What is Pervious Concrete?

Pervious concrete is a basic mix of coarse aggregate, cement, water, and little or no sand or fine-grained sediment. When installed by experienced contractors, pervious concrete has a porosity of 15% to 30% and has a lifespan that is comparable to conventional concrete.

As stormwater flows over typical parking lots and other impervious surfaces, it picks up pollutants such as sediment, oil, and bacteria and transports them toward downstream water bodies. As stormwater soaks through the pores in the pervious concrete and into the soil below, many of these pollutants are filtered out.

The two sections of pervious concrete on the downstream edges of the Chamber of Commerce parking lot are designed to keep polluted runoff from flowing into the Sampit River.

Benefits of Pervious Concrete

- Prevents ponding and flooding problems by allowing rainwater to percolate into the ground
- Prevents stormwater runoff from flowing off-site, thus protecting downstream natural water bodies
- Helps purify stormwater by filtering out contaminants, such as sediment, bacteria, and chemicals
- Enables recharge of underground aquifers
- May reduce the Heat Island Effect often associated with large impervious areas
- Reduces the need for expensive stormwater management practices, such as retention ponds

Research

Researchers from the University of South Carolina found that the pervious sections of our parking lot have an average porosity of 30% and could theoretically handle 1,200 inches of rain per hour – more than even the soils below could absorb!

Dr. Liv Haselbach, a researcher from USC, found that water soaked through the pervious concrete at an average rate of 10 gallons per minute!

Allen Gaither removes a cylindrical core from the finished lot to test the porosity of the pervious concrete.
Project Partners

- The North Inlet-Winyah Bay Coastal Training Program
- The Georgetown County Chamber of Commerce
- The Georgetown Times
- The City of Georgetown
- Georgetown County
- TRICO Engineering Consultants
- Homono & Gastright, General Contractors
- Cobb Concrete Construction

Resources for Additional Information

- http://northinlet.sc.edu/training/
- http://www.pervious.info/
- http://www.perviouspavement.org/
- http://www.nrmca.org/

What’s different about the Georgetown County Chamber of Commerce parking lot?

Pervious Concrete!
When it rains, it drains!