

~~Pervious~~ Problematic Concrete

Quickly Fix Your Permeable Pavement Problem with a Lasting Solution

Pervious concrete is a special type of concrete that allows water to infiltrate into the underlying soil. It typically lasts 5–10 years before encountering one or all of these problems:



Raveling

The concrete breaks apart into gravel, leading to unsightly pavement, that is NOT ADA-compliant.

Causes: salt, freeze-thaw, plowing, wheels turning, or just normal use.

Clogging

Soil, sand, dust, mulch and leaves in the stormwater blocks the pores in the concrete. This means the pervious concrete is no longer permeable.

Causes: sediment accumulation



Cracking

Misapplied forces cause concrete to crack. Cracks range in severity from unsightly to tripping hazards to major structural problems.

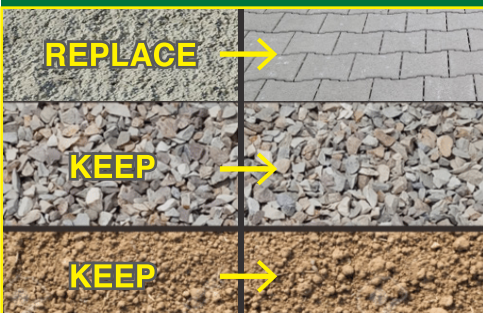
Causes: improper mix design, settling, freeze-thaw, and vehicle overloading (anything more than a car)

How to Fix

With these problems, owners are faced with regulatory requirement to manage their site's stormwater by fixing their pervious concrete. Unfortunately rehabilitation isn't possible, making surface replacement the way to go.

OPTION 1: Do the same thing

Rip out the failed pervious concrete and reinstall. Owners see the problem of replacing a failed material, with the same material—in 5-10 years, they will be back where they started. Installation isn't easy, pervious concrete requires: (1) certified installers and specialized mixes, (2) at least 7 days to cure, and (3) special attention to the week's forecast, particularly temperature, humidity and precipitation.



OPTION 2: Do it Better

After removing the 6" of failed pervious concrete, owners who install PaveDrain can reuse the existing stone base. PaveDrain units are 5.5" meaning a thin leveling course of 57 stone and geogrid need to be added to maintain existing pavement height. This process is quick and cost-effective.

PaveDrain is delivered to site, ready-to-install. PaveDrain systems are rated to handle all traffic and come with a **6-Year No Maintenance Warranty**. Furthermore units can be sealed against salt to prolong the concrete's lifetime to 40+ years.

Replacement Case Studies

PaveDrain Trusted to Replace Failed Pervious Concrete

Thomas Farm Community Center (Rockville, MD)

This community center's parking lot was all failed pervious concrete. The City used a hybrid approach with plain concrete drive aisles and PaveDrain parking stalls. By directing water to the parking areas, and reducing the amount of permeable pavement surface—costs were reduced, while performance increased.



Georgian Forest ES Montgomery County Public Schools (Silver Spring, MD)

Pervious concrete had failed so badly that it appeared the parking lot was just gravel. Pervious concrete was replaced 1:1 with PaveDrain. New schools just start with PaveDrain.



Shoreview Maintenance Building (Shoreview, MN)

The city of Shoreview is on the cutting edge for municipalities regarding their approach to stormwater management, utilizing permeable technology years - and sometimes decades - before their peers. Unfortunately, the pervious concrete started to have issues within a few years of install from salt. A crew of just 3 workers were able to tear out the pervious concrete, re-dress the subgrade rock, and replace 7,000 sf with PaveDrain in just one week.

