



barkman

a better way to solve water management issues

Increasingly, water management is an important issue for municipalities concerned about excessive storm flooding, reduced water quality for drinking and swimming and polluted streams, rivers and lakes. Many of these water issues are the direct result of the presence of asphalt and concrete paving, which prevents the ground from properly absorbing storm water. This, in turn, causes unwanted flooding and/or redirects the water, with accompanying pollutants, into rivers, lakes and retention ponds.

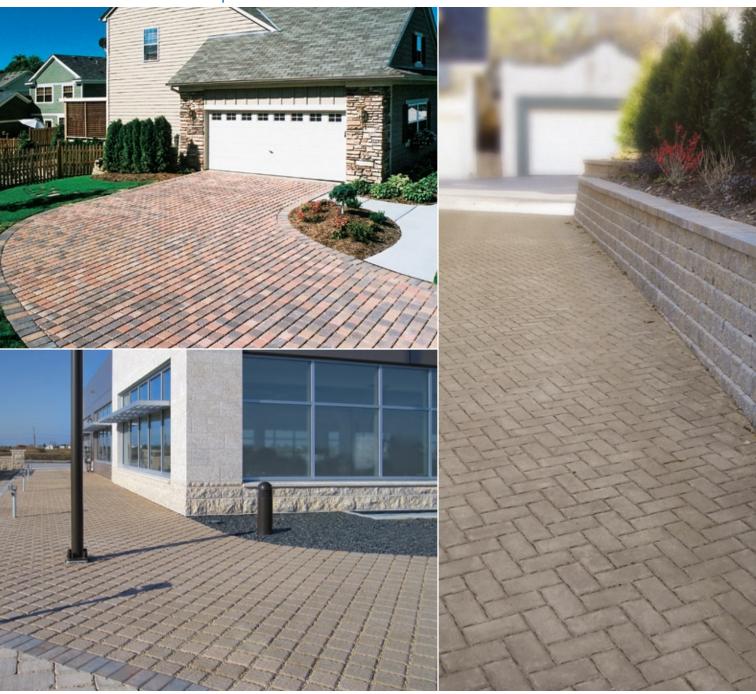
But now there's a solution – barkman's Permeable Paver System with StormAbsorb™ Technology, an innovative new product that conforms to Best Management Practices (BMPs) to effectively handle storm water on-site, and reduce its negative effects.

barkman's StormAbsorb™ Technology Helps Protect the Environment

Perfect for any building or landscaping project seeking LEEDs certification, barkman's Permeable Paving System with StormAbsorb™ Technology reduces storm runoff and flooding and protects local water quality. It does this by permitting water to pass through the specially designed interlocking paver system into the ground, rather than having it collect in place or run off into storm sewers. Before release into the ground, the water is filtered through the paving system's crushed aggregate base, trapping most contaminants which can pollute local water systems.



ideal for all low-speed traffic areas



suburban parking lots, parks, driveways, roadway parking bays, subdivision roads, sidewalks, boat ramps, redevelopment parking areas, plazas, sidewalks, brown fields, urban office plazas, commercial entrances, sidewalks, street tree planting areas, parking lots, parks, outdoor seating areas, low-speed residential streets

barkman

permeable paving system

- Reduces or eliminates the need for storm water detention and retention ponds, storm sewers and drainage appurtenances.
- Removes most pollutants vehicular oil drippings,
 zinc, copper, phosphorus and suspended sediments.
- Meets Low Impact Development (LID) goals.
- Conserves space usage by combining roads, parking, storm water infiltration and retention into the same area, creating more green space or building opportunity.
- Allows rain water harvesting for on-site irrigation or building grey water use.
- Preserves wooded areas that would otherwise be cleared for storm water detention or retention ponds.
- Increases site infiltration to help maintain pre-development runoff volumes and peak flows.
- Reduces urban heat islands through evaporation and reflective, light colors.

Permeable joint material Open-graded bedding course Open-graded base reservoir Underdrain (as required) Open-graded subbase reservoir Uncompacted subgrade soil

easy to install

Mechanical paving equipment allows for easy installation*. Project phasing is made possible through the use of local materials for open-graded base and sub-base. No compaction of soil sub-grade is required. Simply excavate and trim.

*Note: Holland Eco pavers are supplied in pre-configured bundles for mechanical installation.



Construct base using local aggregate



Spread aggregate base, sub-base and compact



Install pavers at 5,000 sq. ft. (500 m²)/machine/day



Fill joints with small aggregate and compact, sweep fine aggregate into joints

better for the environment, better for your budget

Meets LEED® and BMP Requirements

barkman's permeable paving system allows projects to meet post-construction Best Management Practices (BMPs) requirements for the reduction of runoff and pollutants, including U.S. Environmental Protection Agency (EPA) storm water performance criteria for a structural BMP. The system also meets local, state and provincial storm water drainage design criteria and complies with U.S. National Pollutant Discharge Elimination System (NPDES) regulations. Finally, it allows projects to earn lucrative LEED® credits under the criteria for Sustainable Sites (SS), Water Efficiency (WE), Materials & Resources (MR).

sustainable sites credits	points
6.1 (storm water management)	1 ¹
6.2 (storm water management treatment)	1 ¹
water efficiency credits	points
1.1	12
1.2	12
2.0	1 ²
3.1	1 ²
3.2	12
materials and resources credits	points
5.1	1 to 2 ³
5.2	14

¹ With far greater reflectivity than asphalt, StormAbsorb™ Systems can also meet SS requirements for reduced urban heat islands.

Reduces Construction Costs

barkman's Permeable Paving System with StormAbsorb™ Technology offers considerable savings over traditional asphalt or concrete paving. First, the system permits more site space for building by containing storm water right where it occurs in parking and pedestrian areas. The subsequent reduction or elimination of storm water infrastructure such as sewers and retention ponds can mean a dramatic decrease in short and long term costs. Additionally, 100% coverage is not required. With sections serving as holding ponds for asphalt or concrete sections, only partial application is needed. Finally, barkman Permeable Paving lasts a lot longer, requires far less maintenance than other surfaces and repair without patches or pavement cuts. So while the materials themselves may cost more, overall construction has the potential to cost less than if traditionally paved.

As a leading manufacturer of precast concrete products for residential, commercial, agricultural and municipal applications, every barkman product is the result of extensive research and testing. Barkman Concrete Ltd. is an active member of the Manitoba Nursery & Landscape Association (MNLA), Canadian Nursery & Landscape Association (CNLA), Manitoba Home Builders Association (MHBA), Canadian Home Builders Association (CHBA), Interlocking Concrete Paver Institute (ICPI), American Concrete Institute (ACI) and International American Society for Testing & Materials (ASTM). We are also actively affiliated with the Manitoba Association of Landscape Architects (MALA). All barkman products meet or exceed standards set by these organizations and are guaranteed against defects.

² The use of StormAbsorb™ treated water for domestic or commercial irrigation, toilet flushing, etc. can qualify for LEED® Water Efficiency credits.

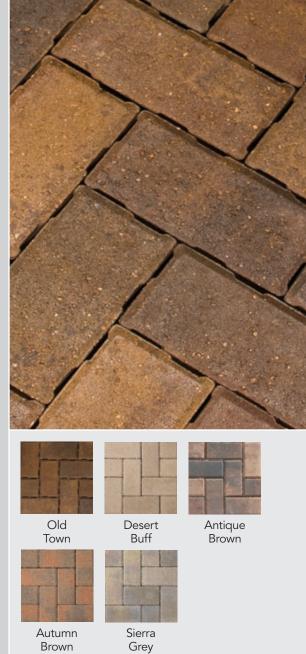
³ For building materials manufactured within an 800 km (500 mile) radius.

⁴ For manufactured materials extracted, harvested or recovered within same radius: 1 point.

barkman



colonial eco















Desert Buff

Antique Brown

Sierra Grey





At barkman we are committed to being good stewards of the planet.

Not only are our products excellent choices for people concerned about
the environment, we employ "environmental best practices" throughout

our manufacturing and operations whenever possible

Barkman Concrete Limited

Steinbach Office, 152 Brandt Street, Steinbach, MB R5G 0R2 T (204) 326 3445 or 1 800 461 2278 F (204) 326 5915 steinbach@barkmanconcrete.com

Winnipeg Office, 909 Gateway Road, Winnipeg, MB R2K 3L1 T (204) 667 3310 or 1 800 342 2879 F (204) 663 4854 winnipeg@barkmanconcrete.com

creating concrete solutions