

Choosing the Best Pavement— and the Best Installer



A comparison guide for consumers

What's Best for Your Home and Your Lifestyle?

You want the pavement for your walkway, driveway, patio or pool deck to look beautiful, require little maintenance, and stand up to the weather. It should also be easy to clean, easy to repair, and compliment the style of your home. In short, you want an excellent long-term return on your pavement investment.



Interlocking concrete pavements offer beauty and long life. Their pattern, colors and texture will enhance your home's character and value. To get the most from your paver project, consider the following aspects before you start.

Ideal for Patios, Pool Decks, Walks and Driveways



Patios, pool decks, walkways and driveways should be wide enough to fit people, lawn furniture, or in the case of driveways, cars and people. A wider walkway lends more grace to an entrance, so allow at least 3 ft (1 m). People enjoy walking on paths with gentle curves, and pavers can define and enlarge space for planting beds.



Layout of patios and decks is like planning a new room. What part of the day will it be in the sun and shade? Will it be blocked from the wind? Will you have plants, a fountain or a pool nearby? How about access to the house? Are steps needed?

What furniture will be on the patios: chairs, lounges, tables, umbrellas, grills? A table and chairs require at least a few hundred

square feet (20–30 m²) of space to allow for ease of movement and to accommodate different arrangements.

Ideal with Lighting

Lighting defines patios, walkways and drive-ways at night, increasing safety and adding a bit of mystique. Lighting can come from overhead, or from fixtures near the ground along the pavement's edge. Interlocking concrete pavements can even accommodate lighting systems that fit right into the paver pattern.



Ideal for Snow Melt Systems

Interlocking concrete pavements can integrate hot liquid-filled tubing or radiant electric wires to melt snow and ice. They can be set up to turn on automatically when a storm starts, eliminating plowing, ice hazards and the need for de-icing salts.

Choosing the Right Contractor

Interlocking concrete pavement systems are best built by professional contractors specializing in segmental pavement construction. They can complete a high-quality job quickly and safely because they have the right equipment, the right materials, and the right skills and knowledge.

The Interlocking Concrete Pavement Institute (ICPI) recommends using ICPI certified concrete paver installers, as well as manufacturers who have ICPI certified concrete paver products.

Why is ICPI Certification Important?




You're investing in a low-maintenance, long-lasting pavement. Certified concrete paver installers can help get the job done right the first time and on time. ICPI certified installers are industry professionals who recognize industry standards. Many are ICPI members, so their companies receive technical support and the latest industry information.





ICPI certified concrete paver installers learn all of the many details required for concrete paver installation excellence, including soil classification and compaction, bedding and joint sand selection and installation, proper material and labor estimating plus sound business practices.

The installer can verify certification for you by presenting a valid certificate from ICPI. Over 18,000 installers have been certified since 1995. Visit www.icpi.org to view a list of ICPI certified concrete paver installers. Besides certification, homeowners should always check job references provided by the contractor and visit nearby projects. Questions for contractors and a contractor check list are available on pages 6 and 7.

Segmental Paving—The most versatile option featuring individual units placed by hand or machine.

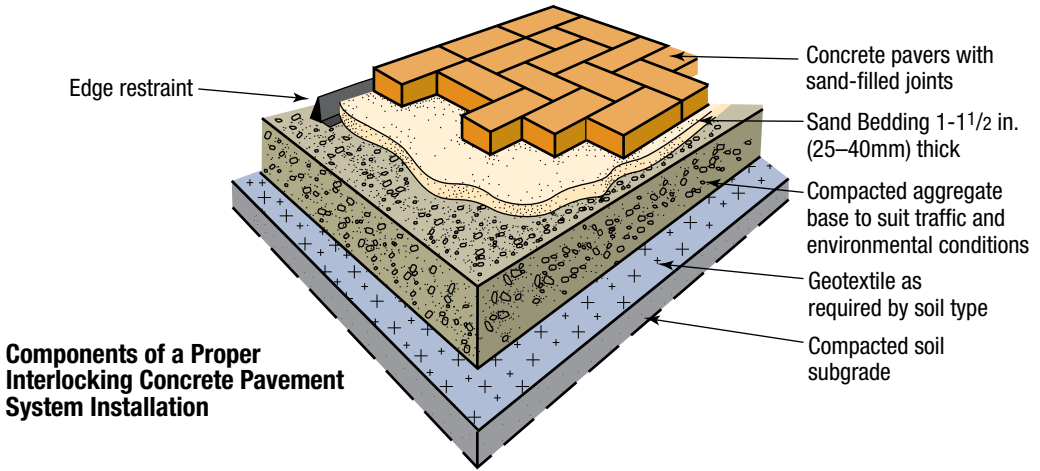
Pavement Types	Appearance	Initial Cost & Installation
<p>Concrete Pavers</p> 	<p>Widest range of finishes, colors, shapes, sizes. Laying patterns can compliment any home’s architecture due to a wide variety of styles available.</p>	<p>Moderate—Tightly fitted, uniform units are placed over a sand bed and a compacted aggregate base. Immediately ready for use. Can be installed by a homeowner or an ICPI certified professional.</p>
<p>Cobble Stone</p> 	<p>Gives elegant, permanent, yet informal “Old World” feel.</p>	<p>Highest—Non-uniform units must be fitted together by hand.</p>
<p>Clay Brick</p> 	<p>Traditionally comes in shades of red and red-brown. Limited shapes and sizes.</p>	<p>Moderate-High—Mortar-set base may be used which increases costs. Natural variations in dimensions may slow installation or cause difficulty in maintaining straight pattern lines.</p>

Other Paving Options

<p>Stamped Concrete</p> 	<p>Surface is usually colored. Patterns designed to give appearance of segmental paving but tooled or saw-cut joints may show.</p>	<p>High—Difficult for DIYers. Requires special equipment to stamp stone or paver patterns into surface. Surface sealer often used.</p>
<p>Ordinary Concrete</p> 	<p>Grey or light brown. Can be colored throughout or on surface only.</p>	<p>Moderate—Difficult for DIYers. Requires 5–7 days for hardening before use. Surface quality varies with weather and installation.</p>
<p>Asphalt</p> 	<p>Few color options. Achieving neat looking edges may be difficult. Stamped asphalt appears painted and artificial.</p>	<p>Low—Installs quickly over compacted aggregate base. Must be professionally installed.</p>
<p>Crushed Stone or Gravel</p> 	<p>Typically a rustic look. Appearance varies with color and shape of stones.</p>	<p>Low—Dumped and spread over soil (no base required).</p>

Superior design flexibility and an upgraded appearance stand out from typical paving applications.

Maintenance	Winter Durability	Snow Removal
<p>Low—Stained or broken pavers can be easily replaced without patches. Dark colored pavers can help hide stains. Factory-made pavers last for decades.</p>	<p>High—Small, high density units resist cracking as well as damage from freeze-thaw cycles and salts. Pavers are stronger than ordinary or stamped concrete.</p>	<p>Smooth surface allows for easy snow removal. Darker pavers help snow melt faster. Snow-melt systems can be easily integrated to eliminate snow and ice removal.</p>
<p>Low—High quality stone lasts for decades. Wide joints may encourage weeds and ants. Rough surface makes walking and driving difficult.</p>	<p>High—High density stone resists cracking and salts.</p>	<p>Rough surface makes plowing difficult.</p>
<p>Low—Natural surface variations may lead to chipping or possible damage.</p>	<p>Moderate—Salts may cause deterioration in some clay pavers.</p>	<p>Smooth surface allows for easy snow removal. Darker pavers help melt snow faster.</p>
<p>Moderate—Cracking likely. Patched repairs may be hard to color-match. Color fading also possible over time.</p>	<p>Low—Potential for deterioration from de-icing salts.</p>	<p>Uneven surface of some patterns and textures may make plowing difficult.</p>
<p>Moderate—Cracking likely. Repairs and replaced sections may be visible. Oil stains hard to remove.</p>	<p>Low—Cracks from freeze-thaw cycles, settlement and salt deterioration may occur.</p>	<p>Smooth initial surface allows for easy removal. Light-colored surface may not melt snow rapidly.</p>
<p>High—Wear and weather will break down surface. Black seal coat required every 2–3 years. Rut or pothole repairs visible. Oil drippings cause erosion.</p>	<p>Low—Cracks from freeze-thaw cycles, settlement and salt deterioration may occur.</p>	<p>Smooth surface allows for easy removal. Dark surface accelerates snow melting.</p>
<p>High—Scattered stone must be replaced and leveled regularly. Tire ruts are likely.</p>	<p>High—Stones resist freeze-thaw cycles and salts.</p>	<p>Stones and surface may become uneven during plowing.</p>



Be sure your proposal includes all materials and specifies these installation guidelines.

What questions to ask a contractor?

In order to ensure a quality installation, you should ask questions of the contractor like:

- How long have they been installing pavers?
- Have they been trained by a manufacturer or by the ICPI? Are they an ICPI Certified Installer? What percentage of their total business consists of installing concrete pavers?
- Will they provide you with three references, not only recent ones, but from past jobs? Can you contact their references and inspect the jobs?
- Do they have a portfolio of photos and letters to qualify themselves?

While the contractor is working on your property, they should be insured for any damage and injuries that may occur. Check your homeowner's insurance policy for coverage of the contractor while on your property.

- Can the contractor provide proof that Worker Compensation insurance covers all employees on the job? Do they have a current Liability Insurance certificate?
- Will they install the job per ICPI specifications? Can they supply a copy?
- Do they provide a written, itemized proposal outlining the scope of work and terms of payment? It should include starting and completion dates, demolition and excavation, paving and base materials, and taxes.
- Do they guarantee their work for one year and will they return to inspect it?
- Are they members of the ICPI or other associations?

With answers to these questions and others you might have, plus answers on how to know when the installation is being done right, you should be able to select a contractor. Use the contractor comparison checklist on page 7.

Contractor Comparison Checklist

CONTRACTOR INFORMATION			
1 Company Name			
Address			
Phone #			
Contact			
2 Workmanship Warranty (yrs)			
3 Job References			
Name			
Address			
Phone #			
Date Installed			
INSTALLATION PROCEDURES			
1 Excavation			
Depth			
Width			
Final Elevation Agreed Upon	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
2 Base Construction			
Type of Material			
Depth of Material			
-- walkway (min 4 in.)			
-- driveway (min 8 in.)			
Compaction			
-- with moisture	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
-- maximum 4 in. layers	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
Woven Geotextile (optional)	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
3 Bedding Layer			
Coarse Sharp Sand, i.e., concrete sand	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
Depth (max 1½ in.)	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
4 Pavers			
Quantity (Sq. Ft.)			
Supplier			
Warranty			
Shape			
Color			
Laying Pattern			
5 Edge Restraints			
Type			
Quantity (Lin. Ft.)			
Base Extends beyond (min 6 in.)	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
6 Jointing Sand			
Fine Washed Sand, i.e., masonry sand	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
Compact in Both Directions	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
Sweeps into Joints	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
TOTAL COST			
NOTES			



Formed in 1993, the Interlocking Concrete Pavement Institute (ICPI) is the authority on segmental concrete pavements in North America. Membership consists of manufacturers, suppliers, distributors, and contractors. ICPI endeavors to increase the quality of segmental concrete pavements in North America through education on proper installation methods.

For further information about concrete pavers, installation and contractors, contact your local ICPI member.

Distributed By

ICPI
INTERLOCKING CONCRETE
PAVEMENT INSTITUTE®



www.icpi.org

13921 Park Center Road
Suite 270
Herndon, VA 20171
Tel: (703) 657-6900
Fax: (703) 657-6901
Email: icpi@icpi.org

In Canada:
P.O. Box 1150
Uxbridge, ON L9P 1N4
Canada