

# Paving Stone Installation

Western Interlock paving stones are easily installed by home owners. No prior experience is needed, just careful work and attention to detail. The following list of tools and materials will make your project possible and enable you to create the long lasting results you desire:

- **Shovel**
- **Gravel**
- **Rubber Mallet**
- **Hand Tamper**
- **Stakes/Stringline**
- **Plate Compactor**
- **Level**
- **Snap-Edge®**

## Materials Needed:

**Gravel base:**  $\frac{3}{4}$ " minus crushed rock; typically 4"-6" of compacted base should be used for light vehicular and pedestrian traffic, or 6"-12" for heavy vehicular or industrial traffic. When using a 4" base, 1 yard of gravel will cover 80 square feet.

**Bedding Sand:** Coarse concrete sand is recommended. A uniform depth of 1" of sand is recommended. 1 yard of sand covers 200 square feet.

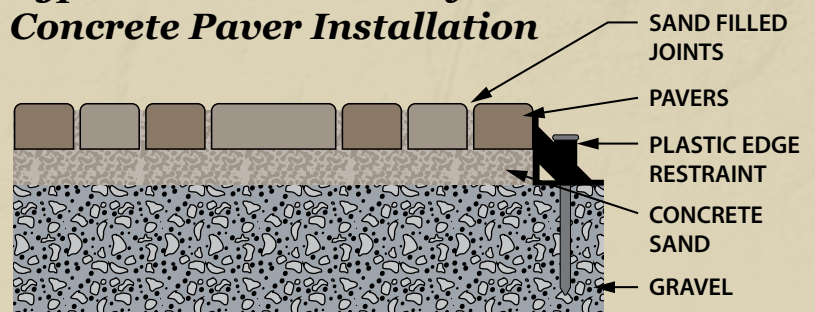
**Pavers:** Determine the total square footage of your project (*length x width = square feet*) adding 5-10% for cuts and extra pavers that might be needed later. To estimate the number of pieces you will need, multiply the square footage by the pieces per square foot. (*Square foot x Pieces per square foot = Total number of pavers needed*)

**Edge Restraint:** All exposed edges (*not up against a permanent structure*) must be restrained. Measure the linear feet of all exposed edges to determine the amount of edge restraint needed.

## Installation:

1. Measure and stake the desired area you intend to pave. Mark the outline of your project with stakes every 4-6" and at each corner; these stakes should be 6" outside from the edge of the planned area. Tie a string line at the level you want your finished project height.
2. Excavate 4"-6" beyond finished size, remove any loose dirt or sod to at least a minimum of 5"-6" below the finished grade. This makes room for 3"-4" of compacted gravel, 1" of sand and 2  $\frac{3}{8}$ " paving stones. The more time and effort you put into your base preparation, the better your paving stone project will look.
3. Compact sub-grade, backfill with crushed  $\frac{3}{4}$ " minus aggregate and compact again. Slope and grade are important for proper drainage. Assure a minimum of  $\frac{1}{4}$ " per foot drop, not to exceed  $\frac{1}{2}$ " per foot. When finished with the base, it should be smooth and flat and reflect the final grade of your pavers.

## Typical Cross Section of Concrete Paver Installation



# Installation Continued

4. Lay screed rails (1" outside diameter pipe or square tube) as guides, spread sand between rails and then use a straight wood 2" x 4" crossways to spread sand smooth and level to an even 1" depth. Remove the rails and fill in the voids left by the guides with sand and trowel smooth by hand or with the backside of a push broom. Don't walk on or compact the sand.
5. Determine your laying pattern. Starting in a square corner with a permanent edge, lay paving stones down lightly on the sand bed. Install rows of pavers checking with a string line every 4 feet or so, across the front of the laying edge to maintain a straight line. Stones may be marked with a wax crayon, and cut with a diamond blade wet saw (*recommended*), a diamond blade for a skill saw or a stone splitter. Try to keep cut pieces along the edges to a size of at least half of a full size paving stone.
6. Install plastic edge restraint (*or similar product*) along edges that are not up against a permanent structure. Edge restraint should rest on the compacted aggregate base and contain the sand and maintain the position of the paving stone.
7. Sweep pavers clean prior to compacting. Using a vibratory plate compactor, set the stones into the sand base. Start along the outside edge and work toward the center. This will level your paving stone project.
8. After compacting, sweep paver joints full of concrete sand and compact again.



## Efflorescence

Efflorescence is a whitish powder-like deposit, common on concrete and masonry products, that normally will disappear over time with weathering. Although it may present an aesthetic concern, efflorescence will not affect the structural performance of pavers or wall systems. With proper maintenance, efflorescence can be removed and the original color restored. Through manufacturing techniques, Western Interlock attempts to reduce the likelihood of efflorescence.

## Sealer

Sealing your paving stones is an option that does offer some advantages. Sealing enhances the color, increases stain resistance to oils, food, and vegetation; as well as stabilizing the joint sand to prevent wash-outs and weed germination. Sealers, however, are topical products and must be reapplied regularly (*generally every 1-3 years*). Efflorescence should be removed from the product prior to sealing.



**Without Sealer**



**With Sealer**