BAYFILTER™ STORMWATER FILTRATION SYSTEM

After years of research and development, the BayFilter is the most efficient, effective, economical and easy-to-use stormwater treatment filter on the market today. A BayFilter system may be a single cartridge or multiple cartridges to satisfy any treatment flow requirement.

Utilizing concrete (manholes, pre-cast, or cast-in-place) vaults, an easy-to-handle cartridge design, a proven mixed media filter, and a proprietary spiral-wrapped layered construction, BayFilter removes fine sediments, nutrients, heavy metals and other pollutants at an astounding maximum flow of 45 GPM (170 l/min) per cartridge. The vertically spiralled layered design maximizes surface loading rate and filter media area for the most effective stormwater treatment, while up-flow filtration allows for BayFilter’s unique hydrodynamic backwash cleansing process. This process dislodges pollutants and restores the porosity of the mixed media filter.

FEATURES:
• The most effective filtration offers enhanced pollution prevention which is providing cleaner stormwater runoff
• BayFilter systems remove greater than 80% Total Suspended Solids (TSS) and 65% of turbidity
• Easy to specify, install and maintain
• Available in different configurations (manhole filter, precast vault filter and cast-in-place vault filter)
• Systems are fully customizable
• BayFilter with enhanced media is capable of removing 65% of the total phosphorous load
• Cartridges may be recycled
• Optional drain-down cartridge feature is built into the filter, minimizing standing water even after siphon has broken and cartridges are not engaged
• Excellent abrasion and corrosion resistance

BENEFITS:
• Reduced life cycle cost
• Customizable systems meet the needs of each specific project
• Low maintenance costs
• Prevents system from becoming anaerobic during dry periods

ADS Service: ADS representatives are committed to providing you with the answers to all your questions, including specifications, and installation and more.
BAYFILTER STORMWATER FILTRATION SYSTEM SPECIFICATIONS

PRODUCTS
• INTERNAL COMPONENTS: All components including concrete structure(s), PVC manifold piping and filter cartridges, shall be provided by BaySaver Technologies LLC, 1030 Deer Hollow Drive, Mount Airy, MD (800-229-7283).
• PVC MANIFOLD PIPING: All internal PVC pipe and fittings shall meet ASTM D1785. Manifold piping shall be provided to the contractor partially pre-cut and pre-assembled.
• FILTER CARTRIDGES: External shell of the filter cartridges shall be substantially constructed of polyethylene or equivalent material acceptable to the manufacturer. Filtration media shall be arranged in a spiral layered fashion to maximize available filtration area. An orifice plate shall be supplied with each cartridge to restrict the flow rate to a maximum of 45 gpm (170 l/min.).
• FILTER MEDIA: Filter media shall be blend of one or more of the following: silica sand, zeolite, perlite, activated alumina and granular activated carbon.
• PRECAST CONCRETE VAULT: Concrete structures shall be provided according to ASTM C. The materials and structural design of the devices shall be per ASTM C478, C857 and C858. Precast concrete shall be provided by BaySaver Technologies LLC.

PERFORMANCE
• The stormwater filter system is capable of treating 100% of the required treatment flow at full sediment load conditions.
• The stormwater filter system’s cartridge units shall have no moving parts.
• The stormwater treatment unit shall be designed to remove a minimum 80% of total suspended solids, 60% of total phosphorous, 50% of turbidity, 40% of total copper and 40% of total zinc. All filter designs shall comply with local regulations.
• The stormwater filtration system shall reduce incoming turbidity (measured as NTUs) by 65% or more and shall not have any components that leach nitrates or phosphates.
• The stormwater filtration cartridge shall be equipped with a hydrodynamic backwash mechanism to extend the filter’s life and optimize its performance.
• The stormwater filtration system shall be designed to remove a minimum of 65% of the incoming Total Phosphorous (TP) load.
• The stormwater filtration system’s cartridge units shall have a treated sediment capacity for 80% TSS removal between 150-350 pounds.

<table>
<thead>
<tr>
<th>FILTER CARTRIDGE</th>
<th>Treatment Flow Rate gpm (l/min)</th>
<th>Treatment Volume ft³ (m³)</th>
<th>Filter Surface Area ft² (m²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>BayFilter 522</td>
<td>22.5 (85.1)</td>
<td>1250 (35.4)</td>
<td>45 (4.2)</td>
</tr>
<tr>
<td>BayFilter 530</td>
<td>30 (113.6)</td>
<td>2500 (70.8)</td>
<td>90 (8.4)</td>
</tr>
<tr>
<td>BayFilter 545</td>
<td>45 (170.3)</td>
<td>2500 (70.8)</td>
<td>90 (8.4)</td>
</tr>
<tr>
<td>BayFilter 622</td>
<td>22.5 (85.1)</td>
<td>1250 (35.4)</td>
<td>45 (4.2)</td>
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<tr>
<td>BayFilter 630</td>
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</tr>
</tbody>
</table>

INSTALLATION
Installation of the BayFilter System(s) shall be performed per manufacturer’s installation instructions.