# **Permavoid**

# **Permeable Pavers and Pavement**









### Permayoid Permeable Pavers and Pavement

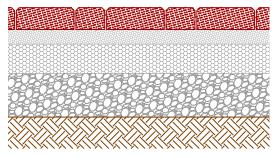
As our understanding of Low Impact Development (LID) improves/continues to grow, by order of priority, four basic stormwater management protocols have become apparent:

- 1. Infiltration
- 2. Capture & Use (rainwater harvesting)
- 3. Bilfiltration/Detention
- 4. Slow Release (attenuation)

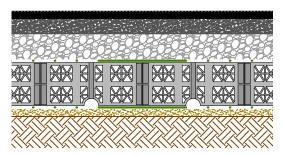
Maximized safe infiltration is optimal when no contaminants are present for each of these Preferred Stormwater Management Solutions, with the exception being when water reuse is more desireable.

#### Stone Alternative

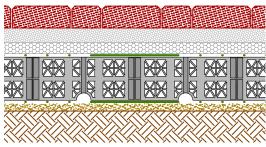
Using a Permavoid subbase as an alternative to reservoir stone curtails differential settlement and creates three times more void space than stone.



Traditional Permeable Pavers and Base Stone



Pavement with Permavoid Permeable Subbase

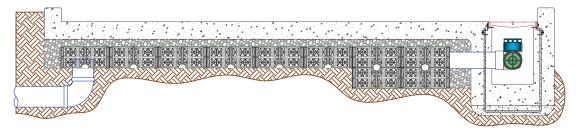


Permavoid Enhanced Permeable Pavers

#### Store and Use More Stormwater

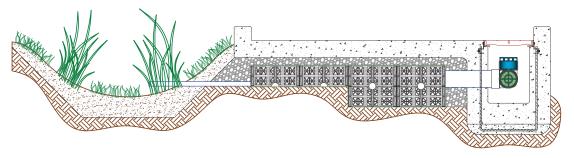
The void space and structural raft created by Permavoid allow for a shallower excavation than traditional drainage stone. This reduces normal cut-and-fill costs as well as the high cost of working in bedrock.





#### **Contaminate Filtration and Nutrient Removal**

Reservoir aggregate has limited functionality in water containment and pollution prevention. The multi-functional Permavoid subbase creates clean storage boundaries in shallow profiles to contain polluted water if necessary and offers shallow filtration devices with engineered nutrient removal media to protect affected downstream reservoirs.



#### **Bio-Swale Enhancement**

Nutrient load removal can be enhanced on bio-swales when directly connected to the Permavoid subbase. The Permavoid subbase can store and attenuate water to optimize the natural nutrient use by the plant life. The extended detention of nutrient rich stormwater will increase the amount of water filtered by the biological media and reduce the amount being directly infiltrated.



## **Capillary Irrigation**

Integrated irrigation options to harvest, store and reuse stormwater are available.



#### **Traditional Pavers & Pavement**

Don't limit yourself to costly permeable pavers and pavement with endless maintenance costs. Implement source control features and low-impact development designs with proven and inexpensive impervious surfaces by connecting Permavoid to line drains. This enables civil engineers and architects to expand their designs while maintaining the natural cycle of stormwater.

#### **Environmental Advantage**

Permavoid subbase eliminates on average up to 27 truckloads of subbase reservoir stone. This reduction in truck traffic dramatically lowers the carbon footprint and harmful greenhouse gas emissions of freight transportation and minimizes the administration of traffic.



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