

Soil Drainage Test

This test will help determine if soil conditions in your yard are suitable for a rain garden, pervious pavers, or other infiltration solutions.

1. Dig a hole that is 24 inches deep and at least 6 inches across.
2. Place a yard stick in the hole with the end flush with the bottom of the hole.
3. Fill the hole with water to the 12-inch mark and let the water drain completely.
4. Repeat filling hole with water to 12-inch depth and drain a second time (may take overnight).
5. Fill the hole with water to a 12-inch depth a third time, making sure it is within 24 hours of the initial fill of water.
6. Time how long it takes the water to drain out completely.

Start time (12 inches of water) = _____

End time (0 inches of water) = _____

7. Divide total inches by total hours to calculate the estimated soil drainage rate (inches/hour).

Total change in water depth ÷ Total hours elapsed = _____ inches/hours



If you find any of the following conditions during your test, your location is not suitable for a rain garden or other stormwater infiltration system:

- You hit hard pan (dense clay) while digging your hole
- Your test hole does not drain at least 0.5 inches per hour
- Your test hole fills with water after or during your digging attempt