

Hydro StormScape™

Green Infrastructure Filter

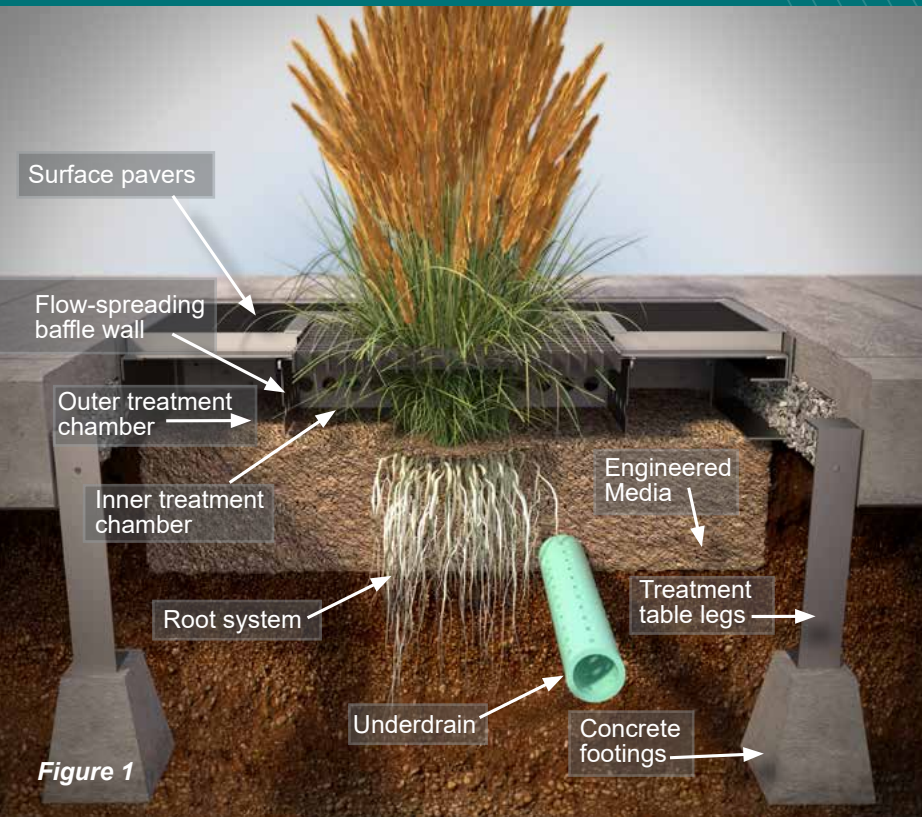


Figure 1

Benefits

Flexible Filtration and Infiltration

Hydro StormScape™ Green Infrastructure Filter allows you to filter and infiltrate stormwater combining pollutant removal and runoff reduction into one bio filter system. Other great features and benefits include:

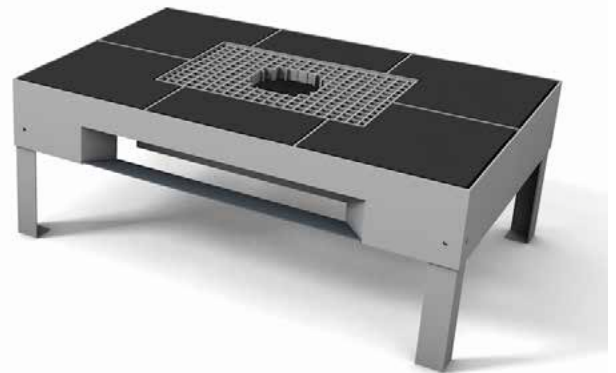
- » An open base won't restrict root growth so vegetation thrives quicker and lives longer
- » Runoff is kept on site which reduces quantity of stormwater that is discharged
- » Modular design allows you to treat a range of drainage areas
- » Optional internal bypass for conveyance of high flows
- » First bio filter with lightweight, modular components that can ship flat and be installed with only landscape equipment--no crane needed!
- » Flexible design for use in a variety streetscapes and drainage system configurations

How it Works

1. Flow entering the system is directed around the outer treatment chamber (where trash and debris are captured) when it comes in contact with the flow-spreading baffle wall (see Figure 1).
2. Flow seeps through the perforated baffle wall into the inner treatment chamber where finer particles and pollutants are captured. Flow passes through an engineered media before infiltrating into the ground (where infiltration is possible).

Don't get Boxed in by your BMP!

An open base won't restrict root growth and enables you to reduce runoff



Product Summary

Hydro StormScape™ is a sophisticated departure from other "tree-in-a-box" bio filters because it's not actually in a box. An open base is not only better for vegetation, it also allows you to keep more runoff on site while using less building material so it's lightweight and easy to install. This attractive and modular option combines the beauty of smart engineering with common sense and practicality.

Applications

- » Sites where runoff reduction is a regulatory objective
- » Removal of total suspended solids (TSS), floatable trash, metals and nutrients from stormwater runoff
- » LID or green infrastructure based developments
- » LEED® development projects



Stormwater Solutions

→ hydro-int.com/stormscape

Product Versatility

Modular, Flexible and Easy to Maintain

Hydro StormScape™ Green Infrastructure Filter can adapt to site conditions by working as one, larger system or a series of smaller systems and can be used with a variety of trees, shrubs/hedges, or with street furniture such as bike racks, flag poles or message boards.

Surface pavers can be supplied as either permeable (to increase runoff reduction) or impermeable, and can be easily removed by a professional for quick, simple maintenance.



Performance Data & Sizing

Model Size ¹		Maximum Drainage Area ²		Treatment Flow Rate ³	
(ft)	(m)	(acres)	(sq.m)	(cfs)	(L/s)
4 x 6	1.2 x 1.8	0.147	595	0.078	2.21
6 x 8	1.8 x 2.4	0.293	1186	0.156	4.42
6 x 12	1.8 x 3.6	0.440	1781	0.234	6.63

¹ Standard sizes. Additional custom sizes available.

² Based on sediment load of 600 lbs. per acre per year.

³ Based on loading rate of 1.46 gpm/sf.

System sizing may vary depending on local requirements

Drainage system design should incorporate a peak flow bypass as necessary

Typical Pollutant Removal ⁴	
TSS ⁵	90%
Phosphorus ⁶	50%
Nitrogen	20%
Copper	40%
Zinc	80%

⁴Median removal efficiencies of paired data from over 500 sand filters with similar dimensions. Data submitted by independent researchers to International BMP Database. Retrieved from <http://www.bmpdatabase.org> on October 23, 2017

⁵New Jersey Corporation for Advanced Technology (NJCAT) data

⁶Phosphorus Removal estimate does not include results from compost filters



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Access the Operation & Maintenance Manual

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