

Eco-Friendly Solutions

Oberfields Permeable Pavers

Permeable Interlocking Concrete Pavements (PICPs) are highly effective in providing infiltration, detention and treatment of storm water pollution. The base can be designed to filter, treat and slowly release water into a storm sewer or water course while providing a walking and driving surface. PICPs answer the call from municipal regulations to limit impervious cover and runoff into storm drains working at capacity, or when sites have limited space for detention ponds.

The U.S. Environmental Protection Agency and several state agencies consider PICPs an infiltration best management practices (BMPs). An increasing number of cities, counties and states are incorporating them into land development and runoff standards, low-impact development guidelines and design manuals on stormwater control. With proper design, material selection, construction and routine maintenance, PICP is a sustainable low-impact BMP used by landscape architects, architects, engineers, developers and public agency staff.

Permeable Interlocking Concrete Pavers (PICPs) are eligible for LEED® credits under the U.S. Green Building Council's guidelines. These requirements limit runoff and water pollution by managing storm water. These pavements can reduce runoff-generating impervious cover and decrease the rate and quantity of runoff.

The design of Oberfield's Washington 21 Permeable Paver allows water to flow around and through the paver joints effortlessly. The design is dynamic enough to also allow these units to be used in conjunction, seamlessly with our standard Washington System, allowing for flexible design between permeable and non-permeable areas in the same design.



50 year life-cycle for surface



Vintage Washington Full & Half Permeable Pavers

Full 5 1/2" x 8 1/4"
(140 mm x 210 mm)

Half 5 1/2" x 4 1/8"
(140 mm x 105 mm)

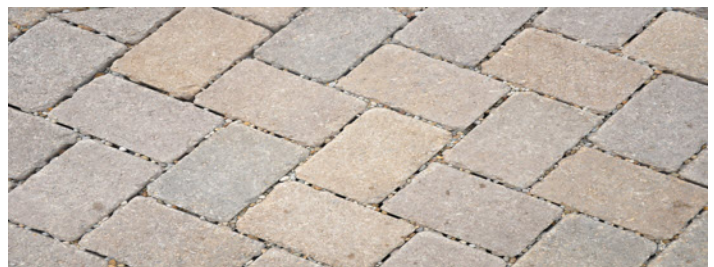
Available in tumbled & non-tumbled

Non-stocked item

LEED® points to contribute to Sustainable Sites, Water Efficiency, Materials & Resources and/or Innovative Design



Reduces runoff from common rainstorms by as much as 100%; eliminates surface puddles and local flooding.



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Permeable Interlocking Concrete Pavement Fits University Master

Home to over 18,000 students and 4,000 staff, The University of Victoria follows an integrated campus plan that incorporates sustainable practices in construction and operation of all new buildings and facilities. A natural fit was permeable interlocking concrete pavements at a new pedestrian drop off and short-term parking for the expanding Engineering/Computer Science building. Completed in March 2004, University officials asked the design engineer to create the 8,000 sf (743 m²) parking that exceeded LEED® (Leadership in Energy and Environmental Design) criteria, specifically reducing the rate and quantity of runoff by 25% from a 2-year, 24 hour design storm. The open joints and notches in the paver surface enabled full infiltration of commonly occurring storms through a clean crushed jointing and bedding material.

The herringbone paving pattern achieved a welcoming entrance while creating six parking spaces for disabled persons and six standard parking spaces. The pavement and subgrade slope gently to one end of the site where perforated pipe at the bottom of the subbase allow the base to drain within 24 hours. The existing catch basins handle overflows from extreme storm events.



An 8,000 sf (743 m²) entrance drop-off and parking lot creates a detention and infiltration for stormwater at the University of Victoria, British Columbia. The fine stone-filled joints infiltrate water from most commonly occurring storms.



A three-layer base provides ample storage and holding time for the water to soak into the clay subgrade and for excess water to filter through the base and drain into a catch basin. These layers include 10 in. (250 mm) of 3 in. (75 mm) open-graded crushed stone, 6 in. (150 mm) of 3/4 in. (19 mm) open-graded crushed stone, and a 2 in. (50 mm) bedding layer with aggregate ranging from 1/2 in. to 1/16 in. (12.5 mm to 1.16 mm). The soil subgrade is clay.

The project was designed by Bruce DeMaere, A. Sc. T with Bullock Bauer Associates of Victoria, British Columbia. Excel Construction from Victoria was the General Contractor. The pavers were supplied and installed by ICPI members.

According to Sarah Webb, the University's Sustainability Coordinator, "The paving stones have exceeded our expectations. Students, faculty and staff have commented on how aesthetically pleasing the drop off is, we have had no problems with wheelchair access, and the stones have continued to perform under our heaviest west coast rains." Maintenance has been minimal and deicers kept ice from the surface during the occasional winter freeze, nor have there been any problems from freeze-thaw cycles. Ms. Webb also noted that, "Paving stones, and other permeable products, will continue to be used on the University of Victoria campus as a part of our green building program and our commitment in our Integrated Stormwater Management Plan to reduce water run off and improve water quality."



The project specifications called for crushed, open-graded base compaction with initial passes of a roller compactor in vibratory mode, then final passes in static mode.

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