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## **GraniteCrete Specification Guide**

### **CRUSHED AGGREGATE BLENDED WITH GRANITECRETE ADMIXTURE SURFACING**

**COORDINATE WITH DRAWINGS:** Show location and extent of stabilized aggregate surfacing. Show details required at adjoining materials and special conditions. The depth of base course and the thickness of stabilized aggregate surfacing can be either shown on the drawings or described in the specifications; edit this section carefully to avoid conflicting requirements.

**FOR MORE INFORMATION:** Contact GraniteCrete Incorporated, [www.granitecrete.com](http://www.granitecrete.com), email [info@granitecrete.com](mailto:info@granitecrete.com), or call (800) 670-0849.

### **PART 1: General**

#### **1.1 SUMMARY**

- A.** Section Includes: Crushed aggregate blended with GraniteCrete admixture surfacing
- B.** Related Work:
  - 1. Section – Earth Moving [fill in here]: Grading
  - 2. Section – Base Courses [type]: Base Course

#### **1.2 REFERENCES**

- A.** ASTM C136-Sieve Analysis of Fine and Coarse Aggregates
- B.** ASTM D2419- Sand Equivalent Value of Soils and Fine Aggregates
- C.** Caltrans Standard Specifications for Public Works Construction
- D.** RIS-Redwood Inspection Services Grades of California Redwood

#### **1.3 SEQUENCING**

- A.** Do not install work specified in this section prior to acceptance of earth moving. Coordinate work specified in this section with work specified in other sections to minimize cutting of - and operation of - heavy equipment over newly-installed surfacing.

- B.** Submit in accordance with Section [ ]--Submittal Procedures
  - a. Manufacturer's product data sheet and installation instructions indicating that product complies with specifications for:
    - i. Crushed aggregate blended with GraniteCrete admixture surfacing
    - ii. Edging [ ]
  - b. Submit a quart jar size [ ] sample[s] of crushed aggregate with admixture in color[s] specified [in manufacturer's standard colors for selection].
  - c. Redwood Edging: Submit evidence of chain-of-custody in accordance with Forest Stewardship Council

#### 1.4 QUALITY ASSURANCE/FIELD QUALITY CONTROL

- A. GraniteCrete Approved Installers can be found on our website here: [Professional Installation](#).
  - 1. Installations 500 square feet and over up to 3,000 square feet – must be a recommended installer at a minimum. Installations 3,000 square feet and over – must be an Approved Installer.
  - 2. An installer not approved, but with sufficient experience for the project as determined by Granitecrete, Inc., may fulfill this requirement by providing a current letter from Granitecrete, Inc. verifying their ability to complete a successful installation for this specific project. For assistance, contact GraniteCrete, Inc. at (800) 670-0849.
  - 3. For installations 3,000 square feet and over - if the installer is not approved as noted above, GraniteCrete, Inc. requires a mandatory Pre-Construction Meeting on site with the company representative. The installers, foreman, and supervisor managing the installation are required to attend the meeting.
  - 4. A representative from GraniteCrete, Inc. will also observe the installation on-site until the company feels confident the installer will successfully install the product to their specifications and satisfaction.
  - 5. The installation instructions in this Specification are meant as a guide for bidding purposes and will be superseded by the approved Submittal of installation instructions from GraniteCrete, Inc., and any field direction provided by the company representative.

6. GraniteCrete, Inc. does not offer a warranty on any installation - even if completed by an Approved Installer - only on the product, bag-to-bag.
- B. Porous Base Rock Testing:**
1. Testing shall occur during installation at [ ] ton increments of shipping for sieve conformance. Results shall be submitted prior to completion of the stone base installation.
    - a. The stone field area shall have a permeable rate no less than 14" per hour. The testing shall be per Din 8035 Part 7, ASTM 2434 (constant head), or ASTM F2898 testing methods.
    - b. In addition to the lab testing, after installation of any aggregate base cross-section, designed to conduct rainfall to the sub-soils and/or under-drain system, the finished aggregate base shall be tested, *in situ* for infiltration rate, using method ASTM F2898. **The test shall be performed by a registered Geotechnical Engineer or certified agronomist.**
  2. The Contractor is responsible to meet this performance specification, before proceeding with installation, and shall bear the cost of the on-site testing and the cost of any additional work necessary to achieve compliance with the specification.
  3. All test results shall be logged and documented by the Owner's Technical Representative or Geotechnical Engineer. If at any time the processed stone base does not meet specifications, it shall be the Contractor's responsibility to restore, at his expense, the processed stone base to the required grade, cross-section and density.
  4. After the contractor has independently confirmed compliance with all the above tolerances (planarity and elevation verified by a licensed surveyor and compaction, gradation, & permeability verified by Geotechnical Engineer, he shall notify the appropriate party and schedule a final inspection for approval. The contractor shall make available an orbital laser system to the Inspection Team for the inspection process.
  5. The compaction rate for porous base rock should be 88%. The compaction rate for non-porous base rock should be 95%.
- C. Standard Specifications:** Shall mean the California Department of Transportation Standard Specifications, latest active edition.

## 1.5 MOCK-UP

- A. Construct mockup of [ ] square feet minimum of crushed aggregate blended with GraniteCrete admixture surfacing, including [base course and] edging, at location approved by [Architect] [Engineer] [Owner's Representative]. Build mockup [ ] days prior to installation. Intent of the mockup is to demonstrate surface finish, texture, color and standard of workmanship
- B. Notify [Architect] [Engineer] [Owner's Representative] [ ] days in advance of mockup construction.
- C. Allow [Architect] [Engineer] [Owner's Representative] to view and obtain approval of mock-up before proceeding with rest of crushed aggregate blended with GraniteCrete admixture surfacing.
- D. [Approved mock-up may remain as first in place construction] [Remove mock-up after acceptance of work specified in this Section.]

## 1.6 DELIVERY, STORAGE, AND HANDLING

- A. Deliver all GraniteCrete Admixture [bags] [bulk] materials in original, unopened packaging. Protect materials and aggregate from contamination with foreign matter. Store under waterproof cover and protect from dampness.

## 1.7 FIELD CONDITIONS

- A. Do not install crushed aggregate blended with GraniteCrete admixture surfacing when sub-base is wet at saturated field capacity.
- B. Do not install GraniteCrete materials during rainy conditions or below 40 degrees Fahrenheit.

## PART 2: PRODUCTS

### 2.1 CRUSHED AGGREGATE BLENDED WITH GRANITECRETE ADMIXTURE SURFACING MATERIALS.

- A. Acceptance Manufacturer:
  - 1. Specification is based on products by GraniteCrete, Inc.  
419 Webster Street, Suite 202  
Monterey, CA 93940  
Phone: (800) 670-0849; Fax: (800) 670-0849



|                                    |                  |
|------------------------------------|------------------|
| Durability Index (Calif. Test 229) | Not less than 40 |
|------------------------------------|------------------|

In addition, if stone stability to water and vehicles is in question, Owner has the right to perform additional testing to ensure material shall adhere to requirements of Caltrans Section 68, as well as additional applicable ASTM tests.

- C. All testing fees shall be paid for by the Contractor.
- D. Permeable Stone: Stone base materials shall be washed, 100% fractured, by mechanical means, with elongated characters on each individual particle larger than 1/4". Materials shall be devoid of mineral fines. All particles smaller than 1/4" shall be produced by manufactured means only. Rounded sands or aggregates are prohibited.
- E. Delivery Moisture Content: Processed stone shall contain 90% to 110% of the optimum moisture content to ensure that fines do not migrate in transit or during placement and to facilitate proper compaction. The contractor shall ensure that aggregate leaving the source plant meets this requirement. The contractor is required to apply water to the processed stone on site to attain and maintain this minimum moisture content.
- F. Aggregate or aggregate blends of permeable stone shall conform to the following gradation (please note this is for **base rock**, not for GraniteCrete):

| SIEVE                       | Sieve Sizes Metric (mm) | Percent Passing by Weight*<br><b>Intended Result</b> | Range                        |
|-----------------------------|-------------------------|--|------------------------------|
| 1"                          | 25.0                    | 100  | 100                          |
| 3/4"                        | 19.0                    | 100  | 90-100                       |
| 3/8"                        | 9.52                    | 78   | 40-100                       |
| No. 4                       | 4.75                    | 36   | 25-40                        |
| No. 8                       | 2.36                    | 26   | 18-33                        |
| No. 30                      | 0.600                   | 11   | 5-15                         |
| No. 50                      | 0.300                   | 6  | 2-10                         |
| No. 200                     | 0.075                   | 2  | 0-5                          |
| Durability Index (CTM# 229) |                         | 40 min   |                              |
| Sand Equivalent (CTM# 217)  |                         | 70   |                              |
| LA Rattler (CTM# 211)       |                         |  | 500 Revs, less than or = 40% |

\* AASHTO Test Method T-27

**G.** Specs for 3/8" minus and 3/4" minus Crushed Aggregate Following ASTM D 1140-17:

100% fractured on all sides with no rounded particles  
Sieve 200 - Non-expansive Clay Fines - **not to exceed 18%**

The below test is for 3/8" minus stone, at approximately 90% compaction when tested.

## GraniteCrete Sieve Analysis Cumulative Percent Passing

| Sieve Size | % Passing Sieve Ranges |     |
|------------|------------------------|-----|
| 1/2"       | 100                    | 100 |
| 3/8"       | 95                     | 98  |
| #4         | 85                     | 90  |
| #8         | 75                     | 85  |
| #16        | 55                     | 70  |
| #30        | 38                     | 57  |
| #50        | 24                     | 33  |
| #100       | 15                     | 24  |
| #200       | 9                      | 18  |
| #400       | 0                      | 9   |

### 2.3 ACCESSORIES

- A. Water: Free from contaminants that would discolor or be deleterious to crushed aggregate blended with GraniteCrete admixture surfacing.

**Installation:** Do not use a vibratory plate to compact the GraniteCrete. Use a lawn roller filled with water to compact the GraniteCrete. Use a 36" drum roller or walk-behind roller in **static position** for driveways and larger installations. It is highly recommended to use a volumetric truck for driveways and larger installations; if possible, the use of a paver is highly recommended as well.

**B. [Steel [Edging]]:**

1. Dimensions: [3/16"] [1/4"] [ ] thick by [4-inch] [ ] deep, with overlapping joints.
2. Stakes: 3/16" x 1-3/4" wide at top tapering to point at bottom; located 36" o.c. maximum.
3. Finish: [Basked-on [green] [brown] [black] paint.] [Hot dipped galvanized.]

**C. [Redwood [Edging]]:**

1. Material: RIS Merchantable Heart Grade [from sustainably managed forests as certified by the Forest Stewardship Council.]
2. Dimensions: Nominal [2x6] [ ] inches
3. Stakes: Steel, 3/16" x 16" long x 1-3/4" wide at top tapering to point at bottom; located 36" o.c. maximum.
4. Finish: Provide in color to be selected by [Architect] [Engineer] from manufacturer's standards.

## **PART 3: EXECUTION**

### **3.1 EXAMINATION**

- A.** Examine grading and subsoil conditions. Do not proceed until conditions are acceptable.

### **3.2 PREPARATION**

- A.** Excavation: Excavate to depth required so edges of crushed aggregate blended with GraniteCrete admixture surfacing will match adjacent grades and have a maximum cross slope of 1 percent. [Remove excavated soil from site.]



- B. Sub-grade Preparation: Comply with Caltrans Standard Specifications Section 301-1 – “Sub-grade Preparation.”
  - C. Base Course Installation: Class II permeable base rock at 90% compaction.
  - D. [Edging]: Install flush with crushed aggregate blended with GraniteCrete admixture. Provide sufficient stakes to secure in place.]
- 3.3 INSTALLATION:** There are two installation methods for GraniteCrete: “Dry” and “Wet.”

The **dry method** is for installations up to 500 square feet (most home applications). The **wet method** is for installations over 500 square feet (most large, commercial installations) and may require the use of a volumetric truck.

#### **GRANITECRETE INSTALLATION – GENERAL**

- A. Mixing method:
1. Installations less than 500 square feet may be mixed on-site.
  2. Installations 500 square feet and over up to 3,000 square feet, must be delivered pre-mixed to the site from a GraniteCrete Inc. approved pre-mix facility. Approved retailers and pre-mix facilities can be found on the company website [www.granitecrete.com](http://www.granitecrete.com).
  3. Installations 3,000 square feet and over up to 5,000 square feet must be supplied by an approved pre-mix facility; GraniteCrete Inc. recommends the use of a volumetric truck.
  4. Installations over 5,000 square feet require the use of a volumetric truck.
  5. The volumetric truck must be calibrated for the GraniteCrete mixture. Contact GraniteCrete, Inc. at (800) 670-0849 for a list of approved volumetric truck operators.

**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 (also known as “lift”)**

For **residential/pedestrian applications**, GraniteCrete is installed as a 3-inch thick layer (“lift”) 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 (lift) over a 6-inch subgrade of compacted Class II base rock. Compaction rates for all applications are 88%–92%.

**Please note:** GraniteCrete compacts approximately ¼” per 1” of lift.

### **Measurements**

An online calculator to assist you with estimating the amount of material needed to complete your project can be found on the GraniteCrete website here:  
<https://www.granitecrete.com/paving-materials-estimator/>

Please note this is **only** an estimator and GraniteCrete, Inc is not responsible for the quantity of materials at the job-site.

**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 this 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 this 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 19:1 ratio (19 units of DG to 1 unit of GraniteCrete, measured in volume).

Commercial/Light Vehicular Application - (3 bag mixture) The ratio for commercial applications is 12.5:1 (12.5 units of decomposed granite to 1 unit of GraniteCrete, measured in volume).

## **Installation Instructions - “Dry” Method**

- 1. Class II Base Rock:** Moisten and compact base rock on the 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; it should **not** be used to compact the GraniteCrete for residential installations.
- 2. GraniteCrete:** Wheelbarrow the 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 "lift". Walking on the area is perfectly acceptable; initial compaction can be performed by walking on the edges and corners.
- 4.** Install a second lift as above; when doing this, make sure to pay particular attention to the edges to ensure even material height, and moisten to dampen mixture.
- 5.** Moisten until both lifts 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 drum 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 the finished surface in a perpendicular pattern with a medium-bristled push broom. Then make several more passes with the lawn roller until the desired surface texture is achieved. With larger installations, a roller in a static position can be used, making sure to keep the 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**. For best results, moisten all newly-installed GraniteCrete paving a second time the following 1 to 5 days, as practical. **Slow curing of GraniteCrete is important to avoid cracking.**

**Make sure there is no direct application of uncontrolled water (e.g. irrigation or sprinkler water) prior to final curing.**

### **Installation Instructions - "Wet" Method**

**After DG and GraniteCrete have been mixed together but BEFORE installation has begun:** Mix thoroughly and moisten with water until the GraniteCrete mixture begins to marble or clump together. 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.

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; it should **not** be used to compact the GraniteCrete for residential installations.
2. **GraniteCrete:** Wheelbarrow the prepared GraniteCrete/DG to the installation site and spread the mixture over the compacted base rock.
3. **Compaction:** Walking on the area is perfectly acceptable; initial compaction can be performed by walking on the edges and corners. Rake or grade area with the flat side of a landscape or asphalt rake (Do not use tang side), until the GraniteCrete is one inch above finish grade.
4. Once initial compaction has been completed, 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.
5. 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.
6. 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.
7. When laying GraniteCrete in batches, be sure to use the **cold joint** method below to ensure a blemish-free installation.
8. **Finishing:** If desired, lightly sweep the finished surface in a perpendicular pattern with a medium-bristled push broom. Then make several more passes with the lawn roller until the desired surface texture is achieved. With larger installations, a roller in a static position can be used, making sure to keep drum clean at all times. Remove spoils off the surface.
9. **DO NOT ALLOW GRANITECRETE TO DRY. MIST LIGHTLY WITH A HOSE  
END SPRAY HEAD AS NECESSARY OR COVER WITH A PLASTIC TARP.**
10. 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. For best results, moisten all newly-installed GraniteCrete paving a second time the following 1 to 5 days, as practical. Slow curing of

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GraniteCrete is important to avoid cracking.

**Make sure there is no direct application of uncontrolled water (e.g. irrigation or sprinkler water) prior to final curing.**

**The following information is applicable to BOTH installation methods.**

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: Dampen the prior installation area. Place newly mixed GraniteCrete into the area, being careful not to overlap existing compacted material. Place a three foot length of 2"x4" carefully along the edge of the new pour and compact by hitting/tapping the board with a single jack. Then, take a medium-bristled push broom and very lightly "feather" the two pours together.

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Method Two:

1. Place a 2”X4” or 2”X6” piece of wood across the installation, loosely 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, making sure to dampen the prior installation area.

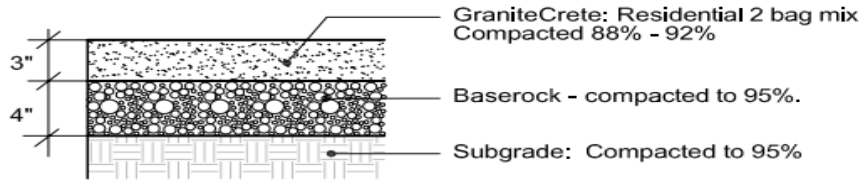
Method Three: (Suggested for large open edges at the end of the work day)

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

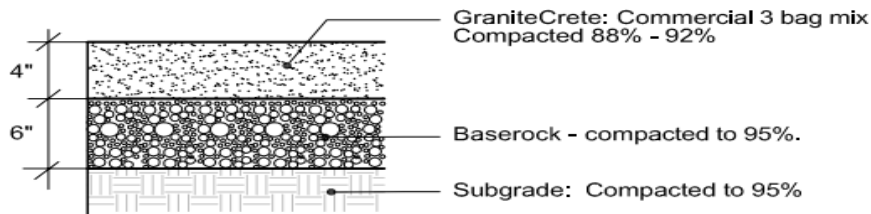
### **Installing for Vehicular Traffic**

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. Please be aware the vibratory plate should be used carefully, as it can have negative effects on the GraniteCrete. Make sure to keep the plate clean. If any ridges or ruts occur, fill in with a hand tamp, compact, and broom over it as the finishing instructions above.

### **Cross-section Details**



**1 GraniteCrete Paving - Residential/Pedestrian**



**2 GraniteCrete Paving - Commercial/Light Vehicle**

### 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<br>(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/>

### 3.4 Important Notes:

- A.** 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.
- B.** 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.
- C.** Non-compacted - or poorly-compacted - base rock may result in failure of the top layer of GraniteCrete.
- D.** 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 you squeeze the mixture and water oozes out, it is too damp. 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.
- E.** Aggregate/decomposed granite materials should meet the sieve specifications in this Specification Guide
- F.** Surface shall follow overall contours of landscape. Flat areas shall be [sloped] [crowned] for drainage. Slope [2.0%] [ ] percent minimum to drain away from

structures.

- G. Compaction rates for all applications are 88% – 92%.
- H. 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.
- I. Saw cut expansion joints every 5' in narrower paths, every 12' in wider paths, and at every engineered stress areas. Wait 48 hours before saw cutting.
- J. Cover finished surface, when practical, to achieve maximum curing period. See Section 3.5.
- K. Minimum Compacted Thickness (See Section Details):
  - 1. [Residential/Pedestrian Paths] [ ]: [3] inches.
  - 2. [Commercial/Light Vehicular Drives] [ ]: [4] inches.
- L. Completed, finished surface shall be of consistent quality and free of deleterious materials such as organic materials, nails, stones, and loose material. Surface shall not have depressions or humps greater than [1/4] [ ] inch in ten feet. Cold joints, if any, should be inconspicuous.

### 3.5 CURING PERIOD / PROTECTION

- A. **For Driveway Installations ONLY:** Do not allow traffic on crushed aggregate blended with GraniteCrete admixture surfacing for 5 days after placement or until compacted crushed aggregate blended with GraniteCrete admixture surfacing has fully cured. [Cover for extended curing period].
- B. Protect crushed aggregate blended with GraniteCrete admixture surfacing from damage until project completion. [Repair damaged areas to match specified requirements].

### 3.6 MAINTENANCE & REPAIRS

- A. Follow manufacturer's recommendations.
- B. Maintenance: Depending on the end users desired finish surface, maintenance may require occasional blowing off or brooming of paved surface - DO NOT use a pressure washer to clean GraniteCrete. Depending on quality of

compaction at time of installation, a thin veneer of loose aggregate material is typical after the full 28 days cure period. If cracking appears in a GraniteCrete surface, broom loose aggregate “fines” into cracks and compact with a rubber mallet.

**C. Repair:** When repairing GraniteCrete it is important to use the original aggregate/decomposed granite and the original GraniteCrete Admixture color to match previously installed materials. If the paved surface has large areas of raveled material (loose aggregate/decomposed granite) the initial installation may not have been properly compacted, or blended materials did not have optimum moisture content during installation. **GraniteCrete must not be allowed to dry prior to final compaction.** The following are suggestions for repair of raveled materials:

1. For the large loose areas, a minimum of a 3-inch of GraniteCrete can be installed. The repair areas need to be saw-cut at agreed length, removed, and re-installed. A portable concrete mixer or wheelbarrow can be used.
2. In areas that collapse/fail due to equipment weight, re-form and re-install with original materials as per specifications.
3. Cracks: Repair by brooming existing surface fines into the cracks of filling with dry, pre-mixed materials, or both. The onsite aggregate/decomposed granite should be sieved to 1/8” minus material for better application and in-fill of cracks. Materials should be mixed as per ratio described above. Broom or fill the crack, moisten, compact (with rubber mallet or hand compaction plate) and “feather” material into the final finish. This process might have to be done two or three times.