

EcoPure BioFilter®

The EcoPure BioFilter is a market-changing Biofiltration stormwater treatment technology. This high performance, low impact system merges both pretreatment of impervious stormwater runoff with advanced filtration from both surface and subsurface runoff sources. The EcoPure BioFilter is designed to remove most traditional pollutants from urban stormwater.

Advanced removal of total suspended solids (TSS), Nutrients – Total Phosphorus, Total Nitrogen, Heavy Metals, Oil and Grease, Trash and Bacteria. The EcoPure Biofilter is also an outstanding value that offers multiple inletting pipe configurations in a compact urban landscape. The device is suitable for both new construction and retrofit applications with a quick, simple installation.

Features

- High filter media area and flowrate
- Linear treatment design with an upfront pretreatment cell
- Low elevation change between the inlet and outlet of the system
- Superior removal mechanisms utilizing physical unit operations, Chemical/Biological processes
- Living plant component at the surface of the unit
- Internal bypass for inline installation (where applicable)
- Maintainable system with access to remove accumulated pollutants multiple times before media replacement
- Scalable systems allow for treatment rates starting at 60 gpm

Benefits

- Compact LID/Green Infrastructure Technology for Ultra-Urban Applications
- Unit has compartmentalized O&M sections
- Can utilize jurisdictional bioretention media in the plant growth section
- Living Surface Biomass
- Trash and Dry storage component
- Optional infiltration design component
- 3-Cell units available for additional Heavy Metals removal and improved TSS and TP removals



EcoPure BioFilter Specification

Materials and Design

- Concrete Structures: Designed for H-20 traffic loading and applicable soil loads or as otherwise determined by a Licensed Professional Engineer. The materials and structural design of the devices shall be per ASTM C857 and ASTM C858.
- Internal components shall be substantially constructed of proprietary media blends, stainless steel, recycled polyethylene or other thermoplastic material approved by the manufacturer.



Performance

- The EcoPure BioFilter is an inline unit capable of conveying 100% of the design peak flow and can bypass (internally) excessive flow rates.
- Up to 60 GPM in a 5' x 8' (1.5 x 2.4 m) unit, with larger flowrate options available
- Greater than 85% removal of TSS and 70% removal of Dissolved Phosphorus

EcoPure Model ¹	Treatment Rate cfs (L/s)*	Mass Capture Capacity lb (kg)*
EcoPure 60	0.134 (3.8)	194 (88)
EcoPure 120	0.27 (7.6)	389 (176)
EcoPure 180	0.4 (11.3)	583 (264)
EcoPure 240	0.53 (15.0)	778 (353)
EcoPure 360	0.8 (22.7)	1166 (529)
EcoPure X	Custom	Custom

* Based on NJCAT/DEP filtration testing protocol

¹ EcoPure BioFilters with a metals bay will have an "M" designation after the model number.

Installation

Installation of the EcoPure BioFilter unit(s) shall be performed per manufacturer's installation instructions. Such instructions can be obtained by calling Advanced Drainage Systems at (800) 821-6710 or by logging on to www.adspipe.com.

