

## **Installation Instructions - "Dry" Method**

There are two installation methods for GraniteCrete: "Dry" and "Wet." The **dry method** is for installations up to 10,000 square feet (most home applications). The **wet method** is for installations over 10,000 square feet (most large, commercial installations) and may require the use of a volumetric concrete truck.

**The following installation instructions have been developed to help ensure a blemish-free, high-quality installation. While GraniteCrete looks similar to concrete, the installation of GraniteCrete follows a different procedure. For best results, follow the instructions below carefully. For assistance, contact GraniteCrete, Inc. at 800-670-0849.**

### **Installation Depth**

For **residential/pedestrian** applications, GraniteCrete is installed as a 3-inch thick layer over a 4-inch subgrade of compacted Class II base rock. For **commercial/light vehicular** applications such as driveways, bicycle paths and cart paths, GraniteCrete is installed as a 4-inch thick layer over a 6-inch subgrade of compacted Class II base rock. Compaction rates for all applications are 88%–92%.

### **Measurements**

An online calculator to assist you with estimating the amount of material needed to complete your project can be found here:

<https://www.granitecrete.com/job-estimator/>

**GraniteCrete:**      Residential/Pedestrian Application - (2 bag mixture) One cubic yard of aggregate/decomposed granite and two (85 lbs) sacks of GraniteCrete admixture combined covers 108 square feet at a 3-inch thickness. **Note:** Aggregate/decomposed granite should be 3/8" minus material and follow our sieve percentages in our Specification Guide within a +/- 5% range.

Commercial /Light Vehicular Application - (3 bag mixture) One cubic yard of aggregate/decomposed granite and three (85

lbs.) sacks of GraniteCrete admixture combined covers 82 square feet at a 4-inch thickness. **Note:** Aggregate/decomposed granite should be 3/8" minus material and follow our sieve percentages in our Specification Guide within a +/- 5% range.

**Class II Base Rock:** Residential/Pedestrian Application - After final compaction, baserock should have a 4-inch depth.

Commercial/Light Vehicular Application - After final compaction, baserock should have a 6-inch depth.

### **Mixing Ratios**

**GraniteCrete:** Residential/Pedestrian Application – (2 bag mixture) The aggregate/decomposed granite (DG) is mixed with GraniteCrete admixture at a ratio of 17.6lbs DG to 1lb GraniteCrete.

Commercial/Light Vehicular Application - (3 bag mixture) The aggregate/decomposed granite (DG) is mixed with GraniteCrete admixture at a ratio of 11.7lbs DG to 1lb GraniteCrete.

**Note:** Depending on the mixing equipment available, it may be necessary to prepare GraniteCrete in batches. Batches can be measured using "shovelfuls" (**a "shovelful" is equivalent to 10 pounds**) or other measuring methods; maintaining the appropriate ratio is important.

GraniteCrete can be ordered pre-mixed with decomposed granite (DG) or it can be mixed onsite.

### **Onsite mixing:**

Combine the decomposed granite and GraniteCrete admixture thoroughly. Again, be sure to only mix the amount that you can use in a single day. To calculate the material needed, we offer a Materials Estimator here

<https://www.granitecrete.com/job-estimator/>

### **Pre-mixed GraniteCrete:**

GraniteCrete can be ordered pre-mixed with decomposed granite from many of our retailers. Please refer to our retailers page: <https://www.granitecrete.com/retailers/>

We strongly recommend that you only order the amount of Pre-Mix you'll be able to finish in one day. Decomposed granite is a bulk material that contains moisture. If left unused longer than one day, the mixture will begin to harden. If for any reason the material is not used, it must be tarped, and absolutely used the beginning of the next day.

The dry GraniteCrete-DG mixture will be placed in two layers, with each layer moistened individually. *It is **not** required to cure the initial layer before installing the second layer.*

### **Installation**

- 1. Class II Base Rock:** Moisten and compact base rock on entire installation area to an even depth of 4-inch or 6-inch, depending on residential or commercial application. A vibratory plate can be used to compact the base rock, but a vibratory plate should **not** be used to compact the final layer of GraniteCrete.
- 2. GraniteCrete:** Wheelbarrow prepared GraniteCrete/DG mixture to the installation site and place a layer of the mixture to one-half of the desired final lift. Be sure to spread the mixture out before proceeding to step 3; this will ensure the mixture is moistened and mixed thoroughly.
- 3.** Moisten the material with a hose end trigger sprayer attachment, **avoiding puddling - oversaturation is detrimental and will negatively affect the integrity of the finished product..** Rake area lightly to evenly distribute water throughout the mix, or layer. Walking on the first layer as it is being moistened and mixed provides sufficient initial compaction. The first layer should not be compacted with a water-filled lawn roller.
- 4.** Install the second layer in the same manner as the first layer. Make sure to pay particular attention to the edges to ensure even material height, and moisten to dampen mixture.
- 5.** Moisten until both layers are damp. Proper moisture content can be checked by clenching your fist around the GraniteCrete. When the mixture just stays together and the color just starts to transfer to your hand, GraniteCrete is

ready to compact.

6. **Compaction:** After proper moisture is achieved for compaction, hand tamp (with a 10" hand tamp) around benches, sign posts, corners, boulders, et cetera. Pay particular attention to corners and edges to ensure tight compaction.
7. Make several passes with a 36" lawn roller (filled with water), or for larger installations, a 36" walk-behind or riding-roller in static position. Hand tamp out any imperfections with a 6" wooden masonry float.
8. Make sure to keep your 10" hand tamp, lawn roller, and wooden floats clean at all times. Fill in any divots with fresh, loose material (removing any larger stone) and hand tamp with the wooden floats to match existing finish.
9. When laying GraniteCrete in batches, be sure to use the **cold joint** method below to ensure a blemish-free installation.
10. **Finishing:** If desired, lightly sweep finish surface with a medium bristled broom. Then make several more passes with the lawn roller until the desired surface texture is achieved. With larger installations, a roller in static position can be used, making sure to keep drum clean at all times. Remove spoils off the surface.
11. **DO NOT ALLOW GRANITECRETE TO DRY DURING INSTALLATION. MIST LIGHTLY WITH A HOSE END SPRAY HEAD AS NECESSARY OR COVER WITH A PLASTIC TARP.**
12. The final step for a GraniteCrete installation is a dampening with water of all newly-installed and compacted GraniteCrete materials. Using a shower head/spray hose attachment, moisten the entire newly-installed GraniteCrete area - **avoid puddling**. To discourage cracking, moisten newly-installed GraniteCrete on a daily basis, for 1 to 5 days. GraniteCrete can be walked on the next day, but vehicles should not be on GraniteCrete for at least 5 to 7 days. **Slow curing of GraniteCrete is important to avoid cracking.**

You may walk on GraniteCrete immediately after installation. However, like concrete, GraniteCrete gets stronger with time. Ideally, stay off the newly-installed GraniteCrete areas for at least one day; after that, foot traffic is allowed. Vehicular traffic should avoid newly installed areas for 5 – 7 days.

Newly installed GraniteCrete paving surfaces are fully cured in 28 days. At that time, the entire surface should be blown or swept off to eliminate loose surface materials. Minor cracking may take place. However, over time, the aggregate fines will fill in the minor cracks and they should disappear. Occasional blowing off of the surface will help to minimize loose surface materials.

**Cold Joint Methods:**

Cold joints can be used at the end of the work day.

Method One:

1. "Between pours," stop at an area that makes the joint location look intentional. Take a chalk snap line just back from loose GraniteCrete into the compacted area and create a chalk line. Use either a masonry blade - or a square-nose shovel - and cut a straight line across the installation.
2. Continue with installation. Place newly mixed GraniteCrete into area, being careful not to overlap existing compacted material. With a concrete trowel or similar tool, tamp the new material at a tapered, 45 degree angle 1" above the finished grade and compact. If necessary, "feather" in with a medium-bristled broom.

Method Two:

1. Place a 2"X4" or 2"X6 piece of wood across the installation, stake it, and finish compacting the material. Leave the board in place overnight.
2. The next day, carefully lift the wood up and away from the installed GraniteCrete. Continue the installation process as per step 2 under Method One.

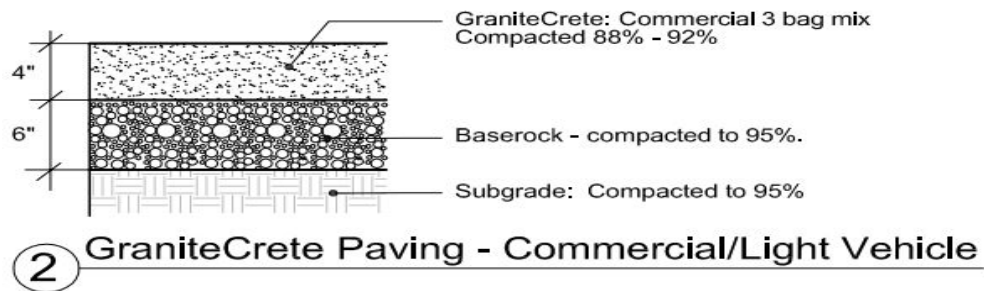
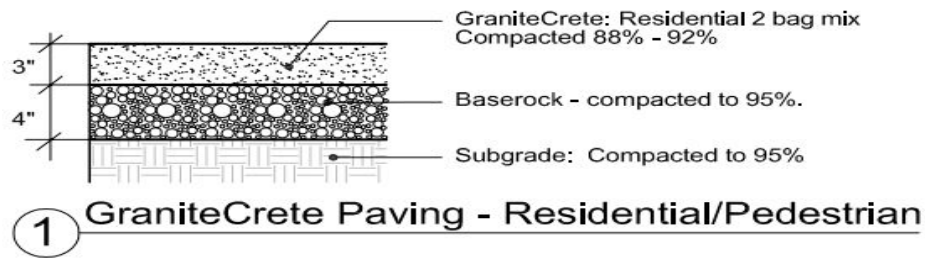
Method Three: (Suggested for large open edges at the end of the work day)

1. Install steel edging at a location that looks "intentional" and aesthetically "makes sense. Permanently install using the stakes provided. Completely finish the first days work.
2. The next day, simply continue with the installation. Leave the edging in place. Again, being careful not to leave any new material on the previously installed GraniteCrete.

**Installing for Vehicular Traffic**

Installing for vehicular traffic is nearly identical to the method above, **EXCEPT** you will use a vibratory plate or static riding roller to compact the GraniteCrete, after final compaction by a lawn roller.

**Cross-section Details**



**Recommended Equipment**

Tools	Materials
(3) Rounded point or flat edge shovels for moving product	GraniteCrete Admixture bags (85 lbs.)
6 cubic foot cement mixer for mixing small installations	3/8" minus aggregate/ decomposed granite
Wheelbarrow for moving material	Class II Base Rock or Class II Permeable Base
8" or 10" hand-tamps for compacting edges and corners, step back fills, and small areas	Curbing or Header Board materials (if desired)
Hose with a shower spray nozzle for moistening dry product	Water source

Landscape and asphalt rake with flat edge for finish grading	
Heavy lawn roller filled with water to compact	
Medium bristled push broom for finishing	
(2-3) 6"-9" wooden masonry float for finishing (1) 6"-9" steel float for cleaning hand tamp and roller	

A large commercial project may require the use of a volumetric concrete truck.

Please refer to our website for further information:

<https://www.granitecrete.com/installation/>

### **Important Reminders**

1. Do not allow GraniteCrete to dry during installation. Mist lightly with a hose end spray head as necessary - **avoid puddling** - or cover with plastic tarp.
2. Non-compacted - or poorly-compacted - GraniteCrete top layer will result in loose and pebbled materials. Edge and corner compaction may require special attention with a hand tamp during installation.
3. Non-compacted - or poorly-compacted - base rock may result in failure of top layer of GraniteCrete.
4. Squeeze the mixture in your fist and open your hand. When the color has just started to transfer onto your hand and the mixture just begins to stay together in a clump, it's ready for installation. Excessive moisture level may result in "sticky" materials complicating the quality of the finish surface or proper compaction. If the material is too wet, it may be placed on the bottom of the installation, with material that has a better moisture content on top.
5. Aggregate/decomposed granite materials should meet the sieve specifications in our Specification Guide
6. Recommended minimum slope for surface drainage is 2%.
7. Compaction rates for all applications are 88% – 92%.
8. Please Note: 3/8" minus aggregate comes in different colors. GraniteCrete™

samples reflect the use of a Golden Granite decomposed aggregates..  
Mock-ups using your local aggregate source is strongly suggested.