



Building Your Interlocking Concrete Pavement to Last a Lifetime

Know what to expect during the delivery, set-up and installation of your pavement project.

Delivery and set-up

- Your contractor should work with you to identify an accessible area for the delivered pavers, crushed stone (aggregate) and bedding sand.
- Your contractor should follow your local municipality's regulations (and Homeowner's Association, if applicable) regarding temporary street storage of pavement materials.
- Be sure the contractor contacts the local utility location service to mark underground utilities. This service does not locate lawn irrigation pipes or other buried objects. Assist the contractor by identifying the location of these underground obstructions.
- You should be present when materials are delivered to ensure access to your home during construction and convenient access for the contractor's equipment.



Installation

- As the crew begins work, there will be dust, dirt and noise from the equipment that removes the old pavement, then excavates and places the new base, bedding sand and pavers.
- Keep all doors and windows closed during construction.
- Keep all pets and children away from the construction area.
- Alert your neighbors so they can do the same.
- Confirm the paver pattern, color(s) and anticipated cuts along the edges with the contractor prior to laying pavers. If a driveway is planned, do not leave your car in the garage. Your contractor can advise you on the best parking location for cars away from the crew and construction equipment.

Daily site inspection

- At the end of each day, spend a few minutes discussing the progress with the project foreman. The foreman should briefly describe work anticipated for the next day.
- Be certain that the pattern, direction, color blend, cuts and detail work meet your expectations. Bring any concerns to the attention of the project foreman immediately, so they can consider adjustments.
- If you have changes, notify the contractor in writing immediately and ask for a written change order. Change orders may require additional supplies, labor and expenses. Be clear on your expectations.
- Inspect the site once the crew has completed its daily clean-up. The crew should remove tools, loose pavers and construction debris. Notify the project foreman of any areas that need additional attention.
- Upon project completion, walk the site with the foreman for your final inspection. Communicate any details that need attention.



What Does Installation Involve?

An overview of the installation basics of a properly installed interlocking concrete pavement system.



Site layout and excavation: The layout of interlocking concrete pavement translates the drawing into reality. In addition to knowing the size of the pavement and excavated area, the layout tells the contractor the sequence of job functions and crew involvement. Considering all factors in advance such as material storage and paving direction helps ensure a smooth operation.

Preparing the soil subgrade: As with layout and excavation, proper preparation of the soil subgrade and aggregate base are important aspects of the job. Soil subgrade and base preparation typically requires up to 70% of the labor time. This time should result in a well-prepared soil subgrade and base.



Soil type: A properly prepared soil subgrade supports the base above it and distributes the loads from the surface. The soil type should be identified before starting the job, during the bid proposal. It can affect the estimate on labor hours and the type of equipment required for the job.



Compaction: Once the soil type is identified, the contractor needs to compact it. Compaction achieves four main purposes: it increases the soil's load-bearing strength; prevents pavement settlement/rutting; reduces seasonal movement; helps ensure that any movement is uniform. When compacted properly, the aggregate base density will minimize deformation and/or heaving of

the paved surface during freezing or thawing.

Surface grading: For proper drainage, the contractor will slope the paved area away from the house at a minimum of 2%.

Geotextiles (optional): Geotextiles (special fabrics) are recommended over compacted clay or silt soil subgrades. They are also a good choice over soils saturated for a large portion of the year. The fabric separates fines in soils from the base and prevents them from migrating upward into the base and weakening it.

Base thickness: ICPI recommends minimum base thickness for different applications. For pedestrian areas, including patios and walkways, for example, a minimum 4 in. (100 mm) thickness is recommended. Your contractor should know the technical requirements for base thickness that apply to your particular installation.

Edge restraints: Edge restraints around the perimeter of the pavers are essential for eliminating horizontal creeping of the pavers and loss of bedding sand. They hold the pavers in place for the life of the pavement.

Bedding sand: Sand is installed over the base to a consistent thickness—between 3/4 inch (20 mm) and 1 1/2 inch (40 mm) according to ICPI guidelines.

Proper paver types and sizes: It is important to choose the right pavers for the application. As a rule of thumb, for example, pedestrian areas and residential driveways achieve interlock with 2 3/8 inch (60 mm) thick pavers. Ask your contractor whether the pavers for your project are the recommended size for the application. For pavers consisting of more than one color, the contractor should assure an even color mix by taking pavers from several bundles or pallets at a time for installation on the smooth, screeded bedding sand.



Cutting pavers: All jobs with concrete pavers involve cutting them. Professional contractors should take care to control the dust from cutting pavers, but you should expect that there will be noise during this process.



Paver compaction and Joint Sand: Pavers are first compacted without joint sand to create initial interlock. After this is complete, dry joint sand is spread and swept and the pavers compacted again until the joints are completely full. Following compaction and removal of excess sand, you and the contractor should inspect the pavement together to ensure satisfaction.

Paver sealing (optional): While pavers are extremely durable, sealing may enhance the colors and can prevent staining. Allow a minimum of 90 days after completion of the installation before sealing. Consult your supplier/contractor for recommendations on cleaning and sealing.