

Up-Flo® Filter

The Clever Kind of Clean

Product Profile

The Up-Flo® Filter is a multi-stage stormwater treatment system that combines pretreatment with fluidized bed filtration technology for superior filtration rates and media longevity. The Up-Flo® Filter optimizes the balance between high treatment performance and total cost of ownership.

Applications

- Removal of sediment, nutrients and metals from runoff
- Source control for redevelopment or new construction
- Treatment downstream of Water Quality Volume detention systems
- Sites operating under an industrial or multi-sector general permits
- Protection for groundwater recharge systems
- LEED® construction projects

System Components

- | | |
|---|---|
| 1. Inlet grate (pictured) or Inlet Pipe (not shown) | 5. Bypass Hood/Siphon |
| 2. Precast Filtration Chamber | 6. Outlet Module with Drain Down Filter |
| 3. Filter Module | 7. Pollutant Storage Sump |
| 4. 4mm Screening | 8. Media bags |

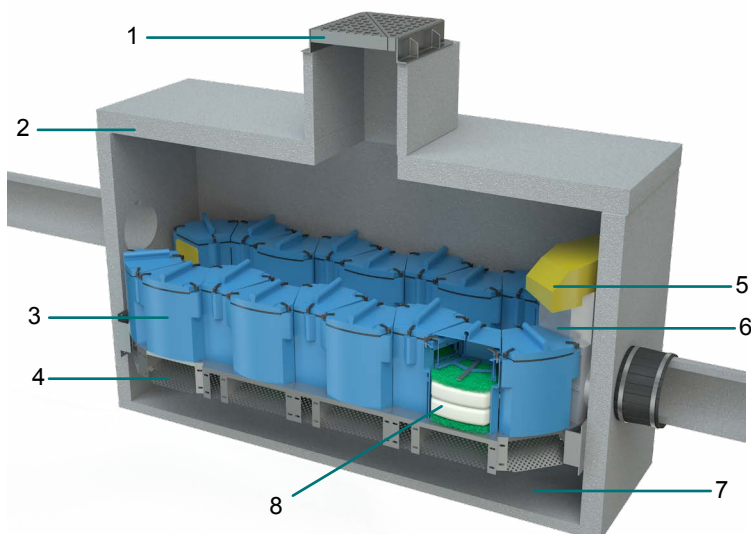


Fig.1 The Up-Flo® Filter includes sedimentation, screening and filtration in a single device.

Advantages

- Sedimentation, screening and filtration in one structure
- Upflow fluidized bed technology prevents clogging of filter media
- Includes an integral high flow bypass and trap for oils and trash
- Economical media bag replacement process requires neither heavy lifting equipment nor purchase of entirely new cartridge
- Independently verified through TARP field monitoring program

How it Works

1. **Pretreatment:** Oil and floatables rise to the surface while sediment settles in the sump.
2. **Screening:** Flow is directed upward through an angled screen to remove debris before entering the filter module.
3. **Filtration:** Water flows upwards through engineered media bags (see **Fig.2**) before leaving the outlet module to be discharged through the outlet pipe.

During peak flows, excess water is siphoned through the yellow bypass hood which also prevents the escape of oil and trash. As water levels return to normal, captured pollutants are washed off media bags, preventing blinding and prolonging media life.

Filter Module Components

Each Filter Module contains two filter bags containing an engineered media mix designed to optimize pollutant removal by evenly spreading the flow across the entire surface area.

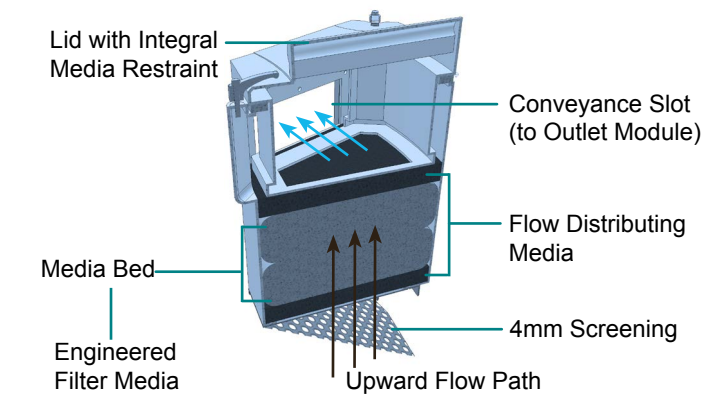


Fig.2 Engineered media mixes, include (a) CPZ™ Mix for TSS, Nutrients, Metals and Organics removal or (b) Hydro Filter Sand for TSS, Particle-bound Nutrients, and Metals removal.

Up-Flo® Filter

Sizing & Design

The modular design of the Up-Flo® Filter ensures that project specific treatment goals are easily met.

Standard and typical dimensions listed below. Use our sizing calculator to determine appropriate site-specific sizing.

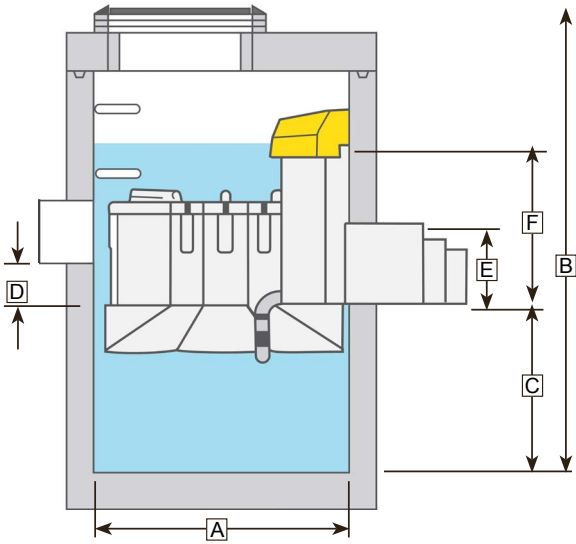


Fig.3 Key dimensions of the Up-Flo® Filter.

FREE Up-Flo® Filter Sizing Calculator for Engineers



This simple tool will recommend the best filter size and arrangement based on site-specific data entered by the user.

Go to hydro-int.com/filtersizing to access the tool

| Chamber | A Diameter (ft/m) | Maximum Filter Modules (No.) | B Height (ft/m) | C Sump Depth (ft/m) | D Inlet/ Outlet Drop (ft/m) | E Maximum Pipe Diameter (in/mm) | F Operating Head (ft/m) | Maximum Treatment Flow (cfs/L/s) |
|----------------------|-------------------------|---------------------------------------|-----------------------|------------------------------|---|---|----------------------------------|---|
| Round Manhole | 4 / 1.2 | 6 | 7.5 / 2.29 | 3.0 / 0.91 | 0.8 / 0.24 | 15 / 375 | 2.5 / 0.76 | 0.056 cfs per module |
| Rectangular Vault | 6 x 8 / 1.8 x 2.4 | 7 | 6.5 / 1.98 | 2.0 / 0.60 | | 24 / 609 | | |
| | 6 x 13 / 1.8 x 3.9 | 18 | | | | | | |
| | 8.5 x 13 / 2.5 x 3.9 | 36 | | | | | | |
| | 15 x 13 / 4.5 x 3.9 | 54 | | | | | | |

Inspection & Maintenance

Nobody maintains our systems better than we do. To ensure optimal, ongoing device performance, be sure to recommend Hydro International as a preferred service and maintenance provider to your clients.

Call 1 (800) 848-2706 to schedule an inspection and cleanout or learn more at hydro-int.com/service

Filter modules are situated along chamber walls enabling easy sump access for vacor trucks.

Our light-weight media bags can be manually replaced without removing the entire module

