

Gravel-Lok™

POROUS STONE PAVING

Case Study: Homeowner Installed DIY - Small Project

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CASE STUDY: Gravel-Lok

This homeowner has a 15' x 2' wide strip that separates her driveway from her sidewalk. It is an area that receives both pedestrian and vehicular traffic. It is filled with decorative stone ranging in size from 3/8" to 3". Over time the stones disappear – they get tossed away due to foot or vehicular traffic. They end up in the driveway, on the sidewalk, or adjacent beds. They also 'settle' and migrate down into the earth below the bed. Dirt, leaves and small twigs infiltrate the bed of pebbles. It's impossible to blow off or vacuum the area without losing more stones.

Every year or two the homeowner picks up the stones, washes them, and replaces them.

This year she used Gravel-Lok to bond the stones together. The following slides describe the process.



Step 1: Remove Dirty Stones





**Some of the areas
were completely
infiltrated with dirt.**

Step 2: Install Geotextile Fabric

**Once stones
were removed,
she installed a
non-woven
geotextile fabric.
This prevents
the stones from
migrating down
into the earth.**

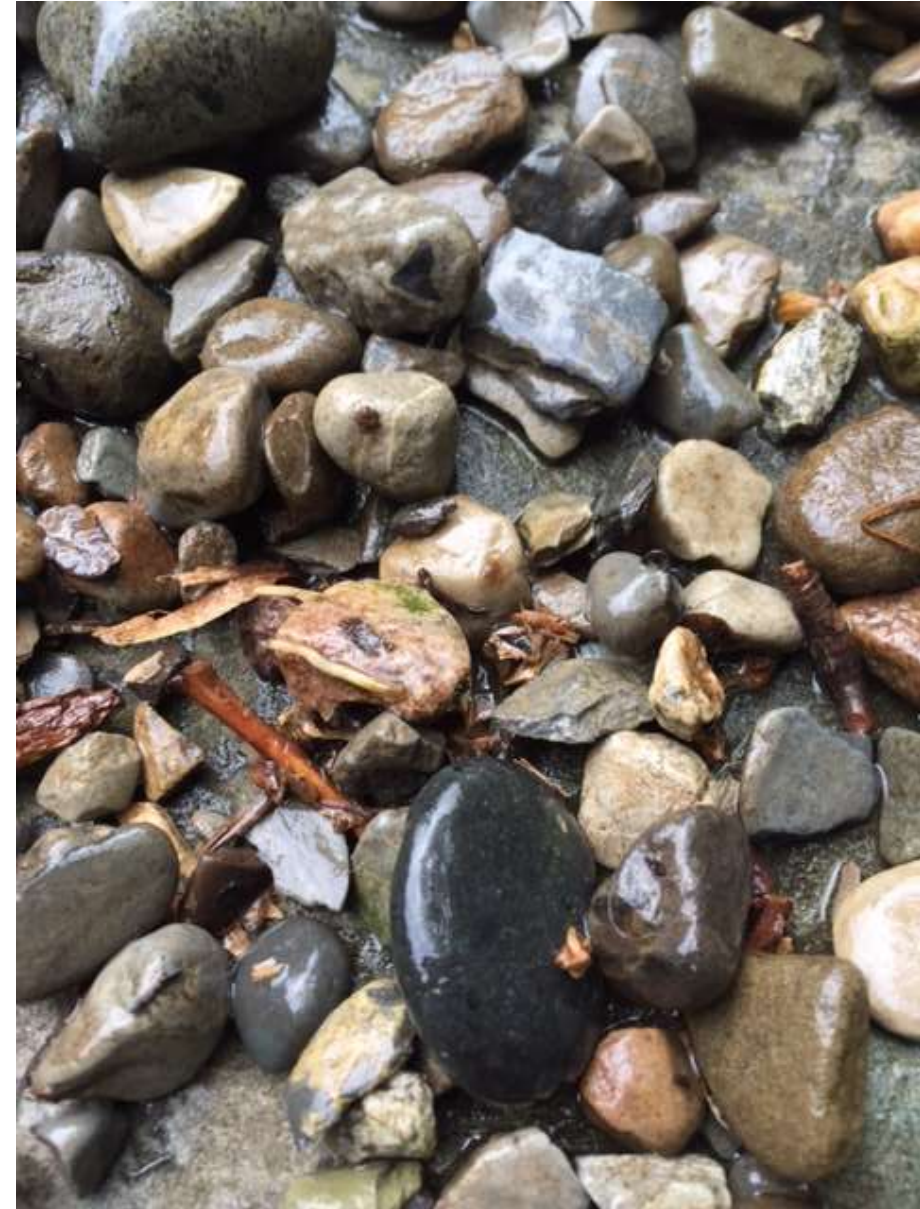


Step 3: Clean the Stones

She put the stones in a plastic colander and set the colander in a wheelbarrow. She used a hose to force the dirt away from the stones.



Here is a closeup photo of the type of leaves and twigs that were still mixed with the wet stones after the dirt was removed.





Although the stones were free from dirt and mud, they still contained many little leaves and twigs. And, they were wet from the washing process.

She spread the stones out on a sidewalk to dry them.

Then, she picked up the stones, by the handful, removing any leaves or stones, and put the clean, dry, stones back into buckets.



Step 4: Replace the Stones

She put the clean, dry stones back into the area.

Step 5: Preparation

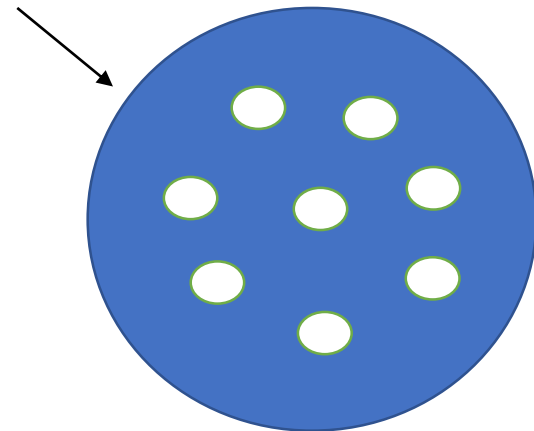
The goal is to lightly sprinkle the liquid onto the stones. Her stones were only about 1" – 2" deep. When stones are less than 2.5" deep and too much liquid is applied, it can foam up and ruin the job. You can always add more! It is better to apply it lightly and apply more, where needed, if necessary.

In order to apply it lightly, she used a 1 liter size drink bottle, emptied out the liquid, and used a hair dryer to make sure the inside of the bottle was dry. (Gravel-Lok should never be mixed with water.)

Then, she drilled out about 8 holes in the cap using a 1/16" drill bit. She used a funnel to fill bottles about half way with Gravel-Lok. Prepare and fill several bottles at once so you won't have to stop to refill.



CAP





Step 7: Application

While wearing proper protective equipment, she lightly sprinkled the liquid onto the stones by turning the bottle over. The liquid flowed through the holes in the cap.



TIP: Have acetone and a rag handy if you drip any on adjacent pavements. Clean it up right away to prevent staining.

Sprinkle lightly. It will have a streaked appearance. This is normal.



After a little while, maybe one hour, the liquid will drip down around the stones and appear to spread. For the most part, it will 'fill in' and the streaked look will disappear.



Gravel-Lok has a 24 hour cure time.

It also must be dry (no rain) and 50 degrees or above for a period of 12 hours after installing Gravel-Lok. If it rains, do not cover. This will create a greenhouse effect and it will have too much moisture and not cure properly.

The next day, she applied a little more liquid to those areas that were missed.

For 30 sf she used about 40 oz. of liquid.





COMPLETE!

