# **ENTRY STEPS**INSTALLATION GUIDE



# TRANSFORM A DOOR INTO AN ENTRANCE WITH NATURAL STONE ENTRY STEPS

Installation instructions for (3) 4'-0"  $\times$  1'-1"  $\times$  7" split face granite steps and fillers

- 1. Begin with a properly prepared base / pad area (see Concrete Pad Preparation Guide or Gravel Pad Preparation Guide)
  - a. Ensure that all dimensions of the pad are correct for the set of steps being installed.
  - b. Concrete pad should be a minimum of 4'-0" left to right, and 3'-0" front to back. A gravel pad needs 6" added to the front, left, and right of the 4'-0" x 3'-0" step set requirement to ensure no settling of aggregate during the step installation (overall finished pad size: 5'-0" left to right, and 3'-6" front to back).
  - c. The concrete or gravel pad should be centered on the door.
  - d. Establish a height of 28" from top of pad to top of door threshold, since it is preferable to maintain a consistent 7" step height for each layer, all the way up and into the house.
- 2. The following is the procedure used for installing a granite step set
  - a. Measuring early and often throughout the process is a crucial part of the installation process in order to ensure that all components are fitting properly at each level
  - b. Verify the measurements of all of the steps and step fillers before beginning the installation. Granite is a natural material, and can have slight thickness variations.
  - c. If there are differences in thickness it is recommended to reserve these step and step fillers pieces for the bottom layer, as this is the best location to make adjustments and not have any shim work show in the finished product.



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- d. Begin by setting the longest pair of step fillers (3'-0" in this case), and place them onto the concrete or gravel pad perpendicular to the home foundation, leaving a slight gap between the back end of the step filler and the home's foundation. This gap will be the same depth as the kickplate mounted to the foundation, below the door threshold, at the top of the steps. When the final top step is placed, the back of the top step will then butt up against the kickplate and also be flush with the step fillers below it.
- e. Evenly space the filler pieces opposite of each other so that the measurement from the outside edge of the split face granite to the outside edge of the other split face granite is equal and matches the length of the step to be installed on top of them (4'-0").
- f. Once complete, set one of the 4'-0" steps flat on the concrete or gravel pad, directly in front of the two step fillers, and align the outside edges of the step flush with the outside edges of the step fillers.
- g. As long as the pad area is level, it is recommended to pitch this first tier of step fillers and step away from the home in order to allow for proper water runoff away from the home. I/4" over 4'-0" of length is sufficient.
- h. Plastic shims (on concrete pads) or additional gravel (for gravel pads) may be required to align the height of the step to the height of the step fillers, due to possible variations in thickness, as previously mentioned.
- Once the first level of steps and fillers are in place, properly pitched, and tested to ensure no movement when walking on them, it is time to build the next (second) tier of steps.
- j. The second tier will use the remaining two step fillers (2'-0" in length). Repeat the same procedure used for the first tier's filler pieces. Check for level and place another 4'-0" step as was done previously. This step will overlap the step below it by one inch.
- k. If shim work is required, it is recommended to place shims towards the inside of the filler or step edges so that the shims aren't visible from the outside.
- I. Once the step and filler pieces of the second tier have been installed and stabilized, the final top step is then placed on all the other components. At this point, if the installation procedure outlined above was followed properly, the final step should be stable and not move, since the first two layers have been stabilized during the build. If the top step has some rocking or movement, it will be necessary to use plastic shims where appropriate, preferably out of sight of the most prominent direction people will step onto the set of steps.



# CONCRETE PAD PREPARATION GUIDE

# HARDSCAPES & MASONRY

### FOR INSTALLATION OF GRANITE STEPS

### **NECESSARY TOOLS**

- Rake
- Shovel
- Hand Tamper
- 4'0" Level
- Ready Mix Concrete
- 2" x 4" x 8' and 2" x 6" x 8'

# **MATERIALS**

#### TYPE

Ready Mix concrete is typically a pre-blended mix of fine and coarse aggregate and Type 10 Portland cement.

Please review the manufacturer's instructions for volume specific information and mixing instructions.

#### **DIMENSIONS**

Length of $Pad = A$	inches	(left to right)
Width of Pad = B	inches	(front to back)
Depth of Pad = C		

For depth dimension ONLY take the depth of your pad and divide by 12. For example, a 6" pad would be listed as 6/12 or .50

#### CALCULATE MATERIAL NEEDED

To calculate approximate material needs, multiply A  $\times$  B  $\times$  C and divide by 144 to get cubic feet. For example, material for a 48"  $\times$  36"  $\times$  6" pad would be calculated as (48"  $\times$  36"  $\times$  .5)/144 which would equal 6.00 cubic/feet.



- Pick
- Wheelbarrow
- Gas Operated Plate Compactor



# CONCRETE PAD PREPARATION GUIDE



# FOR INSTALLATION OF GRANITE STEPS

### STEP I

Excavate an area approximately 6" deep that is 2" longer (left to right) than the outside dimension of your set of steps. Make sure this area has been properly located with regard to your doorway and has been compacted prior to adding your concrete.

NOTE: It may be necessary to excavate deeper depending on existing soil conditions to insure a well compacted, good draining base.

### STEP 2

Form up area with 2" x 6" wood to create a box at the appropriate height from the top of the threshold. These wood forms must be level in both directions from left to right and front to back.

### STEP 3

After slightly overfilling your form with concrete, use a 2" x 4" in a side-to-side sawing motion to screed off any excess using the top of your form as a guide. After the concrete has hardened the wood forms can be removed.

#### STEP 4

Granite steps must be professionally installed and always require a prepared base.

See your local Polycor dealer for more information.



# **GRAVEL PAD**PREPARATION GUIDE

# HARDSCAPES & MASONRY

### FOR INSTALLATION OF GRANITE STEPS

### **NECESSARY TOOLS**

- Rake
- Shovel
- Hand Tamper
- 4'0" Level
- 2" x 4" x 8'

### **HELPFUL TOOLS**

- Pick
- Wheelbarrow
- Gas Operated Plate Compactor

### **MATERIALS**

### **TYPE**

Processed gravel, also known as driveway base, <sup>3</sup>/<sub>4</sub>" or 1" base or crushed bank run contains the appropriate amounts of crushed stone, sand and other finematerials to create excellent compaction.

Please note that pea stone, small crushed stone and sand do not compact well and may shift or wash out.

### **DIMENSIONS**

Length of $Pad = A$	inches	(left to right)	
Width of Pad = B	inches	(front to back	()
Depth of Pad = C			

For depth dimension ONLY take the depth of your pad and divide by 12. For example, a 6" pad would be listed as 6/12 or .50

### CALCULATE MATERIAL NEEDED

To calculate approximate material needs, multiply A  $\times$  B  $\times$  C and divide by 144 to get cubic feet. For example, material for a 48"  $\times$  36"  $\times$  6" pad would be calculated as (48"  $\times$  36"  $\times$  .5)/144 which would equal 6.00 cubic/feet.



# **GRAVEL PAD**PREPARATION GUIDE



# FOR INSTALLATION OF GRANITE STEPS

Very large sets of steps may require a concrete pad. See your dealer prior to starting your base preparation to confirm which would be best for you.

### STEP I

Excavate an area approximately I' deep that is 6" longer (left to right) than the outside dimension of your set of steps. Make sure this area has been properly located with regard to your doorway and has been compacted prior to adding your processed gravel.

NOTE: It may be necessary to excavate deeper depending on existing soil conditions to insure a well compacted, good draining base.

### STEP 2

Using processed gravel, as specified above; fill the excavated area with 3"-4" layers, compacting each layer as you go. A gas operated plate compactor works very well. If a compactor is not available, reduce the thickness of the layers, wet down and use a hand tamper or roller to achieve compaction.

### STEP 3

Compact the final layer at the level where you desire the bottom of your first step. Use your 4' level, with a 2" x 4" if necessary, to confirm that your base is level both left to right and front to back.

# STEP 4

Granite steps must be professionally installed and always require a prepared base.

See your local Polycor dealer for more information.

