

know where
it goes

take simple
steps to reduce
STORMWATER POLLUTION

Introduction to the Permeable Pavement Factsheet Series

Updated 2018

Whether you're a town board member, a professional contractor, or a homeowner thinking about updating your hardscapes, a little information about permeable pavement might come in handy. A range of permeable materials have become more readily available and widely used over the last three decades as alternatives to conventional pavement construction materials, and you may want to consider these popular alternative construction materials for a driveway, patio, or parking lot.

Key Points

Keep in mind that the key to a successful application of permeable pavement lies in following these three steps:

1. Choose the correct paver.
2. Install properly by preparing the subbase.
3. Understand and carry out the maintenance requirements.

When correctly installed and maintained permeable pavements have proven to be practical, cost-effective, and environmentally sustainable due to their usefulness in reducing urban stormwater runoff. Permeable pavements are an example of green infrastructure that can replace gray infrastructure. Gray infrastructure includes those hard surfaces that move stormwater away from developed areas such as roofs, gutters, impermeable driveways, and roads as well as storm drains and sewers. The green infrastructure solution to stormwater is infiltration of that water on site where it can recharge groundwater, reducing the flow of pollutants to local water resources.



Porous asphalt parking spaces at Cottages on the Greene in East Greenwich.



St. Clare Parish overflow lot in Westerly. Photo courtesy of the Unilock New York Inc.

In This Guide...

This collection of fact sheets describes the permeable pavement options currently available to match your project needs and how to develop a maintenance plan for each permeable pavement option. The information presented here begins with a three-page overview of the benefits of permeable pavements and how to determine which permeable pavement design is best suited to your site and pavement needs. There are three distinct permeable pavement options: **block pavers**, **plastic grid pavers**, and **porous asphalt**. The corresponding fact sheet for each type details the installation and maintenance that will make for a successful permeable paved area. Pricing and contact information for manufacturers, as well as some local vendors and contractors, follows. Finally, there is a fact sheet for cost-effective permeable alternatives for driveways.

These factsheets may not include all products available, nor do they constitute an endorsement of any product. Any errors or omissions are the sole responsibility of the authors.

A Word On Concrete

Pervious concrete is a permeable pavement that allows water to infiltrate into void spaces throughout its structure. However, it has been shown to deteriorate as a result of contact with deicing salts. This is true even for small amounts of salts carried onto the concrete surface by parked cars. ¹ University of New Hampshire Stormwater Center recommends a 12 month curing period before treating pervious concrete with deicing salt. ² Currently, pervious concrete is not recommended for use in Rhode Island.

¹ Olson, J. (June 6, 2018). Personal interview.

² UNH Stormwater Center and UNH/NOAA Cooperative Institute for Coastal and Estuarine Environmental Technology. *University of New Hampshire Stormwater Center 2012 Biennial Report*. Durham, NH. 2018. Web.