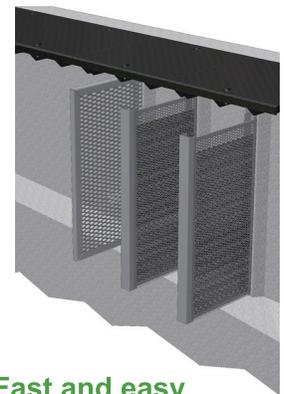
FirstFlush Storm Water Filtration Systems

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.

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.



Fast and easy maintenance equals maximum BMP effectiveness

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

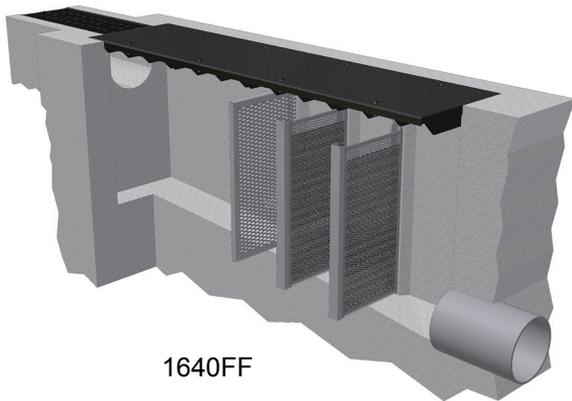
ABT® Filter Media

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.

FirstFlush with ABT Filter Media

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

Product Information



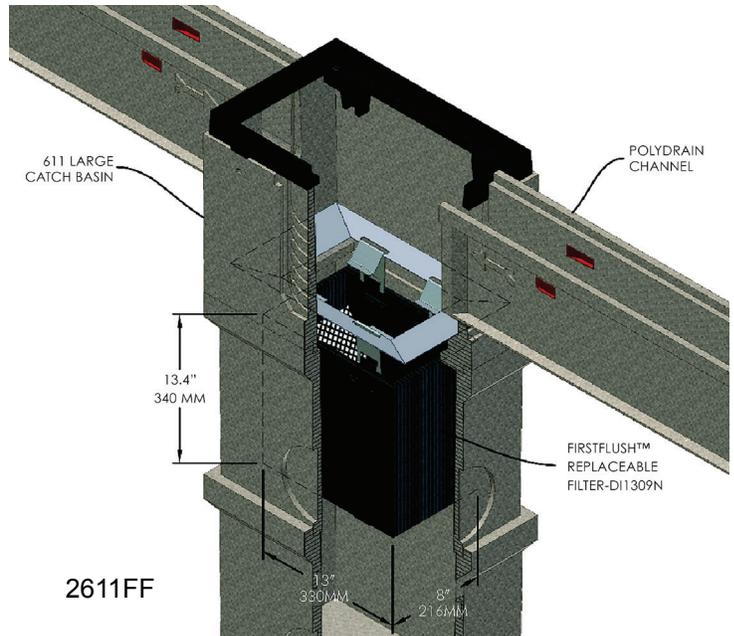
1640FF

1640FF

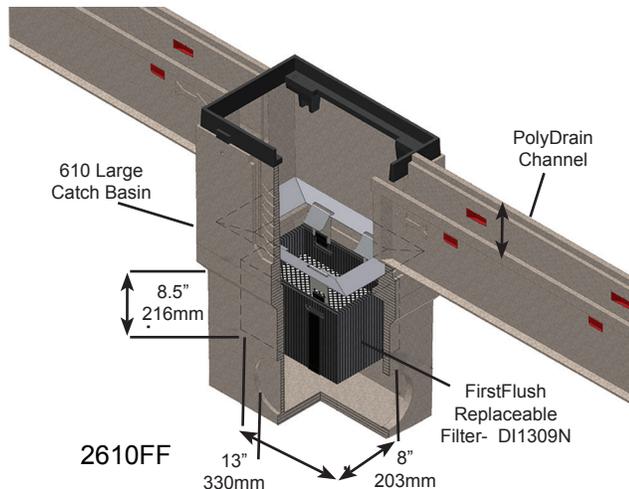
The FirstFlush 1640FF, our largest capacity design, uses ABT's patented forming technology to create a highly durable concrete component. As effluent enters, either through an inlet pipe or from a pre-sloped line drain, the first chamber captures solid debris. Stormwater then passes through two removable 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.

2611FF

This three-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 retrofitted to existing PolyDrain 611 catch basins.



2611FF



2610FF

2610FF

The 2610FF is similar to the 2611FF in every way but is a shallower unit with only two stackable sections. It includes a smaller basket and filter module.

FirstFlush

A BMP Solution for Storm Water Drainage

FirstFlush Q & A

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?

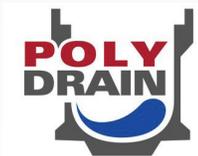
A: Depending on the pollutant load, several times to once a year. Monitoring the initial installation closely for the first three months is recommended to determine the frequency of changes.

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



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