



Porous Pavement Reduces Surface Runoff

Background Information

Porous paving systems have been shown to reduce surface runoff volume and calm flooding. Permeable pavements can reduce total impervious surface, as well as minimize directly connected impervious areas.

Porous paving systems include modular concrete pavers, which interlock and allow water to drain through, and flexible plastic grid networks, which when used with grass, protect root systems and stabilize soil. In some applications, gravel can be used as an alternative to pavement.

Porous paving systems are particularly useful for sidewalks, overflow parking, driveways, fire lanes, road shoulders and other areas of low-traffic volumes and loads.

Permeable paving systems vary widely in cost and are generally more expensive than typical asphalt pavement. However, the use of permeable paving can reduce the need for construction and maintenance of stormwater management facilities, resulting in cost savings over the long term.

Community Strategies

- To reduce runoff, encourage the use of porous pavement systems for sidewalks and low-volume traffic and parking areas.

At a Glance

- Porous paving systems can reduce runoff volume while encouraging infiltration.
- Porous paving systems are best suited for low-traffic applications such as sidewalks, overflow parking, driveways and fire lanes.
- They may reduce the need for construction and maintenance of stormwater management infrastructure, resulting in cost savings.

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Examples



For More Information

[California Stormwater Best Management Practice Handbooks by the California Stormwater Quality Association \(CASQA\) www.cabmphandbooks.com](http://www.cabmphandbooks.com)

[The City of Santa Monica provides a list of permeable pavement products and supplier information http://www.smgov.net/epd/residents/Urban_Runoff/urban.htm](http://www.smgov.net/epd/residents/Urban_Runoff/urban.htm)

[Greenbuilder Sourcebook http://www.greenbuilder.com/sourcebook/PerVIOUSMaterials.html](http://www.greenbuilder.com/sourcebook/PerVIOUSMaterials.html)

[NEMO Technical Paper Number 8 – Pavements and Surface Material http://www.nemo.uconn.edu/tools/publications.htm#technical](http://www.nemo.uconn.edu/tools/publications.htm#technical)

[The Urban Drainage and Flood Control District Volume 3 - Drainage Criteria Manual provides guidelines. http://www.udfcd.org/downloads/down_critmanual.htm](http://www.udfcd.org/downloads/down_critmanual.htm)

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