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| [LUXURY LANDSCAPE SUPPLY]  185 PARK ACCESS DRIVE LAWRENCEVILLE GA 30044 | C:\Users\alec1_000\Documents\Lawrenceville, GA Garden Center_ Landscaping Materials Supply Store _ Luxury Landscape_files\footer_logo.jpg |

**STEP 2 EXCAVATION & PREP**

* Gloves
* Flat Shovel
* Wheel Barrow
* Line Level
* Mason Line
* Hand Tamp
* Plate Compactor (rent if needed)
* Stiff bristle push broom
* Steel Square
* Screed Pipes
* Screed Board
* Concrete or Tile Saw (w/diamond blade)
* Knee Pads
* Measuring Tape
* Chalk Line
* Wooden Stakes
* Dead Blow Hammer
* Rubber Mallet
* Metal Snips
* Level
* Rake

**GATHER YOUR TOOLS**

**STEP 1**

*Having the right tools can be a huge time saver during your project. Gather all tools before you begin, so you can avoid unnecessary delays in your project. Here’s a tool checklist to guide you!*

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*Plan ahead and ALWAYS call Georgia 811 before any digging around your property. Simply call 811 from your phone and they will ask you a series of questions to get the ball rolling. Georgia 811 will tell you when it is safe to start digging. This usually takes around 3-4 days.*



**STEP 2 EXCAVATION & PREP**

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- Measure out the area for this project, leaving about a 6”-12” extra space from the actual pavement edges for installation of edge restraints. MAKE SURE YOUR CORNER IS 90 DEGREES!

-Set a series of stakes along the perimeter of the excavation are and connect with the mason’s line.

-Any pavement should always be sloped away from buildings for drainage, so you will need to grade the soil during the excavation. The slope should be 1” drop for every 10’, (So, if you have a stake evert 5 feet, drop the string in .5” increments on each consecutive stake.) Be sure to clearly mark the strings position on each stake in case they accidently move.

- Your desired depth for your dig should be 7 3/8”. This will allow for 4” of base and 1” of leveling sand.

-NOW START DIGGING!

-After the excavation of the area, be sure to compact the subgrade with a vibrating

**STEP 3 BASE INSTALLATION**

***This step is critical to a successful paver project! It is essential to follow the correct procedure for base installation, without rushing, in order to avoid serious problems with your finished pavement.***

CRUSHER RUN GRANITE

**MATERIALS NEEDED**

# **COMPACTION**

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**There are three keys to compacting an adequate base:**

1. **The method of compaction. A rented plate compactor will help you achieve excellent compaction. Hand tampers will suffice for very small areas and are good for corners and other tight spots, which need special attention to receive the same compaction rate as the rest of the area.**
2. **The moisture content of the base material or soil. Soils compact better when they contain the right amount of moisture. If you squeeze a handful of soil and it retains its shape when you open your hand, it probably has an adequate moisture content. If not, you must keep the material slightly damp while compacting. If the surface starts to puddle or sweat while you’re compacting, the material is too wet and must be allowed to dry for a bit. [*Never work with frozen base material or soil!]***
3. **Compacting the material in “lifts” or layers. You must spread & compact the material in a maximum of 3” to 4” layers. (If using a hand tamper only, layer no more than 2” at a time.) Make sure each layer is EVENLY and thoroughly compacted before spreading the next one. Check elevations frequently and use only base material to correct low spots, making sure to thoroughly compact any additions before moving on.**

**Measuring from the finished elevation, the compacted base should be:**

**3-3/8” lower for 2-3/8” (6cm) pavers**

**4-1/8” lower for 3-1/8” (8cm) pavers**

**STEP 4 EDGE RESTRAINTS**

**Unless the pavers are butting against existing curbs or a foundation, it is important to install edge restraints around the entire perimeter. This keeps the pavers in position and prevents them from spreading or loosening. Various types of edging materials can be used. Flexible plastic edging, which is easy to install and will not rust or rot, is perfect for circles or curves. When you need to restrain a straight line of pavers, it is best to use rigid lengths of edging.**

**Place it directly on the compacted base and secure it by driving 8” stakes into the ground. Three stakes per stick of edging is adequate, but you might need extra around curves. (You may have to purchase extra stakes for the suggested placements.) Be sure that all the corners are exactly 90 degrees. Simple!**

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**STEP 5 SETTING THE SAND BED**

***Pavers are generally “dry set” in a bed of granite sand. This method is not only easier and neater than others, it also allows for simple paver repairs or replacements-just pop up the damaged piece and replace with the new one!.***

**The finished sand bed must be between 1” to 1-1/2” deep.**

**The bed of sand must be leveled so that it is an even 1” to 1-1/2” depth. This leveling process is called “Screeding”. Start by laying 1” to 1-1/2” diameter PVC pipes (“screed rails”) on the compacted base about 6’ to 8’ apart and parallel.**

* Pack a small amount of granite sand around the pipes to hold them in place.
* Cover the pipes & the area in between with granite sand. Level the sand by drawing the screed board along the tops of the pipes in a backward motion pulling towards you.
* If room permits, simply slide the pipes backwards or move one to the other side in an adjacent area.
* Repeat
* When done screeding and you’re area is level remove the pvc pipes. The voids left by the pipes need to be filled with granite fines and carefully hand floated with a trowel. *Never screed more bedding sand than you will need to cover in a day. Do not disturb, walk on or compact sand in any way before laying the pavers!*

CONCRETE PAVER INSTALLATION GIUDE



**A FEW NOTES BEFORE LAYING PAVERS CONTINUED**

* **Have your pattern handy** Please refer to the manufacturer’s pattern guide for layout specific to the pavers you have chosen. Lay pavers in the order suggested for optimum rhythm and efficiency.
* **Cutting pavers** The easiest and quickest way to cut pavers is either with a hand-held power saw equipped with a diamond blade. Mark the cut line with something that easily washes off like a pencil, crayon, chalk, etc. If your saw has a wet-cut blade, be sure to immediately rinse the pasty residue off the pavers immediately for it will stain. Don’t forget to wear the proper safety gear! Safety gloves, glasses, a dust mask and hearing protection.

*All concrete pavers are made to perfectly interlock when placed along a straight line. Therefore, it is essential that you begin laying the pavers from a perfect 90 degree angle, preferably from one of the corners. Do not assume that all corners, even pre-existing building corners, are 90 degrees. CHECK! Once this is established, a series of strings or snapped chalk every 5 or 6 feet will help “keep you in line”. Think gravity and start at the lowest ground first. Always work from the surface that has already been paved, leaving the bedding sand undisturbed.*

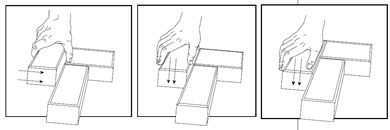
**Click and Drop**

**STEP 6 LAYING THE PAVERS**

* **Are you laying a border course?** Cutting odd-sized pavers to fit around the very edge of your area can lead to instability. Instead, try over-laying your field course first. Then, as you lay the border course of whole pavers next to the edge restraint, cut the field pavers to fit within the borders. Border courses can be made from a completely different shape & color than the main field pavers. See the manufacturers guide for samples.
* **Disturbing inherent color shades** Pavers from different pallets may have been manufactured at different times & under different conditions, resulting in subtle shade variations. When installing, try to randomly choose from a few from each pallet as you go. This will create an even distribution and a fantastic effect.

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When you lay the pavers, the best way to maintain consistent joint spacing and a neat pattern is to use the “click and drop” method. After the first few pavers have been laid to establish the pattern and 90 degree angle, grasp the next paver by the top ½” (as shown). Slide through the air horizontally, toward its proper resting spot, about ½” below the top laid paver. Let the long edge just tap the side of the laid paver. When you hear the click of the pavers tapping, drop it in place.



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When all the pavers are laid and you are satisfied with the placement, pattern and fit, it is time to compact the pavers into the bedding sand. Compaction evens the top surface of your pavement and starts the interlock process by forcing sand up through the joints. Use your plate compactor at its highest vibration (up to 3500 psi), but lower the amplitude, so it doesn’t jump around and possibly dislodge or damage a paver.

Start on one edge of the pavement and compact the perimeter first. Then, go back & forth the main field, as if you were mowing the lawn, except over lapping each pass about 6”. Repeat going back and forth in the opposite direction. Each paver should receive two or three full passes of the plate compactor. ***Do not compact any pavers that are within 3 feet of an unrestrained edge.***

After the initial compaction, you are ready to begin filling in the joints with sand. We recommend concrete sand. Spread some dry concrete sand over the top of the pavement. With a stiff bristle push-broom, begin sweeping the sand around the pavement and into the joints using a push-pull-pound motion. When joints are full, sweep off excess sand and repeat compaction. This will vibrate the sand & allow you to sweep the next lot into the joints. Repeat sand sweep. Continue until all joints are tight and filled. Retain some of the sand in a dry place and resweep after joints have settled (30-60 days).

**STEP 7 COMPACT & JOINT SAND**

**STEP 8 FINISHING!**

Sweep the pavement clean & wash it off with water. Be careful not to wash sand out of the joints! Back-fill the perimeter with topsoil & seed or your choice of landscaping material. Although it is not absolutely necessary to seal pavers, we suggest doing so. Sealer intensifies the color and protects your pavers from stains, ensuring a beautiful surface for many years. Cleaning & sealing can also restore the original appearance of raw pavers that have been exposed to dirt & wear over time.