

Sustainability

Ecological solutions with concrete pavers

Benefits

- Superior physical properties of pavers provide longer pavement life, reduced maintenance costs and extend the replacement cycle while conserving the use of raw materials
- Concrete pavers improve the quality of life for an environment and its users
- Concrete pavers provide sustainable ecological solutions proven to last

Advantages

- PICP eliminates stormwater runoff and conserves land, while serving as a durable wearing course



Solutions

Local flooding increases with development. Local flooding can increase with land development. Permeable Interlocking Concrete Pavement (PICP) is the perfect solution because runoff can be eliminated. Removing standing water creates a safer pavement surface, and a reduction in deicing salt usage. PICP also reduces the impact to existing stormwater infrastructure and mitigates peak flow rates, reducing downstream erosion.

Impervious pavements have a negative impact on the environment. Use of PICP has a positive impact by capturing first flush runoff pollutants and treating them.

Looking for ways to earn LEED® credits? Consider Interlocking Concrete Pavement (ICP) and PICP. Light-colored pavers provide a cooler surface and can even be produced to improve air quality. Energy costs may be reduced by employing ground source heat pumps with captured stormwater runoff. There are 27 LEED® points available with the use of ICP and PICP.

Pavements used on past projects too expensive over their life? If other types of pavement repair costs and replacement costs are too expensive, then the use of ICPs and PICPs are a solution. ICP and PICP life cycle costs will require less energy and resources to maintain and over the life of the pavement will be better for the environment.





Features

ICP and PICP are LEED® and LID friendly. Both may use local materials, labor and recycled content that reduce energy requirements and carbon footprint.

ICPs and PICPs provide a low maintenance solution. If you are looking for a system that will lower maintenance requirements and use less energy over its life, then ICPs and PICPs are the answer.

PICPs provide a method to effectively store and treat stormwater runoff. The

structure of a permeable pavement system provides a base and subbase to store runoff. They effectively trap suspended solids, process nutrients and oils and can immobilize heavy metals.

Elimination of material failure issues. Concrete pavers are factory-made thereby reducing time and energy due to material failure compared to site-formed pavements.

References

Project Profiles — Permeable Interlocking Concrete Pavements, 2008, Interlocking Concrete Pavement Institute

Permeable Interlocking Concrete Pavement- A Comparison Guide to Porous Asphalt and Pervious Concrete, 2008, Interlocking Concrete Pavement Institute

Permeable Interlocking Concrete Pavement — Fact Sheets, 2008, Interlocking Concrete Pavement Institute

Low Impact Development Center: www.lowimpactdevelopment.org

Field Evaluation of Permeable Pavements for Stormwater Management, Olympia, Washington: www.epa.gov/owow/NPS/pavements.pdf

“Permeable pavement is a very important part of the low impact toolbox. What it does is allow us to make surfaces and sidewalks permeable so we can then filtrate the runoff.”

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