

LOW-IMPACT Development



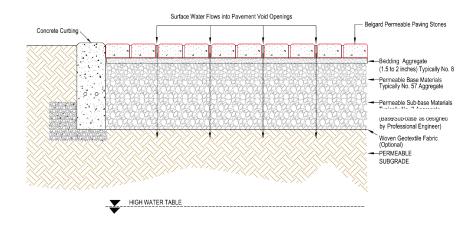
DETENTION / RETENTION

From Top PERMEABLE PAVERS

Belgard permeable pavers are designed to combine functionality and beauty in a pavement surface designed to optimize surface infiltration and easy maintenance for pedestrian and vehicular applications. Permeable interlocking concrete pavement systems are a Best Management Practice (BMP) for controlling stormwater runoff.



Sample Permeable Paver System Cross Section





FORM MEETS FUNCTION

Realize the full potential of your stormwater surface treatment design with the PermeCapture system. Water can either be filtered directly from the surface through Belgard permeable pavers into the StormCapture modules for controlled treatment or collected within the permeable pavement aggregate reservoir and piped to a StormCapture module for additional treatment or storage.

SYSTEM APPLICATIONS

- Infiltration
- Detention/Retention
- Treatment/Conveyance
- Water Harvesting
- Flood Management

TREATMENT TRAIN SOLUTION

Stormwater requirements vary by location. The combination of a Belgard LID permeable pavement system with a StormCapture vault provides design flexibility to provide the best solution to maximize storage capacity and treatment in one system.

STORMCAPTURE[®] SYSTEM WITH HYDRAPORT[™] INLETS

A major component of the PermeCapture system is the StormCapture module which features unique HydraPort inlets in the top section. This allows maximum runoff collection over the entire system's footprint without the need for grated inlets. The HydraPorts and permeable base materials above are strategically sized to eliminate the need for a geotextile fabric that has the potential to clog the system.



MAINTENANCE ACCESS Allows easy access to the StormCapture system for periodic maintenance and inspection.





Immediately below the permeable pavers is a 2" thick layer of #8 stone aggregate. This layer not only assists with the treatment of contaminants within the stormwater, but is also an integral structural component of the paver system.

PERMEABLE BASE MATERIALS

The second layer of aggregate, which is a 4" layer of #57 stone, serves as a filtering material below the bedding to direct flows horizontally to the HydraPort inlets while also preventing port clogging.

HYDRAPORT[™] INLETS

A series of HydraPort inlets allow stormwater to enter the StormCapture system at rates exceeding the permeable paver system. This allows the system to effectively capture and manage stormwater from any design storm including a 100-year storm event.





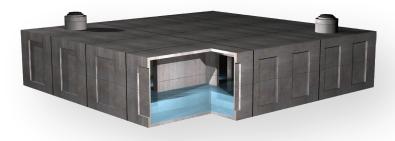
To Bottom STORMCAPTURE MODULES

Whether your site needs a complete stormwater reuse system, a ground water recharge system for Low-Impact Development (LID), a stormwater treatment system, or simply a means to slow down runoff to prevent storm drain overloading, the StormCapture system will provide your complete solution.



DETENTION • RETENTION • RECHARGE • REUSE

The StormCapture system incorporates the advantages and versatility of structural precast concrete to create a "green" system for stormwater management.





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OVERVIEW

The PermeCapture system combines the advantages and versatility of structural precast concrete modules with the aesthetics and performance of permeable interlocking pavers to provide a stand alone, low maintenence, Low-Impact Development (LID) solution for stormwater retention, detention, reuse and ground water recharge.

TREATMENT

Testing has shown that Belgard permeable paver systems are capable of removing a high percentage of Total Suspended Solids (TSS) and other pollutants from the infiltrating surface water. This removal takes place primarily in the jointing material between the pavers, where it can in turn be removed during routine maintenance. PermeCapture systems can also incorporate a variety of stormwater treatment systems within the StormCapture modules to meet any additional water quality needs your project requires. From internal filtration and pumping solutions, to external polishing chambers, PermeCapture offers a complete range of water filtration solutions with maintenance access options.

PERFORMANCE

- TSS removal from 60-90% by permeable pavers
- Can incorporate secondary treatment options
- 50-year design and lifecycle based on proven field performance
- Light colored pavers reduce the heat island effect
- Reduces stormwater runoff by up to 100%
- Ability to capture a high percentage of nutrients, metals and hydrocarbons from stormwater





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