



# Permeable Interlocking Concrete Pavements Maintenance Guide

Permeable interlocking concrete pavements offer years of structural performance and, with reasonable care and attention, meet hydrological objectives for managing stormwater runoff. Fines and debris naturally accumulate on the surface of walkways, plazas, driveways, parking lots and roadways. With porous pavements, if these particulates are allowed to build up over time, the pavement's ability to infiltrate stormwater diminishes. To maintain infiltration, cleaning at regular intervals is prescribed to remove sediment. The protocol for monolithic porous pavements, such as asphalt and concrete, calls for vacuuming as many as 4 times per year. Permeable pavers, on the other hand, can be easily maintained with routine cleaning because the aggregate in the drainage openings trap sediment at the surface, where it is accessible to conventional sweepers. If permeable interlocking pavements become severely clogged, aggregate in the openings can be removed and replenished to restore full infiltration.

Provisions in stormwater permit maintenance covenants are sometimes used to stipulate cleaning frequency. While the intention is worthy, the regimen may be relaxed over time or, if the property changes hands, not conveyed to the new owner. We suggest a more practical and plausible approach to determining when deep cleaning is required for pavements comprised of permeable interlocking concrete pavers - visual inspection. A good indication that infiltration must be restored is the presence of persistent standing water on the pavement surface following a rainfall or evidence of sediment deposit that cannot be removed by sweeping. As simple as it sounds, pouring a bucket of water onto various areas will show if the pavement is draining or clogged. After all, why incur the added expense of prescribed vacuum cleaning if not needed?

We recommend the following for routine cleaning, snow removal and general maintenance.

## Cleaning

- Keep pavement clean of leaves and debris.
- Sweep on routine basis. Perform in dry weather to remove encrusted sediment.
- Sweeper types:
  - Conventional broom sweeper
    - Acceptable for removing crust when joints/apertures are accessible to brushes
  - Regenerative air sweepers
    - Better option for maintaining permeable pavements
  - Pure vacuum machines
    - Best for restoration if clogged
- Do NOT pressure wash pavement as water jet can drive residue into the setting bed and base below.

## Snow Removal

- Remove snow promptly with conventional snow removal equipment. (Blade height adjustment typically not required.)
- Use sand and deicing chemicals sparingly. Unlike impervious surfaces where puddles re-freeze at night, melt water from snow and ice drains into the openings, reducing slip and skid hazards.

## General Maintenance

- Replenish aggregate in joints/voids as needed. Use correct size stone-sand to sweep into cleaned openings.
- Remove or spray weeds that grow in pavement openings with a biodegradable herbicide.
- Maintain groundcover around the perimeter of the pavement to filter run-off overflow and reduce sediment running onto the pavement.
- If overflow openings in curbing are present, keep clean of debris.
- Visually inspect pavement once a quarter and within 24 hours after storm events greater than 1.0 inch in a 24 hour period. Check outflow from observation well if installed. Retain records of inspection and maintenance.
- Repair ruts or deformations exceeding 1/2".
- Remove & replace broken pavers that compromise structural integrity of surface.
  - See Ideal's *Contractor's Guide to Installing Concrete Pavers* for more information

**Concrete & Permeable Pavers ■ Landscape Retaining Walls ■ Garden Products**

Manufactured by Ideal Concrete Block Company, Inc.

45-55 Power Rd – Westford, MA 01886 ■ 232 Lexington St. – Waltham, MA 02452