

Permeable Pavers / Permeable Asphalt



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Permeable pavement allows water to enter in the joints between bricks and flows through to a subbase that allows the stormwater to percolate and infiltrate the soil below. The goal is to control stormwater at the source, reduce stormwater runoff and improve water quality by filter pollutants in substrata layers.

Permeable pavers and asphalts have some limitations in cold weather climates. First, road salt contains chlorides that could migrate through the porous pavement and into the groundwater. Sand cannot be used on permeable surfaces because it will plug the pores and limit the permeability. These problems can be overcome with proper design and regular maintenance.

Porous Asphalt & Pervious Concrete Maintenance

Inspection should be performed several times in the first few months and then monthly or quarterly depending upon the intensity of use.

When conducting inspections

- Confirm “good housekeeping” practices are in place, i.e. are all surrounding surfaces stabilized and not likely to erode.
- Inspect for spalling and surface deterioration of the pavement surface.
- Check pavement surfaces for signs of ponding or standing water after a precipitation event. If standing water remains within 30 minutes after rainfall has ended, cleaning of porous pavement is recommended.
- Voids should be checked for accumulation of fine material.
- Check for accidental or illicit spillage.

Take pictures and record all observations in an established log with location, date, time and weather noted.

Maintenance activities

A Vacuum sweeper shall be used regularly to remove sediment and organic debris on the pavement surface. Regenera-

tive air vacuums are superior to other methods of vacuuming and should be used whenever possible. It may be necessary to repeat vacuum operations in the same location by conducting a second pass in the direction opposite the first pass. Careful inspections during the vacuuming process is required to determine the amount of cleaning and its effectiveness.

Pavement vacuuming should occur during spring cleanup following the last snow event to remove accumulated debris. Pavement vacuuming should also occur during fall cleanup to remove dead leaves.

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For loose debris, a power/leaf blower or gutter broom may be used to remove leaves and trash.

Power washing can be an effective tool for cleaning clogged areas. This should occur at mid pressure typically less than 500 psi and at an angle of 30 degrees or less. Vacuum removal of loosened debris and dirty water should occur simultaneously.

Check for and remove any debris accumulating on pavement, especially debris buildup in winter.

General notes

Controlling run-on and debris tracking is key to extending the life of porous surfaces.

Erosion and sedimentation control of adjacent areas is crucial.

Repairs can be made using standard (non-porous) asphalt for most damages. Repairs using standard asphalt should not exceed 15% of total area.

Do not store materials such as sand/salt, mulch, soil, yard waste, and other stock piles on porous surfaces.

Stockpiling snow on porous pavements is not recommended and will lead to premature clogging.

