



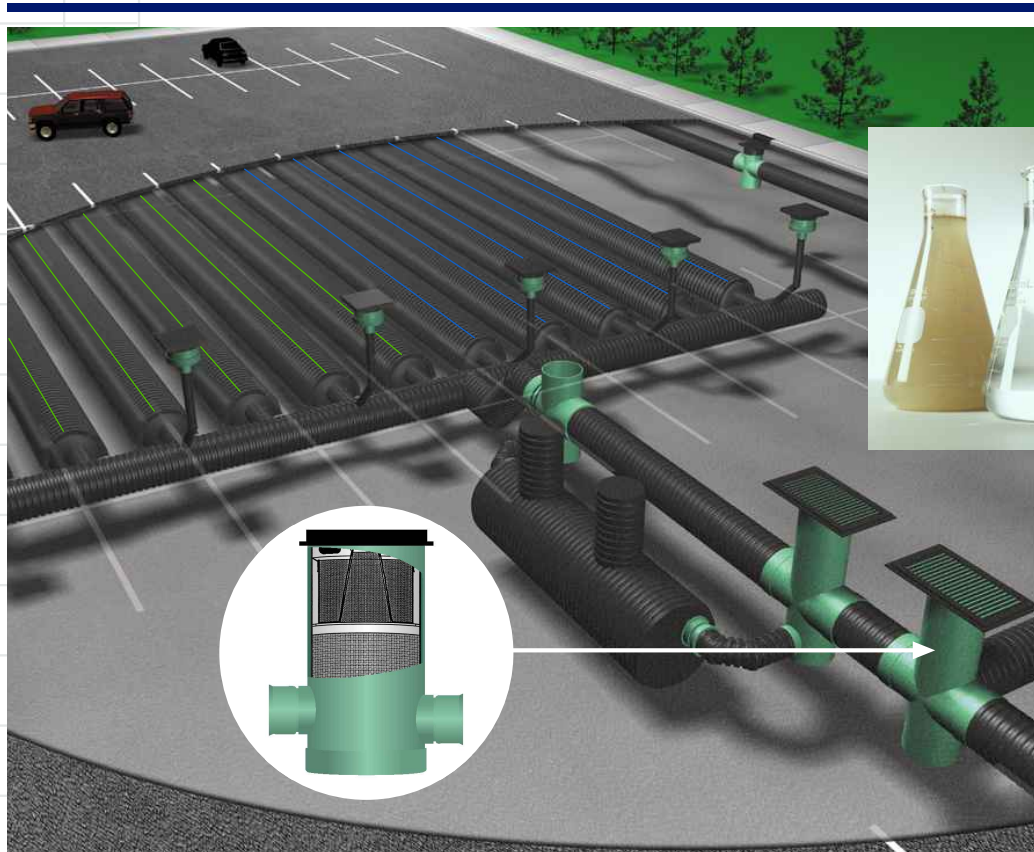
Nyloplast

Tomorrow's Storm Drainage Structures Today.

Storm PURE™

F I L T R A T I O N S Y S T E M

Filter By: **MYCELX** 



The Nyloplast Storm-PURE Catch Basin Insert with MYCELX® PermaKleen® technology stands alone in its ability to remove suspended solids, hydrocarbons and other pollutants from storm water runoff!


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Treating Storm Water At The Source

Phase II of EPA's National Pollution Discharge Elimination system requires all but the smallest municipal and industrial storm sewer systems to treat storm water discharge to the "maximum extent practicable." The regulations are not clear on the allowable concentration of specific pollutants, but it is generally agreed that significant removal of suspended solids, hydrocarbons, sediment, metals and nutrients is required.

The EPA lists a variety of best management practices (BMPs) for treating storm water, and local jurisdictions are free to choose the ones they believe will provide the most effective and economical compliance. One important factor is the ease with which the BMP can be adapted to the existing storm sewer system.

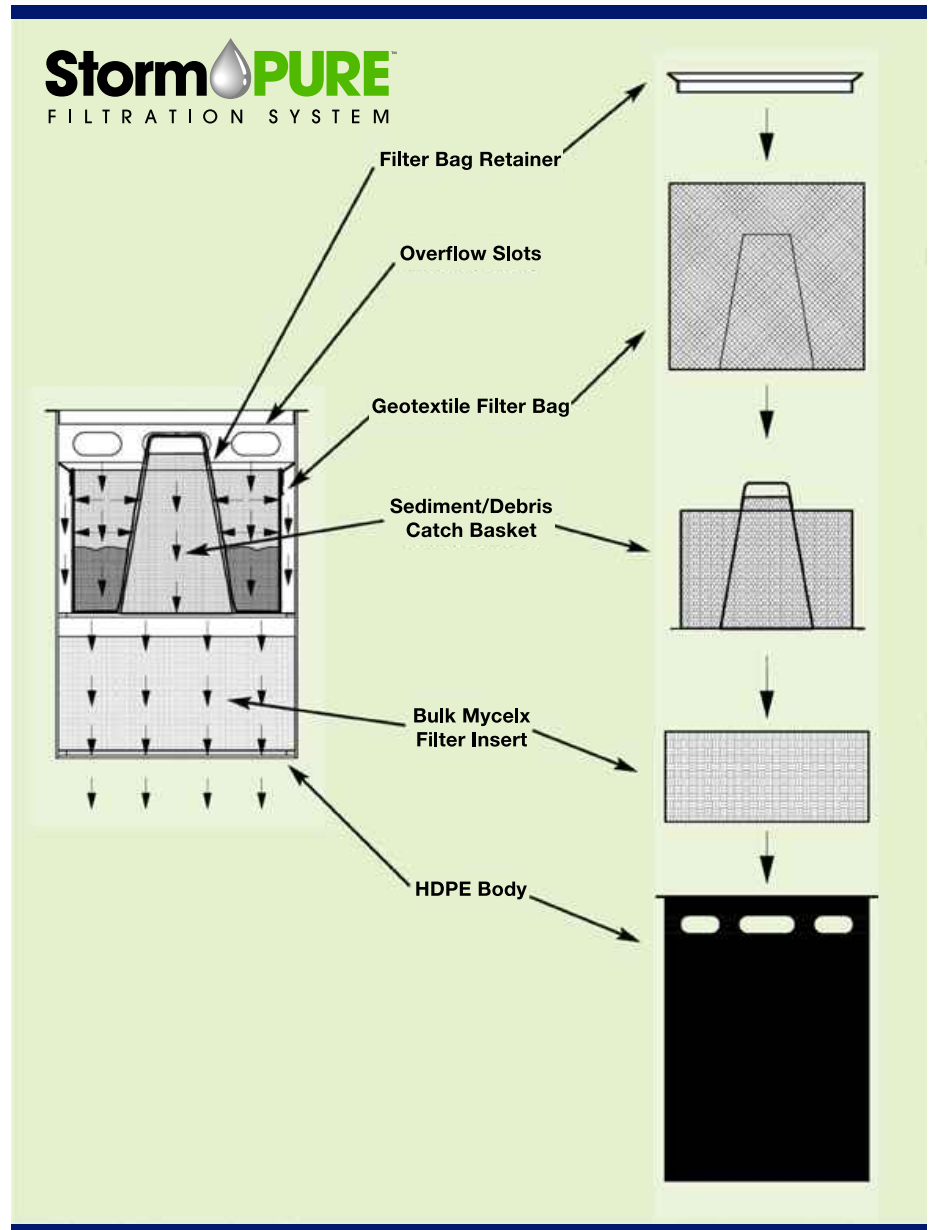
Catch Basin Inserts

Storm water treatment is especially important in locations with higher pollutant concentrations, such as roadways, parking lots, and maintenance and loading areas. Catch basin inserts are increasingly being selected for these applications because of their adaptability to existing drainage systems, fast installation, high flow volume, relatively low cost, and pollutant removal performance.

Storm-PURE™

Nyloplast has developed a catch basin insert that provides all of the above benefits, and is particularly efficient at removing pollutants. The Storm-PURE catch basin insert is a two-stage unit that will fit into 24" nominal diameter catch basins (additional sizes to be developed as demand dictates).

The upper section consists of a perforated metal catch basket covered by a geotextile filter bag. This assembly captures sediment and debris while allowing filtered water to pass freely through the center cone.



The lower stage contains a patented Mycelx® PermaKleen® filter insert that attracts and holds tiny particles of hydrocarbons and oil-bound pollutants. The specially treated absorbent material instantly bonds contaminant particles, resulting in a 99.0% removal rate of total petroleum hydrocarbons.

Both stages are housed in a corrosion-resistant high density polyethylene body with overflow slots at the top to act as a bypass in unusually high flow conditions.

The complete assembly will pass 230 gpm without bypassing the flow.

The Storm-PURE™ catch basin insert fits readily into standard 24" Nyloplast catch basins (including curb inlets and road and highway basins), providing a highly engineered solution for treating storm water. A kit is available for retrofitting standard concrete basins.

Unmatched Pollutant Removal

The Storm-PURE™ water treatment insert stands apart from competitive units in its ability to remove suspended solids, hydrocarbons and other pollutants. In a laboratory test, polluted storm water was processed through the unit, and samples of the influent and effluent were analyzed by Analytical Environmental Services, Inc. to determine removal efficiency. The results are shown in the table below.

The testing procedure and lab results were third party certified by Lloyds Register North America, Inc., certificate #NAO 0605940-01 (complete report available on Nyloplast Technical CD, Version 4).

Features & Benefits of the MYCELX® PermaKleen Filter

- MYCELX will not water log.
- MYCELX will not support microbial or insect growth.
- The unused capacity will remain fresh.
- Flow rate over 200 gpm in Storm-PURE insert.



MYCELX captures and permanently bonds hydrocarbon pollutants (with no desorption). It also removes pesticides, metals and other construction chemicals attached to the hydrocarbon molecules.

Pollutant Removal Performance

| Analyzed Components | Unit | Reporting Limit | Influent | Effluent | Removal |
|------------------------------------|------|-----------------|----------|----------|---------|
| Total Suspended Solids (TSS) | mg/L | 5 | 36 | 11 | 69.44% |
| Total Petroleum Hydrocarbons (TPH) | mg/L | 5 | 96.9 | BRL | 99.90% |
| *Chemical Oxygen Demand (COD) | mg/L | 10 | 156 | BRL | 94.23% |
| *Nitrogen | mg/L | 0.2 | 1.49 | BRL | 99.33% |
| *Total Phosphorus | mg/L | 0.25 | 19.7 | 12.8 | 35.03% |
| *Iron | ug/L | 100 | 1490 | 362 | 75.70% |
| *Copper | ug/L | 5 | 86.2 | 11.5 | 86.66% |
| *Lead | ug/L | 1 | 1110 | 106 | 90.45% |
| *Zinc | ug/L | 10 | 6060 | 286 | 95.28% |

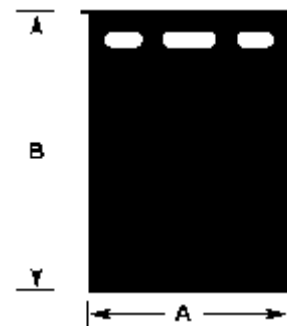
*Removal related to the components bonding with hydrocarbon molecules.

BRL - Below Reporting Limit

Storm-PURE Specifications

| | | |
|--|------------|--------------|
| Max. Flow Rate of Filter (at 0 ft. of head weir flow) | 230 gpm | (0.52 cfs) |
| Max. Flow Rate of Bypass (at 0.5 ft. of head orifice flow) | 1189 gpm | (2.65 cfs) |
| Max. Flow Rate of Filter & Bypass (at 0.5 ft. of head orifice flow) | 1419 gpm | (3.16 cfs) |
| Primary Filter (Upper Section) Sediment/Debris Storage Capacity | 1.42 cu ft | (170 lbs) |
| Sediment/Debris Particle Size Captured by Primary Filter | >0.033 in | (838 micron) |
| Sediment/Debris Particle Size Captured by Secondary (Mycelx) Filter | >0.012 in | (300 micron) |
| Secondary Filter Hydrocarbon Removal Storage Capacity | 15 lb | (2.04 gal) |
| Secondary Filter Media Volume | 1.60 cu ft | - |

Dimensions*



| Nom. Diameter | A | B |
|---------------|--------|--------|
| 18" | 15.38" | 18.00" |
| 24" | 21.38" | 18.00" |
| 24" | 21.38" | 30.00" |

*Additional sizes to be developed as dictated by demand.

Recommended Maintenance Schedule and Procedure

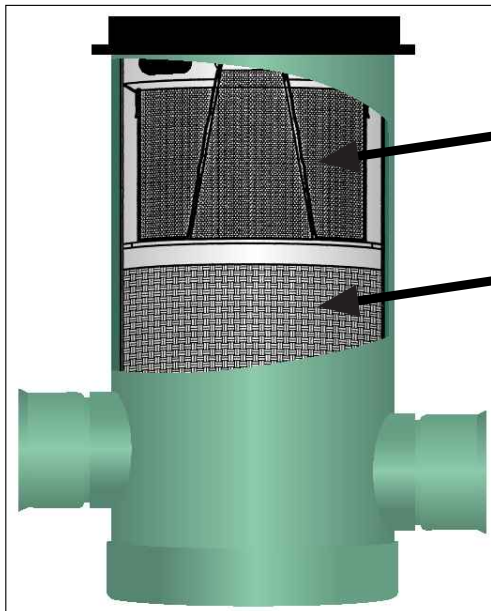
(Personnel should wear protective gear on hands and proper eye protection.)

Monthly, or following 6" of accumulated rainfall:

1. Remove grate.
2. Lift out the catch basket (upper chamber) by hand or mechanical lifting device.
3. Remove the gasket material and lift out the geotextile filter bag from the basket.
4. Dispose of sediment and debris. If sediment has dried or caked, it may be necessary to wash the bag.
5. Inspect the filter bag. If too much sediment has dried and cannot be washed out, or if any tears or holes are discovered, the bag should be replaced.
6. Re-position the bag in the catch basket and re-install the basket into the top of the Storm-PURE unit.
7. Replace the grate.

Every 6 months, or after oil/fuel or other hazmat spill event:

1. Clean and inspect the filter bag as outlined at left.
2. The Mycelx hydrocarbon absorption bag is located in the lower chamber of the Storm-PURE assembly.
3. Obtain a replacement Mycelx filter by calling 800-821-6710.
4. Prior to removing filter, consult with local waste management authorities to determine proper disposal procedure.
5. Remove Mycelx filter bag and dispose of in accordance with local requirements.
6. Install a fresh Mycelx filter into the lower chamber, making sure it is lying flat and is equally displaced.
7. Re-assemble the unit and replace the grate.



- Sediment/debris catch basket
- Geotextile filter bag (primary filter)
- Storm-PURE™ body
- MYCELX™ filter

- Low cost BMP solution for hydrocarbon and debris removal
- Superior flow and bypass design ensures capture and eliminates back-up
- Quick and easy installation and maintenance requirements
- 99% hydrocarbon removal efficiency under test conditions
- Lloyds Register third party certified testing procedure and removal rates



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www.nyloplast-us.com

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