

GREEN INFRASTRUCTURE in New Jersey



PRACTICES

GREEN INFRASTRUCTURE PRACTICE: PERVIOUS PAVEMENT

Pervious pavement systems are paved surfaces that allow rainwater to infiltrate into underlying soils. There are three types of pervious pavement systems: pervious concrete, porous asphalt and interlocking concrete pavers.

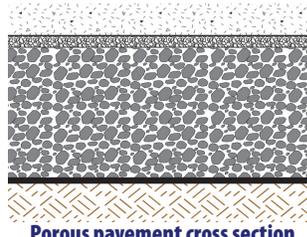
HOW IT WORKS:

Rain that falls on these systems enters an underground storage bed through either pores in the paved surface, as in porous asphalt or pervious concrete, or through gaps between pavers, as in interlocking concrete pavers. Water is held temporarily in the storage area while it slowly percolates into the soil beneath the pervious paving system. Because rainwater is able to flow through this type of pavement, the runoff is treated for pollutants as it passes through the soils; from there it is available to replenish groundwater. In addition, the soils below pervious pavement tend to be wetter than soils underneath traditional pavement. The water in the soil traps heat, so pervious pavement does not freeze as quickly as standard pavement; this can reduce the amount of salt needed for de-icing in the winter.

CONSIDERATIONS:

Because pervious pavement relies on the underlying soils to treat pollutants and to recharge groundwater, these soils must be sandy enough to allow the rainwater to flow through it. Also, because these types of systems ultimately do flow into the groundwater, they should not be used where chemicals that could contaminate groundwater supplies are present.

Additional information regarding the design of pervious pavement is available at www.njstormwater.org/bmp_manual2.htm.



Porous pavement cross section