

# DIY Paver Patio and Walkway Installation

Call 811, Common Ground Alliance, to have utilities marked before starting your project.

Read all instructions prior to installation.

Fig. 1



**1. Stake Out Project and Excavate.** Lay out project by marking area with tape measure, string line and stakes. With a shovel, excavate the area 6 inches larger on all sides than the finished project size (Fig. 1). For patios and walkways excavate 7 or 9 inches deep: 7 inches for well-draining soil conditions and 9 inches for poorly-draining soil conditions.

Fig. 2



**2. Create Leveling Pad.** Base material can be paver base or an equivalent to  $\frac{3}{4}$ -inch minus (with fines) aggregate. Add a 2-inch layer of base material in the bottom of the excavated area; rake out and thoroughly compact with a plate compactor (Fig. 2). Repeat as needed. To achieve the desired finished patio height, finished compacted base should leave enough room above for paver height and leveling sand. The final grade should slope away from the house or structure, dropping  $\frac{1}{4}$ -inch per foot, for drainage.

Fig. 3



**3. Screed Sand.** Temporarily lay two 1-inch-diameter pipes parallel on base, several feet apart. Spread 1 inch of paver sand over compacted base between pipes. Level sand by pulling a straight 2x4 across the pipes several times until sand is smooth (Fig. 3). Remove pipes and fill voids with sand, using a trowel to level sand. Repeat until project area is covered with sand.

Fig. 4



**4. Install.** Start at a 90-degree corner (nearest house or structure, if applicable). Along one side (moving away from house at a 90-degree angle), place edge restraint on top of the base material, removing sand if necessary. Fasten with spikes according to the manufacturer's instructions. Lay a border course along edge. Continue laying pavers in the desired installation pattern (Fig. 4).

Fig. 5



If the desired installation pattern requires cutting, cut the pavers with a circular saw or tub saw using a diamond blade designed for cutting concrete pavers.

**Always wear eye protection when sawing blocks.**

**Read and understand the operating manual before using a saw.**

Fig. 6



**5. Install Edge Restraint.** Place edge restraint around entire project on top of base (Fig. 5). Use trowel to remove sand from edge of pavers. Push edge restraint up tight to the pavers and install according to the manufacturer's instructions.

**6. Compact.** Compact the pavers with a plate compactor (Fig. 6). Starting from the outside, compact the border and continue until you reach the center of the paver area. Repeat once more to set the pavers. Once compacted, spread paver sand over the surface and sweep into joints. Compact again to ensure all joints are completely full. Sweep any loose sand from surface.

**7. Backfill Around Project.** Finish project by backfilling and firmly compacting dirt in the area outside edge restraint.

**Snow and Ice Removal:** To maintain the best surface integrity, use plastic blades on snow and raise blades on a snow blower. Do not use sharp objects to chop ice as they can damage the surface.

Installation materials and tools needed (reference images on last page):

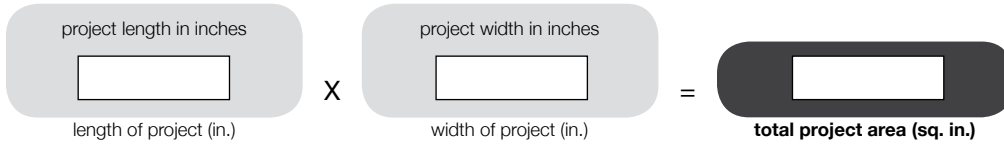
- Gloves
- Tape measure
- String line
- Stakes
- Shovel
- Paver base or an equivalent to  $\frac{3}{4}$ -inch minus (with fines) aggregate
- Plate compactor
- Two 1-inch outside diameter pipes
- 2x4 board
- Paver sand
- Trowel
- Edge restraint
- Circular saw or tub saw
- Diamond blade designed for cutting concrete pavers
- Safety glasses
- Carpenter's level



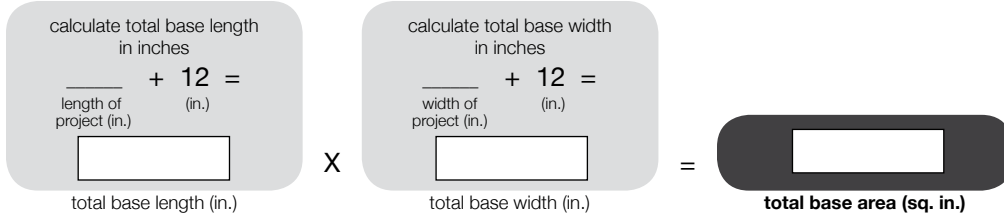
# Paver Project Material Calculators

1. Plan the dimensions of the finished project, accurate to nearest inch.

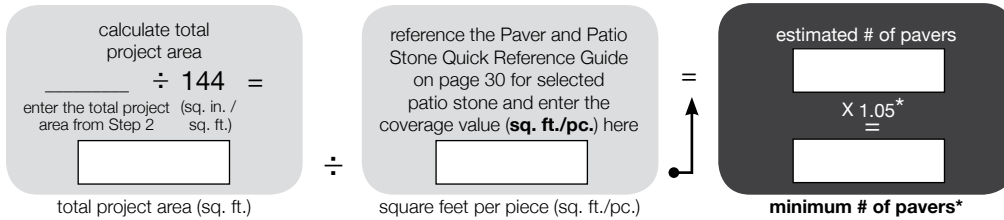
2. Calculate the area (total square inches) of the finished project.



3. Calculate the base area (total square inches) of project.

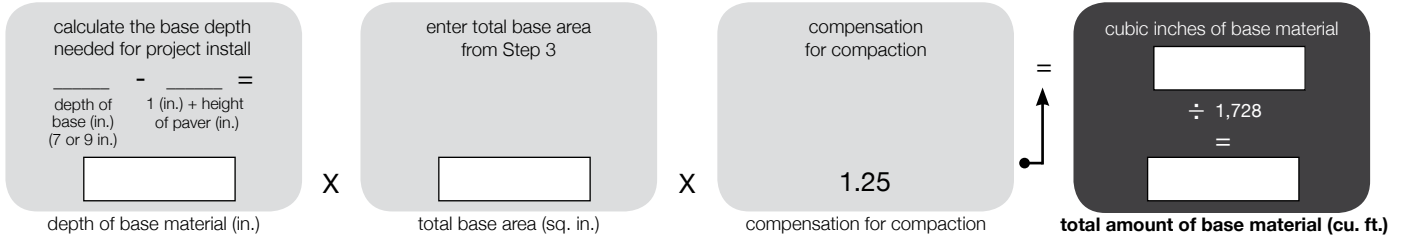


4. Select paver and installation pattern: If using a single-piece installation pattern, use calculator below; otherwise reference chart on page 30 and add 5 percent\*.

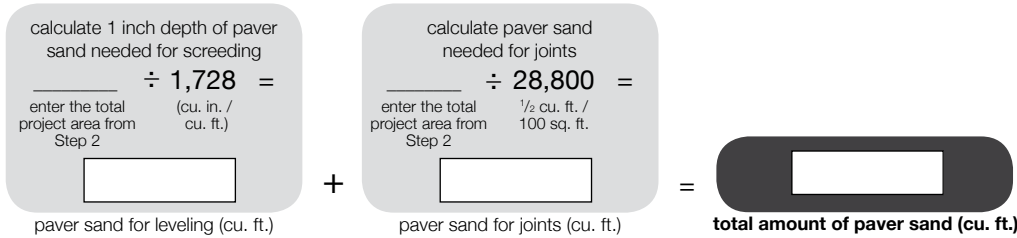


\* It is recommended that you purchase 5 percent more product than estimated to account for cutting and breakage.

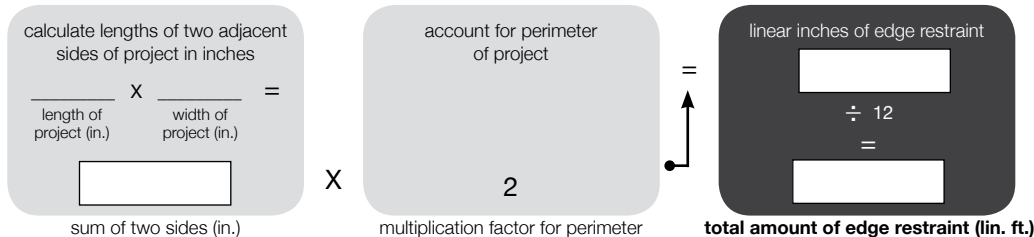
5. Calculate base material (paver base or 3/4-inch minus [with fines] aggregate) needed for project.



6. Calculate paver sand needed for project.



7. Calculate edge restraint needed for project.



**Complete installation materials and tools reference images:**



**Gloves**



**Safety glasses**



**Rubber mallet**



**Hammer and Chisel**



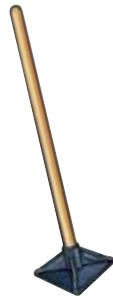
**Level**



**Rake**



**Shovel**



**Tamper**



**String**

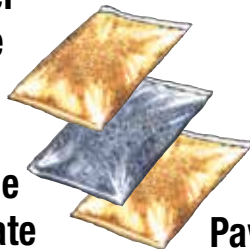


**Carpenter's pencil**



**Circular saw**

**Paver base**



**Drainage aggregate**

**Paver sand**



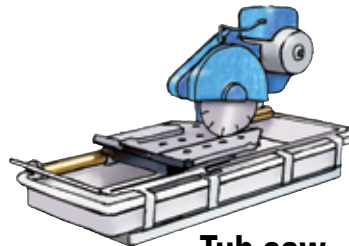
**Garden hose**



**Stakes**



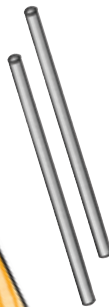
**Adhesive**



**Tub saw**



**2x4 board**



**1" Pipes**



**Spikes**



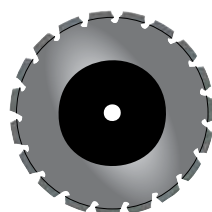
**Edge restraint**



**Plate compactor**



**Tape measure**



**Diamond blade**



**Trowel**