

RiverSmart Homes Rain Garden, Pervious Paver Rebate Perc Test

You must perform a perc test before installing either a rain garden or pervious pavers. This test needs to be performed to ensure that your soils will drain and that a rain garden or pervious pavers will function properly. Please follow the below steps and fill out the chart (you or your contractor can do this). You must fill out this form and return it for pre construction approval. *Note: If you are installing pervious pavers, the perc test can be performed in an adjacent unpaved area of the yard. If the entire yard is paved, then the perc test should be performed once the concrete is removed, but before the pervious paver system is installed.*

Step 1: Dig a hole that is 24" deep and at least 6" wide in the area that you will be installing either the pervious pavers or rain garden. It is helpful to add a stake with a ruler attached to measure the rate of infiltration.

Step 2: Fill up the hole with 12" of water and let drain completely.



Step 3: Within 12 hours of the first fill, fill the hole with

12" of water a second time. Measure the water height every hour for 6 hours (at this point the rate of infiltration should stabilize). Please fill out the chart below.

Step 4: Calculate infiltration rate:

| • | Elapsed time in hours | Depth of water in Inches | Total change in water level (inches) | Calculate Infiltration Rate |
|-------------|-----------------------------|--------------------------------|--|---|
| First Fill | <12 | N/A | Subtract water depth at hour 6 from 12 inches: | Divide Total change in water level by 6 hours: |
| Second Fill | 1 | | | |
| | 2 | | | |
| | 3 | | | |
| | 4 | | | |
| | 5 | | | |
| | 6 | | | |

Step 5: Check the next day to make sure that the second filling has drained within 24-36 hours. An optimal infiltration rate would be 1.2" per hour and minimum acceptable infiltration rate is .3 " per hour – *if the hole has not drained within 36 hours a rain garden or pervious paver installation is not possible*.



Pictures from: http://www.seattle.gov/util/groups/public/ documents/webcontent/02_008090.pdf

Name:

Site Address:

