

POROUS SURFACES MAINTENANCE GUIDANCE

Maintenance of porous surfaces focuses on the periodic removal of sediment and debris from the system. While porous asphalt, porous concrete, and resin-bound aggregate are no longer permitted, maintenance guidance for existing systems can be found below. General recommended maintenance activities for porous surface are summarized in Table 4.2-4.

Sediment Control

Superficial soil does not necessarily clog the voids in porous surfaces. However, soil that is ground in repeatedly by tires can lead to clogging. Therefore, trucks or other heavy vehicles should be prevented from tracking or spilling soil on to the porous surfaces. Furthermore, all construction or hazardous materials carriers should be prohibited from entering a porous surface lot. Areas with heavy vehicular traffic will require more frequent vacuuming.

Winter Maintenance

Winter maintenance for a porous surface may be necessary but is usually less intensive than that required for a standard asphalt lot. By its very nature, a porous surface system with subsurface aggregate bed may have better snow and ice melting characteristics than standard pavement. Once snow and ice melt, they flow through the porous surface rather than refreezing. Therefore, ice and light snow accumulation are generally not as problematic. However, snow will accumulate during heavier storms. Abrasives such as sand or cinders must not be applied on or adjacent to the porous surface. Snow plowing is acceptable, provided it is done carefully (i.e., by setting the blade about 0.5 inches higher than usual and using a rubberized blade or blade tip). Salt is acceptable for use as a deicer on the porous surface, though non-toxic, organic deicers, applied either as blended, magnesium chloride-based liquid products or as pretreated salt, are preferable. Any deicing materials should be used in moderation.

**TABLE 4.2-4:
Porous Pavement Maintenance Guidelines**

	ACTIVITY	FREQUENCY
EARLY	Inspect erosion control and flow spreading devices until soil settlement and vegetative establishment of contributing areas has occurred.	<i>Biweekly</i>
	Mow grass in permeable paver or grid systems that have been planted with grass.	<i>As Needed</i>
	Vacuum porous asphalt or concrete surfaces with regenerative air sweeper or commercial vacuum sweeper (traditional street sweepers are not appropriate).	<i>Semiannually</i>
	Vacuum inlet structures within or draining to the structural SMP beneath the porous surface.	
	Inspect underdrain cleanouts, if any.	<i>Quarterly</i>
Replace filter bags for pre-treatment devices. Please ensure filter bag is installed properly.		
	Maintain records of all inspections and maintenance activity.	<i>Ongoing</i>

Repairs

Potholes are not common; though settling might occur if a soft spot in the subgrade is not removed during construction. Damaged areas that are smaller than 50 square feet and comprising less than 10% of the total porous area can be patched with a porous or standard asphalt mix, depending on the location within the porous area. In many cases the loss of porous surface will be insignificant. If an area greater than 50 square feet or 10% of the total is in need of repair, approval of patch type must be sought from either the engineer or owner. Porous surface must never be seal coated under any circumstances. Any required repair of drainage structures should be done promptly to ensure continued proper functioning of the system.

Outlet Controls

The designer is referred to Section 4.12, Outlet Controls, for information on maintenance guidance for outlet controls.