

PERVIOUS PAVERS

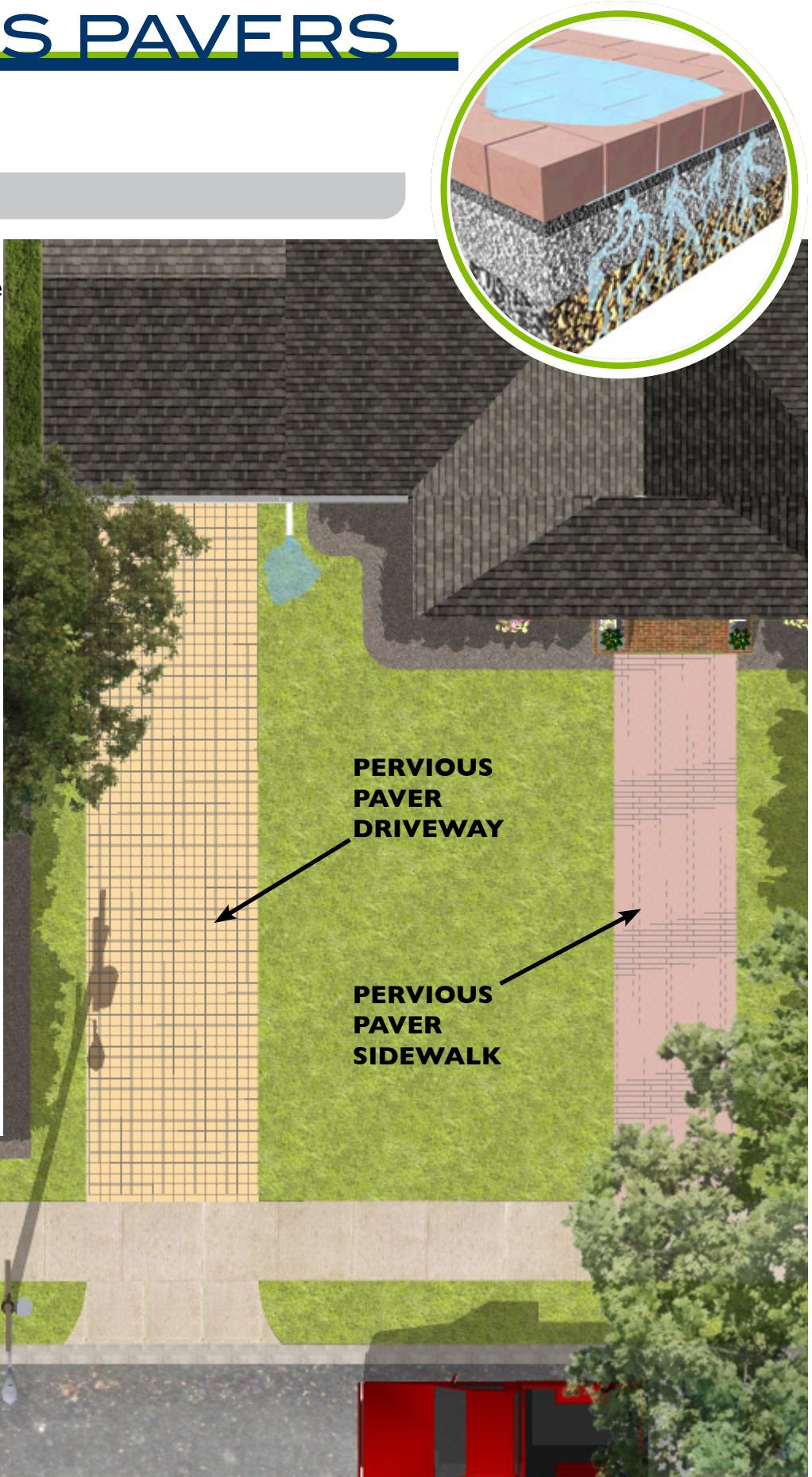


DEFINITION

Pervious pavers are pavers made out of concrete bricks and are separated by joints or gaps. These gaps are filled with small stones. The pavers are laid over a bed of washed gravel or clean aggregate stones that have no fine material to fill gaps. This way water is able to move through the gaps between the pavers and is stored in the gravel or aggregate area beneath the pavers until it infiltrates into the soil.

You can walk and drive on pervious pavers, just like on regular pavement. Although you can install them in small patio areas yourself, it is recommended that you hire a contractor to install them in larger areas, especially if you are trying to get credit for stormwater management criteria or if you are using them for vehicular loads such as driveways or parking.

An Interlocking Concrete Pavement Institute (ICPI) certified contractor should be the one to install your pervious pavers.

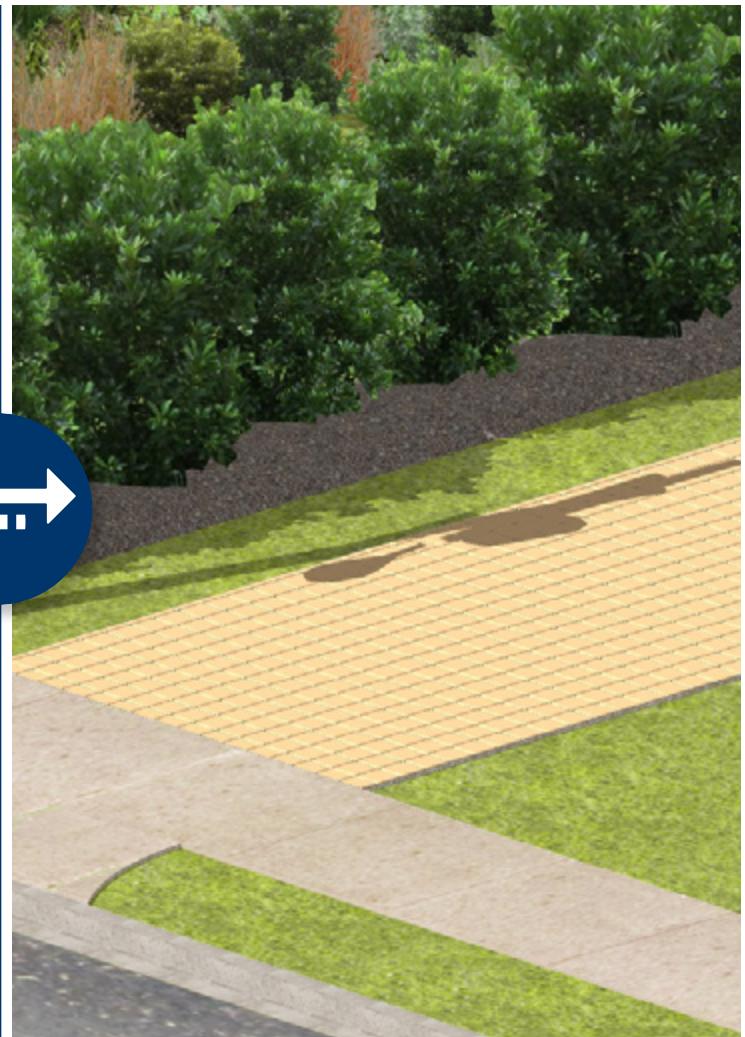


BEFORE



CONCRETE DRIVEWAY

AFTER



PERVIOUS PAVER DRIVEWAY

EXAMPLES

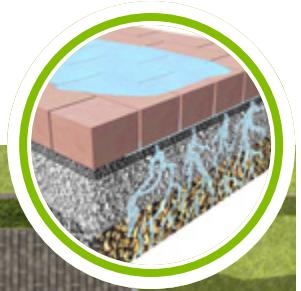
PERVIOUS DRIVEWAY



PERVIOUS SIDEWALK



CONSIDERATIONS



Typically pervious pavement replaces traditional concrete surfaces. These surfaces are commonly driveways and sidewalks. Driveway aprons have to remain concrete due to city code and vehicle weight requirements. Pervious pavers can also be used to create patio spaces and other paths on your property. The following items discuss several site conditions that need to be considered prior to determining whether a particular location is suitable for pervious pavers.

Steep slopes:

- Pervious pavers should not be placed on slopes greater than **5%**. This may cause too much shifting of base materials and pavers.

High Water Table:

- The bottom of the base aggregate should be at least **2** feet above the seasonal high water table.

Poor Soil Conditions:

- Be sure to test your soil beforehand to make sure that water percolates through it.

Floodplain:

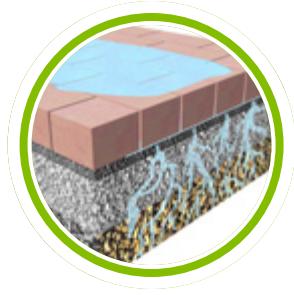
- Pervious pavers should not be constructed within the **100**-year floodplain.



GETTING STARTED

Due to the increased complexity of pervious pavers and the need for specialty equipment, it is strongly recommended that you work with an ICPI certified contractor.

If you want to install small areas of pervious pavers yourself, you will need the following items to help you get started.



DO IT YOURSELF (DIY)

If you intend to perform this work yourself, see the lists for general tools and materials you may need to help you get started.



Tools & Materials:

- Personal Protective Equipment (PPE)
- Paint for marking the ground
- Shovel
- Rake
- Heavy equipment rental
- Garden hose or bucket
- Tape measure
- Utility knife
- Wheelbarrow
- Hammer or mallet
- Pervious concrete pavers

- No. **2** Aggregate
- No. **57** Aggregate
- No. **8** Aggregate
- Plastic, steel or concrete edging
- Wooden or metal stakes
- Levels
- Tamper or Mechanical compactor
- Roller
- Underdrain (if needed)



HIRE OUT THE WORK

Contact a [CBLPro](#) licensed and bonded landscape or site contractor. Prices will vary on amount of digging and length of pipes.



SPECIALTY ITEM or KITS

Specialty items or drainage supplies can be ordered Online or found at a landscape supply store.



MAINTENANCE

Yearly

1 to 2 times annually (typically spring/fall): vacuum surface, remove surface sediment and soiled aggregate, and refill joints with clean aggregate, sweep surface clean and test infiltration rate.

Replenish aggregate in joints if more than $\frac{1}{2}$ in. (**13** mm) from chamfer bottoms on paver surfaces.

Inspect vegetation around perimeter for cover & soil stability, repair/replant as needed to prevent soil from washing onto pavers.

Inspect and repair all paver surface deformations exceeding $\frac{1}{2}$ in. (**13** mm)



HOW TO

Step 1: Assess & Mark

Verify your drainage will not adversely affect your house foundation, anyone else's land or any public areas. Call **811** before beginning the construction process.

Step 2: Site Prep

Set up temporary erosion and sediment controls during install and divert stormwater away from project site. Stabilize the area surrounding the pervious hard-scape. Do not install the system in wet conditions.

Step 3: Removal

When removing concrete keep from compacting the soil the permeable hard-scape will be placed on. Excavators or backhoes should work from the sides to excavate to the appropriate design depth and dimensions.

Step 4: Subsoil Work

The native soils along the bottom of the permeable hard-scape should be Scarified or tilled to a depth of **3 to 4** inches prior to the placement of stone.

Step 5: Rock & Edging

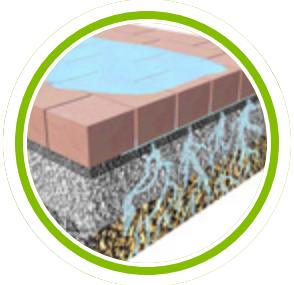
Moisten and spread the appropriate clean, washed stone aggregate (usually No. **2** or No. **57** stone) **6**-inches at a time to the desired depth. Place at least **2** inches of additional clean pea sized aggregate above and then lightly compact it.

Install edging restraint to keep stone and pavers in place.

Step 6: Lay Pavers

Paving materials shall be installed in accordance with manufacturer or industry specifications for the particular type of pavement.

- Pavers may be placed by hand or with mechanical installers.
- Fill gaps at the edge of the paved areas with cut pavers or edge units.
- Fill the joints and openings with stone. Joint openings must be filled per the paver
- Compact and seat the pavers into the bedding course.



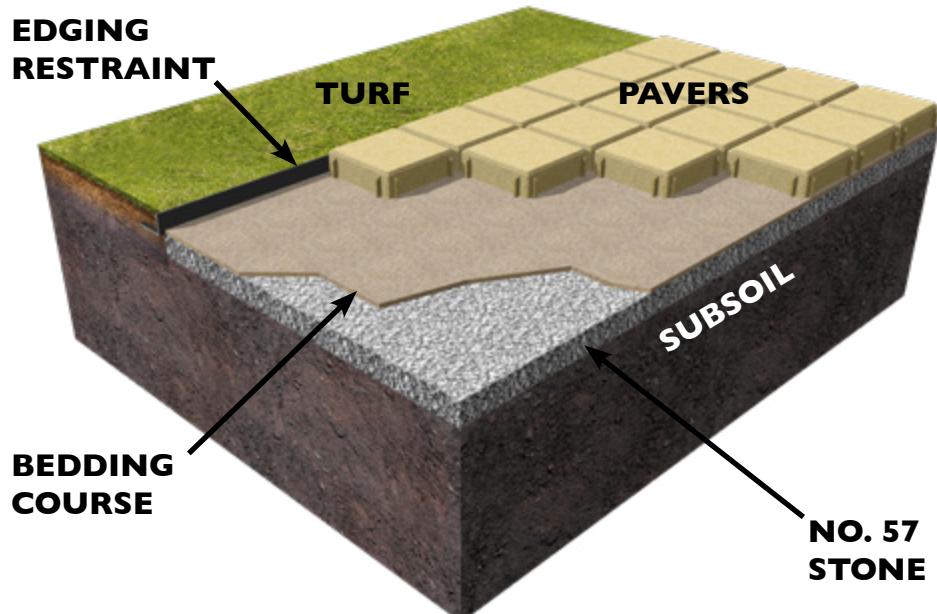
- Thoroughly sweep the surface after construction to remove all excess aggregate.

Step 7: Inspect

Inspect the area for settlement. Any pavers that settle or are not level must be inspected and reinstalled.

Within **6** months, top off the paver joints with additional stones if any areas are missing stone.

Pro Tip: Keep construction materials clean from being contaminated by sediment as this will clog the pavers.



Project Completion!

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