

Willow Creek Select Series™ Permeable Pavers

Sustainable Solution for a Lake Home

When impermeable surface limits are an issue, Willow Creek Paving Stones Select Series permeable pavers can be the solution. They look beautiful while meeting municipal limitations for protecting environmentally sensitive waterways and lakes.

Willow Creek's Select Series pavers can be installed as a traditional or permeable surface. Permeable pavers dramatically reduce runoff from roadways, including stormwater and snowmelt. Stormwater that flows across fields, yards and paved surfaces can carry pesticides, vehicle fluids, fertilizers and other pollutants. These pollutants become concentrated in lakes and waterways when discharged from storm sewers.

A permeable installation using Select Series pavers ultimately protects waterways while reducing the amount of runoff from impermeable surfaces on a property. Where stormwater falls on a permeable paver system, it percolates back into the subsoil through joints in the paver surface, relying on nature's filtering system to prevent runoff and heat island effects and protect aquatic ecosystems, while supporting pedestrian or vehicle traffic.

Homeowners with a new home on the shores of Pulaski Lake in Buffalo, MN, had to consider the city's impermeable surface limits when they were about to install a driveway. An existing traditional patio and sidewalk had been grandfathered into the property's impermeable footprint, but the homeowners weren't excited about the prospect of a 40-foot by 60-foot unpaved driveway. Concrete was out of the question due to the city ordinance.

"The city of Buffalo, Minn., requires no more than 25 percent of hard surfaces on a lot," said homeowner Kent Pfeifer, who with his wife Lynn, own a property management company in Buffalo. "The city and state department of natural resources want to protect the quality of Pulaski Lake and the surrounding watershed district by managing runoff."

Landscape contractor Mike Kuka, owner of L & K Landscaping, in St. Michael, MN, suggested Willow Creek's Select Series 7cm Slatestone in the Shor color, with a lineal soldier course in a contrasting Ash color for the border. The permeable solution allowed the driveway to be built while staying within the city's impervious surface limits.

"Impermeable surface limits mean that the total square foot of hard or impermeable surfaces cannot not exceed a certain percentage of the total area," said Kuka. "A permeable interlocking concrete paver system from Willow Creek Paving Stones provided the solution."

"We had to figure out the amount of rock under the pavers for the drain-tile system, which allows rainwater to percolate down slowly while maintaining the integrity of the permeable installation," said Kuka. "The permeable installation had three sizes of rock going down more than 15 inches."

Permeable pavers perform well in Minnesota winters because they are manufactured to withstand freeze-thaw conditions and absorb the sun's heat, allowing snow and ice melt in place through the voids. "I was a little concerned about snow removal with permeable pavers," Pfeifer said. "It's easy to remove snow with the snow blower by setting the blade a little higher. And one benefit of the permeable system is that snow and ice melt in place with the sun. There's no problem with ice build-up, compared to the concrete adjacent to it."

Not only do Willow Creek Select Series permeable pavers meet municipal requirements for impervious surface limits, but they look beautiful too. "We get a lot of compliments on our driveway, and a lot of people stop to look at it," said Pfeifer. "We even had one person stop at our dock with his pontoon boat, when we were outside, to look at the beautiful hardscapes around our home."

Select Series pavers incorporate Willow Creek Infusion™ technology, which provides vibrant color, enhanced color longevity, heightened durability and additional stain-resistant properties. Select Series permeable pavers have been tested by an independent, certified laboratory to meet or exceed permeability standards (ASTM C1781).



Project: Pulaski Lake home, Buffalo, MN
Owner: Private Residence
Installer: L & K Landscaping, St. Michael, MN
Products: Driveway is a permeable installation of 7cm Willow Creek Select Series Slatestone in Shor for the driveway's paver field with 7cm Slatestone in Ash for the 3-piece lineal soldier course border. Back patio/side walkway is a traditional installation of 6cm Slatestone in Shor for the paver field with 6cm Slatestone in Ash for the 3-piece lineal soldier course border.
Square Feet: 2,400 Sq. Ft.

