

## Pervious Concrete Facts & Benefits

## When it Rains, it Drains

## **Pervious Concrete Facts:**

- 1) Pervious concrete pavements allow water to pass through the pavement to a stone base beneath the concrete.
- 2) Pervious concrete performs structurally similar to conventional concrete and is capable of carrying pedestrian, automobile and heavy truck traffic.
- 3) Pervious concrete is most often used for walking paths, parking lots and low-volume streets and local roads. Other beneficial uses for pervious concrete include sub-bases for conventional pavements, artificial reefs, well linings, tree grates in sidewalks, noise barriers and non-load-bearing walls, among others.
- 4) Almost all ready mixed concrete plants are capable of producing pervious concrete.
- 5) Pervious concrete is considered by the NCDENR DWQ as a preferred permeable pavement.

## **Pervious Concrete Benefits:**

- 1) Pervious concrete assists in stormwater management by reducing, or eliminating, the need for unsightly dry or wet ponds. By eliminating ponds, the public is relieved of potentially dangerous breeding grounds for mosquitoes and other harmful insects, reptiles, etc.
- 2) By allowing water to pass through the concrete and be stored in the stone base beneath the pavement, the water is held until it is allowed to infiltrate into the ground.
- Pervious concrete helps to keep the groundwater table close to pre-development conditions. This
  helps to minimize the effects of drought conditions in metropolitan areas by reducing stormwater
  runoff and stream erosion.
- 4) The NCDENR DWQ gives water quality credit to pervious concrete for reducing Total Suspended Solids by up to 85%, Total Nitrogen by up to 30% and Total Phosphorus by up to 60%.
- 5) The NCDENR DWQ grants water quantity credits to pervious concrete for peak attenuation and volume capture. Additionally, the DWQ gives credit for reducing Built-Upon Area (for purposes of determining whether a site is high- or low-density) by up to 75%.
- 6) Progressive local, state and Federal jurisdictions grant pervious concrete credit to reduce the Impermeable Surface Ratio when determining Percent Impermeable Area for a constructed site. This credit can, and should, be a 1:1 credit.

NCDENR DWQ recognizes pervious concrete as having a low land requirement, moderate cost of construction and maintenance burden while receiving high community acceptance.