

The following information are general guidelines for the installation of 60mm thick Interlocking Concrete Pavers as suggested by the ICPI (Interlocking Concrete Pavement Institute). Site conditions and Soils will vary from project to project, the information below are suggestions on how to install pavers and should not be used as definitive rules for installations of concrete pavers. Reference ICPI Tech Spec 2 for information on acceptable tolerances for installation.

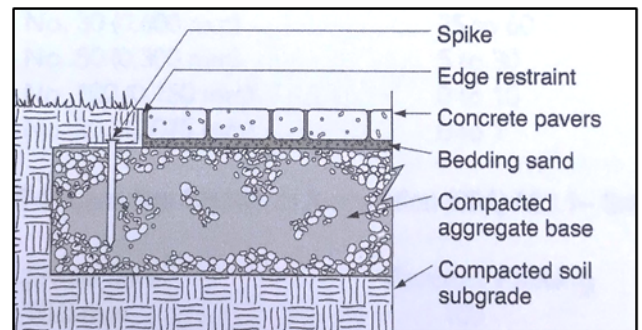
## Residential Paver Installation

### Suggested tools-

Shovel / rubber Mallet / Wood or metal Stakes / String Lines / line level and a 4' level / hand tamper / reversible plate compactor / wheel barrow / grease pencils / 1" od screed pipes / 4' +/- 2x4 / Masonry Block saw or cut off saw / marking paint

### Materials for installation-

Class II Base / Concrete Sand / EZ Edge restraints / Paver Spikes / Air Vol Pavers / Air Vol Stabilized joint sand or Plaster Sand.



### Installation -

- In preparing the area that Pavers will be installed, mark off the area with white marking paint to identify the areas that will be excavated for the installation.
- This area should be 6" to 12" past the area in which pavers will be installed.
- It is suggested to add approximately 5% to your total for any cuts needed or if extra pavers are needed.
- Prior to excavating, check with the local utility companies to ensure that digging does not damage underground pipes or wires. You can contact USA North 811 to arrange for check for utilities. Go to the [usnorth811.org](http://usnorth811.org) web site for information on how and when to arrange for a check for underground utilities.

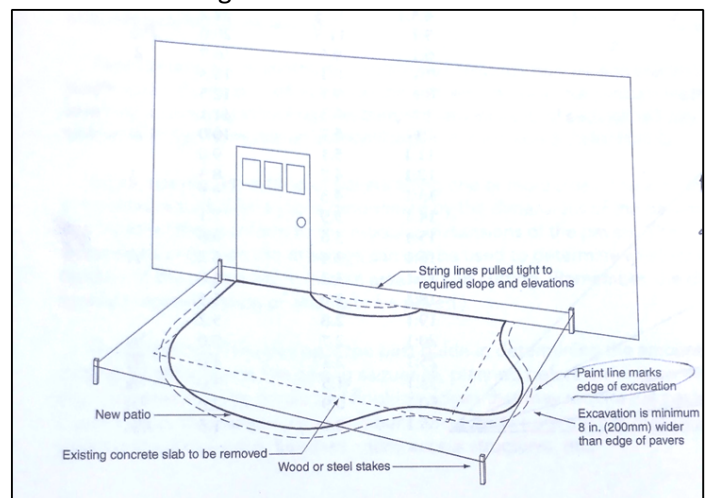


- Use wood stakes and string lines to mark finished grades.
- Stakes and string lines should be a slight distance away from the area to be removed so that they are not moved during excavation.

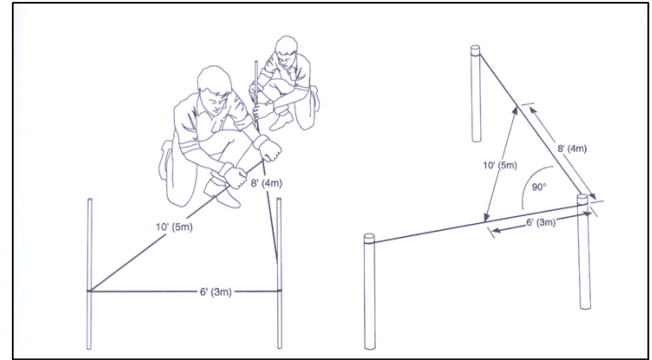
- Paver Installation needs to slope away

from structures. Typical slopes would be a minimum of 1.5%.

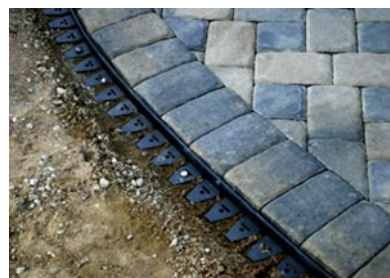
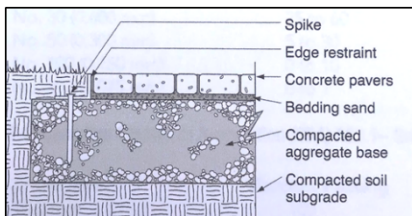
- If your installation will be square or rectangular, in order to get parallel sides and 90 degree corners, use the 3-4-5 triangle method. Start with a base line of 3', then with two measuring tapes and a helper to hold the ends, measure 4' from one end



of the 3' line, and 5' from the other. Drive a stake where the 4' & 5' marks meet. The angle opposite the 5' side will be 90 degrees. Measure off the 3' or 4' lines to the location of the opposite site and repeat the 3-4-5 Triangle measurement.



- Excavate and remove site soils to be replaced with the Class 2 Road Base that you could get from Air Vol Block.
  - Depth of excavation for Pedestrian only areas should be a minimum of 7-1/4". For driveways, minimum depth should be 9-1/4". Poor soil conditions may require a deeper base to prevent soil movement.
  - Compact the native soils to prevent differential settlement using a reversible plate compactor or hand tamper
  - Multiple string lines can now be used to identify where the final elevation of the pavers will be.
- Spread Class 2 base in lifts of 2"-3" compacting with a reversible plate compactor. Continue to add and compact the base until the Class 2 base is at 3-1/4" below the finished elevation your pavers will need to be.
- Use a hand tamper or other device to tamp down areas that the plate compactor can't get to.
- Once the base is compacted, install the edge restraints. Edge restraints should be about 6" to 12" in from the outside edge of the compacted Class II Base.
- The most common edge restraint is an "L" shaped plastic edge that is installed on top of the compacted base. You can get the EZ Edge retaining edges that are rigid or flexible from Air Vol Block along with the spikes to hold them in place.



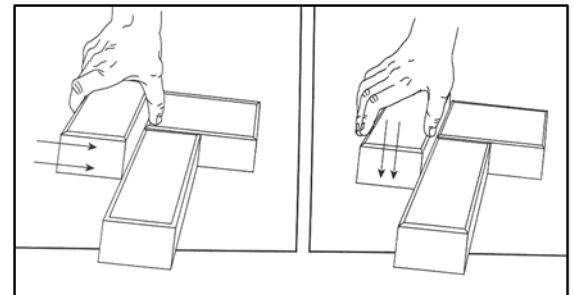
sand, commonly know as concrete sand that can be purchased from Air Vol Block as well.

- Install 1" of bedding conforms to ASTM C33. This

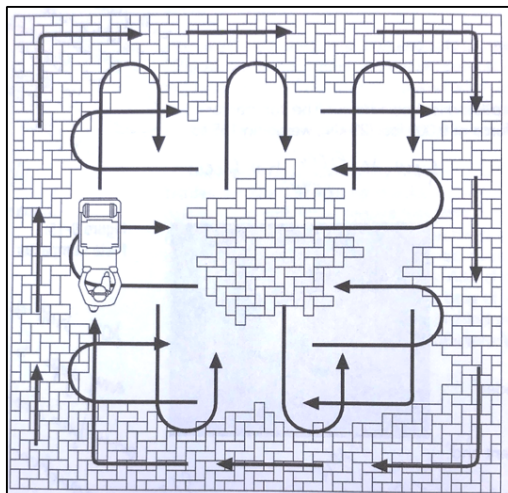


- To get an even layer of bedding sand, lay 1" o.d. pipe on top of the Base, add the bedding sand and use a 2x4 piece of wood to screed the sand, remove the pipes and fill the voids with sand.

- Start installing your pavers.
- Start at one corner and move across the area to be installed.
- Use the click and drop method to lay your pavers. Click the paver tight against its neighbors, then drop the paver into place. Do not scoot pavers on the sand bed.



- Reference your string lines to maintain straight joint lines.
- The pavers should be 1/8" to 1/4" higher than the finished elevation desired. Pavers will settle during compaction.
- When taking your pavers off the pallets to be installed, take the pavers from one side of the full pallet, and work across to the other side and take pavers off multiple pallets to ensure a consistent color blend. Taking pavers off 1 pallet at a time and layer by layer can lead to an installation in which the colors are not uniformly mixed.
- Joint width between pavers should be 1/16" and 3/16".
- If less than a full size paver needs to be installed along the edges, place the paver to be cut above the area it will go, with one edge next to the installed pavers and the other over the edge. Mark the paver with a grease pencil so that the mark will not wash off when cutting the paver. Marking the side and then on the bottom will eliminate the need to clean the marking off the surface of your pavers once installed.



- If you will have a lot of cuts to make, renting a Masonry wet tub saw will be beneficial. If just few cuts are needed, a skill saw with a masonry blade could be used if desired. If cutting pavers near your installation, be sure to protect installed pavers from cutting as to not stain them with the saw scum.

- Once all the pavers have been installed, compact your pavers with a reversible vibrating plate compactor.
- At least two passes should be made across the surface, 1 in a North South direction, the other in an East West direction. This will settle the pavers into the bedding sand by about 1/16" to 1/8" and the sand will suck the sand up between the paver. The sand lodged between the pavers is what creates the interlocking component of the pavers.





- If a Stabilized joint sand is used, be sure to follow the instructions by the manufacture for installing the joint sand. Air Vol Block offers three brands of Stabilized Joint Sands in a Beige or Grey color.
  - Spread your joint sand on the surface of the pavers, use a push broom to sweep sand into the joints
  - Use the vibrating plate compactor in the North South and East West directions again. This will work the sand down into the joints completing the Interlocking of the pavers.
  - Sweep excess sand off the surface.
- If using Polymeric Sand, be sure that all the polymer has been removed from the paver surface prior to wetting to avoid hazing the pavers. Gently mist the joints per the manufacturer's recommendations, taking care not to flood the pavers (which can also haze the pavers).
  - Your installation is now complete.



Sealing of your installation is optional. There are wet look sealers to enhance colors or natural sealers that will not change the color. It is recommended that prior to sealing you clean your pavers with a cleaner that is made specifically cleaning concrete pavers. Any stains or discoloration on the surface of your pavers can not be cleaned once the pavers are sealed. Follow the directions from the manufacturer of the cleaners and sealers. The sales team at Air Vol Block can answer questions about the different sealers and cleaners that are sold at Air Vol Block.

Visit the Air Vol Block web site to view option for Paver shapes, colors, textures and installation patterns at [www.arivolblock.com](http://www.arivolblock.com).

Additional information, technical notes, details and resources can be seen at the Interlocking Concrete Pavement Institutes web site at [www.icpic.org](http://www.icpic.org)