

Permeable Pavement

What is permeable pavement?

Permeable pavement is designed to let rain that falls on paved areas soak through into the underlying soil. Permeable pavement designs include more open spaces or voids than traditional pavement, which allows water to pass through. Four types of permeable pavement are presented in this brochure:

- Permeable pavers
- Open-celled grids
- Porous asphalt
- Pervious concrete

What are the benefits of permeable pavement?

Permeable pavement reduces flooding and erosion in streams by slowing the speed of rainfall sheeting off of sidewalks, patios, and driveways. It also protects the water quality in streams and Puget Sound waterways by filtering oil, grease, and other pollutants from driveways.

Where can permeable pavement be used in Jefferson County?

Permeable pavement should not be installed in areas where soaking rain water into the ground could pose a hazard, such as in areas with steep slopes, erosion or landslide hazards, poorly infiltrating soils, contaminated soils, or shallow groundwater. Critical areas maps showing locations in Jefferson County that are affected by these conditions are available online. Consult a civil or geotechnical engineer if in doubt.

Helpful Resources

Jefferson County Critical Areas maps

<http://www.co.jefferson.wa.us/idms/mapserver.shtml>

Interlocking Concrete Pavement Institute

<http://licpi.org/>

Paver Search

<http://www.paversearch.com/permeable-pavers-menu.htm>

Pervious Pavement

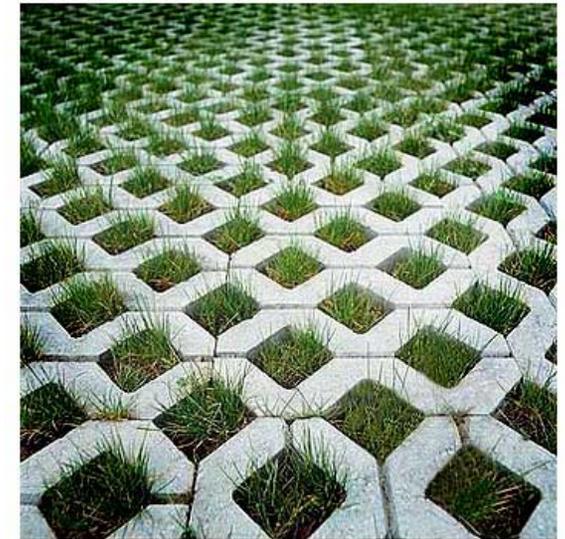
<http://perviouspavement.org/>

Puget Sound Partnership—Stormwater & Low Impact Development (LID)

<http://www.psp.wa.gov/stormwater.php>

Washington Aggregates & Concrete Association

<http://www.washingtonconcrete.org/>



Permeable pavement is one method of low impact development (LID) used to effectively manage stormwater runoff.



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What types of permeable pavement are available?

Permeable Pavers are interlocking blocks or bricks that come in a variety of materials, colors, and shapes that can be arranged in various patterns. Irregularly shaped flagstones or salvaged concrete can also be installed with 1- to 3-inch gaps or joints filled with either gravel or a mix of sand and compost.



Porous asphalt looks similar to conventional asphalt, but has fewer small particles, which provides open space for water to pass through. Porous asphalt has a rougher surface than conventional asphalt. It can be used in low-traffic areas such as residential driveways and sidewalks.



Open-celled grids are concrete grids or rigid, plastic cells that interlock and are pinned in place. The grids or cells may be filled with gravel, or amended soil planted with grass or ground cover. Open-celled grids can support the weight of vehicles and are typically installed in driveways, sidewalks, and patios.



Pervious concrete looks similar to conventional concrete, but has fewer small particles, which provides open space for water to pass through. Pervious concrete has a similar load-bearing capacity and a rougher surface than conventional concrete. It can be installed in residential driveways, sidewalks, and patios.



Where can permeable pavement be installed on your property?

Driveways, sidewalks, and patios are suitable locations for permeable pavement. The site should have a slope of less than 5% , or a one foot drop for every 20 feet. Permeable pavement is not recommended in areas with a high risk of pollutant spills , such as a driveway where vehicles are frequently maintained.

How should permeable pavement be maintained?

- Sweep twice per year, in the fall and spring
- Avoid leaf accumulation or contact with sand, compost, or mulch
- Open-celled grids installed with grass may need occasional reseeding, mowing, and irrigation
- Open-celled grids installed with gravel may need occasional refilling of crushed rock or gravel
- Permeable pavers may need occasional refilling of sand in the joints

