Presto Geosystems’ GEOPAVE® porous pavements were utilized along with other environmental and sustainable products in a popular Wisconsin nature preserve, The Ridges Sanctuary, in their pursuit for a LEED® green building rating. Awarded LEED® Gold in January 2017, this facility is the first LEED® certified commercial building in Wisconsin’s Door County.

In addition to the GEOPAVE aggregate system incorporated for highly porous parking and walkways around the facility, other green design features included high performance and low-energy materials such as insulation, lighting, heating and cooling, water use, and a multitude of recycled materials.
Highly Porous System Protects Lake Michigan Waters; Contributes to Stormwater Goals

Design choices that encourage land preservation and conservation were of utmost importance to the 7,400 sf center and serve as an exemplary example to the community, both homeowners and businesses, of how sustainable and low-environmental impact materials can be included in buildings.

Protecting the Lake Michigan watershed was a primary concern at this facility’s location on the northeast shores of the Door County Peninsula, and Western shore of Lake Michigan. Located adjacent to Lake Michigan, the GEOPAVE system was an important part of the overall plan to protect the waters against the negative effects of stormwater runoff on water quality. The GEOPAVE system, infilled with highly porous stone, allows water infiltration, and acts as a natural, on-site stormwater retention system, storing stormwater in its aggregate base after rain events and allowing for natural percolation. Unlike hard pavements that shed water from the surface, the GEOPAVE system with its permeable infill accepts water, significantly reducing runoff into the surrounding sensitive areas.

Use of Local Aggregate Resources

The limestone crushed aggregate used for the parking area and the contrasting colored buckshot crushed aggregate for the walkways were both obtained locally. The GEOPAVE paver structure is made from recycled polymer and is designed specifically to contain aggregate infill. The system’s integrally-molded mesh bottom contains the aggregate infill and minimizes aggregate movement under vehicle loading and turning stresses. GEOPAVE pavements are designed to accept every day traffic and can be designed with appropriate base to accommodate heavier loads such as for emergency and utility lanes.

The Results

“We are extremely pleased with the level of interest visitors have expressed in the GEOPAVE product and delighted we’ve had the opportunity to talk with them about this very practical way of making a personal investment in the environment”, notes Judy Drew, Assistant Director, The Ridges Sanctuary.

Create a CSI-Spec