

Permeable Pavement

Description

Permeable pavement allows stormwater to pass through and percolate into the underlying soil. This technology is comprised of a hard but permeable surface, with underlying capacity to store water prior to infiltration. Excess water can be routed to a controlled drainage system. Examples include pervious concrete, porous asphalt, or interlocking concrete pavers separated by spaces and joints. Typical site locations include parking lots, plazas, walkways/sidewalks, and playgrounds.

Advantages

- Significant reduction in stormwater runoff
- Increases groundwater recharge
- Removes pollutants from stormwater runoff
- Stormwater runoff can be stored then piped out of the system for reuse
- Reduces regional flooding and impacts from hydromodification
- Reduces in the amount of land needed for traditional stormwater management measures
- Long life-cycle results in less maintenance over time (as compared to conventional surfaces)

Limitations

- Requires continuous maintenance, otherwise the system can become clogged and ineffective
- Must take traffic and site use into account
- Areas of low soil permeability, seasonal high groundwater tables, and areas close to drinking water supply wells should be avoided
- Areas with steep slopes may require pretreatment
- Areas that have slope stability issues may not be suitable
- Should not be used in areas that can negatively impact building foundations

Porous Asphalt Parking Lot

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