

This Quick Reference Guide assumes the installer has the required skills and equipment for the proper installation of concrete pavers. These guidelines are in accordance with industry standards as defined by the Concrete Masonry and Hardscapes Association (formerly known as the ICPI). The guide does not apply to porcelain or concrete slabs or permeable applications. The guidelines are intended for pathways, patios, and pedestrian areas only, with well-drained soils, and assumes that site conditions are suitable for paver applications.

STEP 1: Prior to excavation notify local utility companies to ensure digging does not damage underground utilities. Excavate area a minimum of 8" below finished grade (in freeze-thaw climates or site requiring additional base, 10 or 12" excavation may be needed). Be sure to over excavate a minimum of 6" beyond the perimeter of the paver area. *(Diagram 1)*



Diagram 1

STEP 2: Compact subgrade and ensure the subgrade slope 1-2% in the desired direction. Place the proper geotextile over the subgrade and up along the side walls if required (a separation fabric can prevent the migration of soil into the base layer). *(Diagram 2)*



Diagram 2

STEP 3: Add 4-8" of base material compacting in 2-4" lift thickness increments. The maximum lift thickness is based on the type of compaction equipment used. Use road base material (dense-graded aggregate) commonly used in your project area.

STEP 4: Install paver edge restraint on compacted base. Options include spiked plastic, steel or aluminum edging. If poured-in-place concrete curbs are used as a restraint, they should be placed on compacted aggregate in accordance with local requirements. Edge restraints must be installed at the correct level. A minimum of 1" vertical restraining surface should be available for contact with the side of the paver. Follow the installation instructions of the edge restraint manufacturer. *(Diagram 3)*

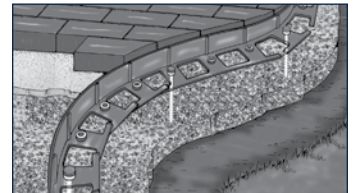


Diagram 3

STEP 5: Add nominal 1" uncompacted bedding sand layer and screed to level. Use concrete sand. Masonry sand, screenings or stone dust should never be used. *(Diagram 4)*



Diagram 4

STEP 6: Lay pavers in desired pattern starting at a 90-degree corner. Installing a border course along the perimeter is a recommended best practice. Joint widths between the pavers should be consistent and nominally 1/8". Ensure that the width allows the sand to enter and fill the joint. *(Diagram 5)*



Diagram 5

STEP 7: Compact the pavers with a minimum 5,000 lbf centrifugal compaction force operating at 75-90 hertz frequency. Fill paver joints to within 1/8" from the top with dry polymeric sand by spreading and sweeping. Reapply joint material and repeat compaction passes two additional times. *(Diagram 6)*



Diagram 6

STEP 8: Check your work. Final surface elevations should not vary more than +/- 3/8" under a 10 ft. straight edge. Joint lines should not vary by more than +/- 1/2" over 50 ft from taut string lines. Confirm final surface slope is ≥ 2%.

SAFETY NOTE: Always use appropriate equipment, including safety glasses or goggles and respirators, when splitting, cutting or hammering units.