



# **FILTERPAVE® & FIRMAPAVE™**

## **POROUS PAVEMENT SYSTEM**

## **MAINTENANCE GUIDE**

### **Cleaning**

Porous surfaces do not sheet flow water. As such, small particulate matter such as dust, dirt and sand will not be transported over the surface through sheet flow. This material will collect on the pavement.

Filterpave® is far more porous than traditional porous concrete or porous asphalt, allowing many of the finer particles to move through the bonded glass/bonded aggregate matrix to the bottom of the clean, crushed aggregate base, where significant void area exists. However, larger particles will eventually gather nearer the surface and will have no mechanism for transport. Additionally, allowing the fine particles to migrate into the base can clog the base over time, eliminating water storage capacity. Sweeping up of loose particles from the surface such as rocks or loose aggregate from natural shedding is also recommended as needed. As such foreign material accumulates it can damage the wearing surface over time.

So, it is recommended that all FilterPave Porous Paving System installations be monitored for permeability and maintained with an industrial wet vacuum sweeper when necessary. Studies have shown that a wet process cleans the void spaces more effectively. The frequency of cleanings will vary depending on site conditions, including frequency of traffic, local climate, and surrounding environment, but should be performed once in the Spring and once in the Fall-after leaves have fallen and before snow (if applicable)-to assure long functional life. In order to minimize required cleanings, care should be taken, through good site design, to prevent adjoining landscaped areas from releasing loose soil onto the FilterPave/FirmaPave areas. A cutoff perimeter to prevent sediment run-on to the FilterPave/FirmaPave surface through the use of swales, cobble rock bands or other mechanisms to reduce particulate transport should be utilized.

In smaller settings such as residential applications, more frequent rinsing of the FilterPave/Firmapave surface with a standard garden hose and spray nozzle is all that is necessary to flush the sediment through the pores to keep a steady infiltration rate. If a pressure washer must be used on the pavement, use a maximum pressure of 3500 psi and keep nozzle of washer at least 3 feet above pavement surface at all times.

### **Snow Removal**

Plows with polycarbonate cutting blades are required. With their use, no alterations to typical snow removal are required. Use of any other type of snow removal system may void the manufacturer and installer's warranty. Sand should not be used for deicing and should not be necessary. Sand will prematurely clog the porous pavement system.

Magnesium Chloride is an excellent option for de-icing. University of New Hampshire studies show that porous pavements reduce the need for deicing salts by up to 70%. Porous pavements melt faster than traditional pavements, as the melting water does not remain on the surface to insulate the remaining ice.

### **Top Coating (20% glass)**

All FilterPave surfaces with 20% or more glass content will require a UV-Stabilized top coat of manufacturer recommended polyurethane to be applied at the time of the original installation and again at approximately 2-4 year intervals. In regions of intense UV conditions, a more frequent interval may be required, such as once every 1-2 years. This process will also renew the appearance of the FilterPave surface and does not significantly alter the water infiltration rate.

Top coating can be applied by roller or spray method. Specific mixing and application rate information is supplied with each top coating kit and should be followed closely for best results. Refer to the Filterpave QC document for recommended practices for topcoating.

### **Painting**

Painting parking stripes on FilterPave/FirmaPave is performed similarly to that of traditional concrete or asphalt parking lots. No unique materials or additional labor is required. Due to the porous nature of the surface, paint will last longer as the stripes are protected from wear in the voids and pore spaces just below the aggregate high points.

### **Repair**

Damage to the surface or repair for trench removal, etc can be affected with a concrete saw and removal. Replacement consists of reinstalling the removed area. Filterpave Products LLC can offer specific guidance and assistance upon request.

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