# SLATE INSTALLATION GUIDELINES

These instructions are intended as a general guide for mortar-less slate walkways & patios for pedestrian use. For additional DIY information, or for help finding an installation contractor, please contact the Sharecost staff.

#### STEP 1 EXCAVATION

Start by marking out the area to be paved with rebar stakes and string lines at the desired finish elevation. **Position your stakes outside the project area by a minimum of 12", as you will be excavating a minimum of 8" beyond your desired pavement perimeter** (this will allow room for the edge restraint system). Excavate a minimum 7" below final slate elevation. Allow 1/2" slope over four feet for correct water runoff. Your slope can be in more than one direction depending on job-site circumstances. **Water WILL NOT drain through the joints.** Remove any loose soils after excavation is complete.

#### STEP 2 BASE PREPARATION

Add 2" of road base to the excavated area. Compact the entire sub-grade with a 200-pound plate compactor. After compacting the sub-grade, add another two inches of road base, rake smooth and compact again. **Your final compacted road base layer should be 4" to 6" thick.** The Road Base must be wetted to enable proper compaction. Repeat these steps until the final base elevation is achieved. For slate that is roughly 2" thick, the final base elevation should be roughly 3" below final pavement elevation. Remember, the final product will mirror the base elevation: any deviation in base should be corrected at this time with Road Base, not Cart Path Chip.

#### STEP 6 EDGE RESTRAINT

Any edge not restrained by a solid, rigid structure (i.e., concrete curb, asphalt) MUST be contained with a plastic edge restraint system. After final gradation of the Road Base is complete, install edging with 12" spikes, **driving them in every 14 to 18 inches.** 

#### STEP 4 CART PATH CHIP

Cart Path Chip should be screeded (that is, levelled with a 2 x 4 strike board) at a depth of 1". Place 3/4" diameter PVC pipes (with outside diameter of 1") on top of the compacted Road Base. Place pipes parallel to each other and almost as wide as the strike board. Place Cart Path Chip between pipes and pull strike board across both pipes. **This will generate a 1" bed of Cart Path Chip.** Pull pipes out; fill voids with Cart Path Chip and trowel smooth. DO NOT COMPACT.

#### STEP 6 SETTING SLATE

The 1" layer of Cart Path Chip will provide 3/4" of tolerance to level each stone as they will vary slightly in height.

**Start with your thickest piece of slate.** Set this piece 3/4" down into the Cart Path Chip layer. Level this stone with a 4 foot level. With the thickest stone levelled and sunk into the Cart Path Chip you will have 3/4" to play with to level the remaining slate. Level each stone with a 4-foot level. **Chip or cut the stones to fit, all joint widths MUST be under 4".** 

#### STEP 6 POLYMERIC STONE DUST

**Everything must be completely dry before proceeding with this final step.** The use of specialized jointing material – polymeric stone dust – greatly simplifies the installation of the slate.

### However, certain conditions must be considered:

☐ Must be installed over compact Road Base
☐ DO NOT install over concrete
☐ Must be installed while outside temperature is above 15°C
$\square$ Stones must be bone dry, with no rain forecast for 24 hours
$\hfill \Box$ Leaf blower is required to remove all polymeric stone dust residue
$\square$ Joints must misted three times over a 12 minute period
$\ \square$ Do not walk on the stones for 24 hours after water activation
$\Box$ One bag covers 20 to 30 ft <sup>2</sup> (with 1" to 2" joints and 2" thick stones)

Start by sweeping polymeric stone dust into all the joints. Tap the centre of each stone with a rubber mallet to help settle any air pockets in the poly dust. Use a leaf blower to blow excess polymeric stone dust off of the slate surface. **Ensure slate surface has no dust residue remaining on it**.

Mist the entire installation with water until you see a bit of water on top of the joints. Let stand for three to four minutes maximum (not longer) and mist again. Let stand three minutes and mist again. **You're done!** 

**Don't walk on the install for at least 24 hours.** Over a couple of weeks the polymeric stone dust will harden to rock-solid joints.



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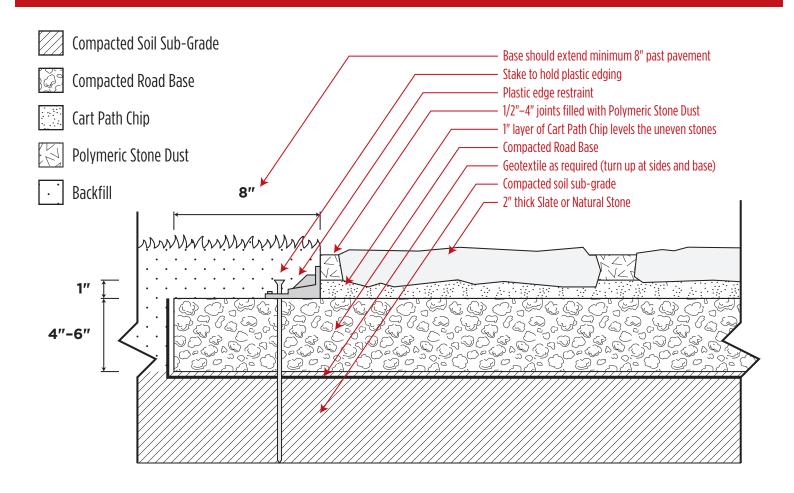
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### **CROSS-SECTION**



## **MATERIALS CHECKLIST**

#### STEP 1 EXCAVATION STEP 3 EDGE RESTRAINT STEP 6 SETTING SLATE ☐ Gloves ☐ Shovels ☐ Plastic Edging ☐ Slate ☐ Rakes ☐ Mattock ☐ 12" Metal Spikes ☐ Measuring Tape Wheelbarrows ☐ String-Line ☐ Masonry Saw ☐ String-Line Level ☐ Rebar Stakes STEP 4 CART PATH CHIP ☐ Hammer & Cold Chisel ☐ Hammer ☐ Mini-Excavator ☐ Cart Path Chip ☐ 4-Foot Level ☐ Bobcat Loader □ laser Level ☐ Straight piece of 2x4 at 4' to 8' long ☐ Two 10' pieces of 3/4" PVC pipe STEP 6 POLYMERIC STONE DUST STEP 2 BASE PREPARATION ☐ Concrete Trowel ☐ Polymeric Stone Dust ☐ Road Base ☐ Hard-Bristled Broom □ 200-pound Plate Compactor ☐ Leaf Blower ☐ Garden Hose w/ Misting Nozzle



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