

# Aqua-Bric®

## Pedestrian Friendly Permeable Pavement



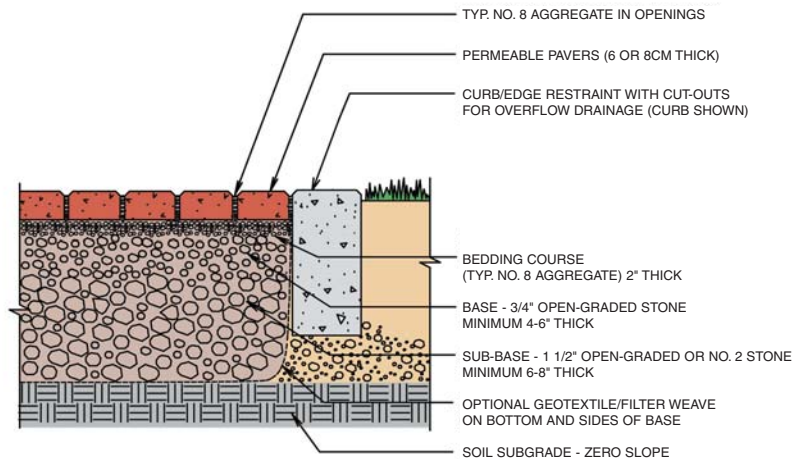
*Pavers by Ideal is pleased to introduce Aqua-Bric®, a pedestrian friendly, ADA compliant permeable interlocking concrete paver. Properly installed, Aqua-Bric's® flat surface accommodates foot traffic, high heels and wheelchairs while allowing rainwater to drain through the pavement and infiltrate into the soil below. Aqua-Bric is ideal for walkways, patios, plazas, entrances and residential driveways.*

### Benefits of Aqua-Bric®

- Creates a smooth, stable pavement surface with minimal openings complying with Americans with Disabilities Act (ADA) criteria
- Provides 100% stormwater infiltration—up to 6" of rainfall per hour over the design life of the pavement
- Eliminates standing water on surfaces without sloping
- Withstands harsh deicing salts, and snow can be safely and easily removed with snow shovels, snow blowers or snow plows
- EPA-recognized Best Management Practice (BMP) and meets Low Impact Development (LID) criteria
- Qualifies for credits under the LEED® Green Building Certification System
- Cost is comparable to conventional impervious pavement with catch basins and underground pipe
- Outperforms other systems in harsh climates with freeze/thaw cycles
- Popular shape offered in a choice of colors and patterns creates remarkable curb appeal



4" x 8" x 2 3/8"



Patent Pending

Aqua-Bric® is a registered trademark of Advanced Pavement Technology

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# Aqua-Bric®

## Introduction

Since 1923, Ideal Concrete Block has been at the forefront of manufacturing quality concrete masonry products in New England. In the mid-1970's, Ideal became one of the first companies in the U.S. to manufacture interlocking concrete pavers and introduced Eco-Stone® permeable pavers in the 1990's. Ideal continues its commitment to developing new products and technologies with the addition of Aqua-Bric permeable pavers.

## Aqua-Bric FAQs

### Some permeable pavers have larger size openings. Are they better?

The difference in infiltration rates between larger and smaller size openings molded into permeable pavers is minimal and both offer significantly greater rates of infiltration compared to all rainfall intensities typical to New England. This is not to be confused with our regular pavers, which do not provide any appreciable infiltration through the joints.

### How does the surface conform to ADA (American Disabilities Act) requirements?

ADA Design Guidelines require that surfaces be firm, stable and slip resistant. While our Eco-Stone and Aqua-Bric both meet these guidelines, Aqua-Bric has been designed to meet the criteria ADA is considering for joint spacing and chamfer size for pavements that are subject to wheelchairs, scooters and rolling walkers.

### How are permeable pavements designed and constructed?

Aqua-Bric permeable interlocking concrete pavements are similar in design and construction to our traditional interlocking pavers. Aqua-Bric pavers are placed onto a 2" layer of coarse stone sand, which sits atop a 6" to 12" thick base comprised of open-graded stone. The notches molded into Aqua-Bric create a series of openings throughout the pavement that allow rainwater to drain through the surface into the base. Pollutants carried from the pavement surface are naturally filtered out as the rainwater infiltrates into the soil below.

### Can a dense-graded aggregate base be used under permeable interlocking concrete pavement (PICP)?

Yes. Dense-graded bases can accommodate most of the runoff from common rainstorms up to 1 1/2" per hour. An open-graded base is preferred because it provides better infiltration rates, water storage capacity, filtering, and treatment of pollutants.

### What about clogging?

To maintain infiltration, a permeable pavement requires more care and consideration than impervious pavements. Avoid the use of sand in the winter, but if used, spread sparingly. Keep the pavement free of leaves, weeds, and sediment. Periodically sweep the openings to remove crust

that may have formed on the surface of the drainage openings. A stiff bristle broom works well for residential walks and driveways, while a hydrovac type sweeper is appropriate for commercial parking lots. The frequency of cleaning will vary with use of the pavement and deposition of sediment. If severely clogged, infiltration rates can be restored to 100% capacity by removing the aggregate from the openings and replacing it with clean material.

### How well does the pavement perform in freeze and thaw conditions?

Like our other pavers, Aqua-Bric is made to withstand New England's harsh winter and freeze-thaw conditions. PICPs allow ice and snow to melt and soak through the openings, thereby reducing slip hazards. Water drains from the base in about 24 hours, and should it freeze before draining, there is adequate space for ice to expand within the open-graded base, thus minimizing the risk of heaving.

### What about low-infiltration soils such as some types of clays?

If the subbase is comprised of low-draining soils such as clay, a perforated plastic pipe is placed at the bottom of the base to remove excess water.

### What about cost?

An Aqua-Bric permeable pavement is comparable in cost to conventional pavements that require catch basins and storm drains or underground chambers. For residential projects, installation and construction cost is similar to our traditional concrete pavers and over its life cycle, will compare favorably with asphalt pavements.

### What is the difference between permeable pavers and porous pavements?

Porous pavement is a generic term for pervious concrete, porous asphalt and permeable pavers. Concrete and asphalt are transported in a wet condition to the job site and cured in place. Both achieve infiltration through a popcorn texture. Permeable pavers are segmental units, factory made and delivered in a ready to use condition. They are molded with indentations along the sides, and when assembled into a pavement, create a series of openings that allow water to drain. Permeable pavers conform to ASTM C 936 standards and possess compressive strengths greater than 9000 psi. Properly installed, permeable pavers easily accommodate repeated vehicular traffic, and 8 cm thick units can support AASHTO H20 loads.

### Where can I obtain more information on permeable pavers?

Our leadership role in the Interlocking Concrete Pavement Institute (ICPI), the association that represents the concrete paver industry in North America, allows us to serve as a resource to design professionals, contractors and homeowners alike. Ideal is able to provide current information on the proper design, selection, detailing, construction and maintenance of PICPs.