



Stabilizer Solutions, Inc.
33 S. 28th St.
Phoenix, AZ 85034
800-336-2468 (Fax) 602-225-5902
Website: stabilizersolutions.com
E-Mail: info@stabilizersolutions.com

SECTION 1

STABILIZER FOR AN AGGREGATE PATHWAY – PEDESTRIAN ACCESS

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section includes material and labor requirements for construction with decomposed granite or crushed 3/8” or 1/4” minus aggregate pathway with Stabilizer binder additive for the following items:
 - 1. Stabilized aggregate pathway and patios
- B. Related Sections:
 - 1. Section 02100 – Site Preparation
 - 2. Section 02200 – Earthwork
 - 3. Section 02230 – Granular Materials

1.2 PERFORMANCE REQUIREMENTS

- A. Perform gradation of decomposed granite material or 3/8” or 1/4” minus crushed aggregate in accordance with ASTM C 136 – Method for Sieve Analysis for Fine and Course.

1.3 SUBMITTALS

- A. Products Data: For each product specified. Submit a 5 lb. sample and sieve analysis for grading of decomposed granite or crushed 3/8” or 1/4” minus aggregate to be sent to Stabilizer Solutions, Inc. prior to any construction – (allow 2 week turn around). Must be approved by Landscape Architect and owner.
- B. Shop Drawings: Show details of installation, including plans and sections.

1.4 PROJECT/SITE CONDITIONS

- A. Field Measurements: Each bidder is required to visit the site of the Work to verify the existing conditions. No adjustments will be made to the Contract Sum for variations in the existing conditions.
 - 1. Where surfacing is indicated to fit with other construction, verify dimensions of other construction by field measurements before proceeding with the work.
- B. Environmental Limitations: Do not install decomposed granite or crushed 3/8” or 1/4” minus aggregate paving during rainy conditions or below 40 degrees Fahrenheit and falling.

1.5 QUALITY ASSURANCE

- A. Installer Qualifications: Installer to provide evidence to indicate successful experience in providing decomposed granite or crushed 3/8" or 1/4" minus aggregate surfacing containing Stabilizer binder additive or ability to follow installation instructions.
- B. Mock-ups: Install 4 ft. wide x 10 ft. long mock-up of decomposed granite or 3/8" or 1/4" minus crushed aggregate surfacing with Stabilizer additive at location as directed by owner's representative.

1.6 WARRANTY

- A. General Warranty: The special warranty specified in this Article shall not deprive the Owner of other rights the Owner may have under other provisions of the Contract Documents and shall be in addition to, and run concurrent with, other warranties made by the Contractor under requirements of the Contract Documents.
- B. Special Warranty: Submit a written warranty executed by the installer agreeing to repair or replace components of stabilized surfacing that fail in materials or workmanship within the specified warranty period. Stabilizer Solutions, Inc. does not warranty imitation "Stabilizer" purchased from a non-approved Stabilizer Solutions, Inc. licensee. Failures include, but are not limited to, the following:
 - 1. Premature wear and tear, provide the material is maintained in accordance with manufacturer's written maintenance instructions.
 - 2. Failure of system to meet performance requirements.
- C. Warranty Period: Contractor shall provide warranty for performance of product. Contractor shall warranty installation of product for the time of one year from completion.
- D. Contractor shall provide, for a period of sixty days, unconditional maintenance and repairs as required.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Stabilizer for crushed aggregate surfaces provided by the following manufacturer:
 - 1. Stabilizer Solutions, Inc. 33 South 28th St., Phoenix, AZ 85034; phone (602) 225-5900, (800) 336-2468; fax (602) 225-5902; website stabilizersolutions.com; email info@stabilizersolutions.com

2.2 MATERIALS

- A. Decomposed Granite or 3/8" or 1/4" crushed aggregate screenings
 - 1. Sand and crushed stone shall consist of inert materials that are hard and durable, with stone free from surface coatings and deleterious materials. Gradation requirements shall be as follows:
 - 2. Crushed Stone Sieve Analysis Percentage of Weight Passing a Square Mesh Sieve AASHTO T11-82 and T2782

1/4" MINUS AGGREGATE GRADATION

U.S. Sieve No.	Percent Passing by Weight
# 3/8"	100
# 4	90 – 100
# 8	75 – 80
# 16	55 – 65
# 30	40 – 50
# 50	25 – 35
# 100	15 – 20
# 200 to	10 – 15

3. Acceptable local supplier list to be provided by Architect

B. Stabilizer Binder

1. Patented, non-toxic, organic binder that is a colorless and odorless concentrated powder that binds decomposed granite or crushed 3/8" or 1/4" minus aggregate.

2.3 EXCESS MATERIALS

A. Provide owner's authorized rep. with the following excess materials for use in future decomposed granite or 3/8" or 1/4" minus crushed aggregate surfacing repair: 40 to 50 lb. Bags of the aggregate paving blended with proper amount of Stabilizer.

PART 3 - EXECUTION

3.1 BLENDING STABILIZER

A. Blend 12 to 16-lbs (call manufacturer for exact blend) of Stabilizer per 1-ton of decomposed granite or crushed 3/8" or 1/4" minus aggregate screenings. It is critical that Stabilizer be thoroughly and uniformly mixed throughout decomposed granite or crushed 1/4" or 3/8" minus aggregate screenings. Bucket blending is not acceptable. Blending with a rake and or shovel is not acceptable. Blend material dry as water will make the material hard.

3.2 PLACEMENT

A. After pre-blending, place the Stabilized decomposed aggregate or 3/8" or 1/4" crushed aggregate screenings on prepared sub-grade. Level to desired grade and cross section.

B. Depth of pathways – 3" for heavy foot traffic and light vehicles.

3.3 WATERING

- A. Water heavily for full-depth moisture penetration of the Stabilized pathway profile. Water activates Stabilizer. To achieve saturation of Stabilized pathway profile, 25 to 45-gallons of water per 1-ton must be applied. During water application randomly test for depth using a probing device, which reaches full depth.

3.4 COMPACTION

- A. Upon thorough moisture penetration, compact aggregate screenings to 85% relative compaction by equipment such as; a 2 to 4-ton double drum roller or a 1,000-lb. single drum roller. The roller size will depend on the depth of the pathway. DO NOT use a vibratory plate compactor or vibration function on roller as vibration separates large aggregate particles. Do not begin compaction for 6 hours after placement and up to 48 hours.
- B. If surface aggregate dries significantly quicker than subsurface material, lightly mist surface before compaction.
- C. Take care in compacting decomposed granite or crushed 3/8" or 1/4" minus aggregate screenings when adjacent to planting and irrigation systems. Hand tamping with 8" or 10" hand tamp recommended

3.5 INSPECTION

- A. Finished surface of pathway shall be smooth, uniform and solid. There shall be no evidence of chipping or cracking. Cured and compacted pathway shall be firm throughout profile with no spongy areas. Loose material will not be present on the surface after installation, but may appear after use and according to environmental conditions. Pathway should remain stable underneath the loose granite on top. It is a "natural" looking pathway, yet stable throughout. Any significant irregularities in path surface shall be repaired to the uniformity of entire installation.

3.6 MAINTENANCE

- A. Remove debris, such as paper, grass clippings, leaves or other organic material by mechanically blowing or hand raking the surface as needed. Any plowing program required during winter months shall involve the use of a rubber baffle on the plow blade or wheels on the plow that lifts the blade 1/4" off the paving surface.
- B. During the first year, a minor amount of loose aggregate will appear on the paving surface (1/16" to 1/4"). If this material exceeds a 1/4", redistribute the material over the entire surface. Water thoroughly to the depth of 1". Compact with power roller of no less than 1000 lbs. This process should be repeated as needed.
- C. If cracking occurs, simply sweep fines into the cracks, water thoroughly and hand tamp with an 8" – 10" hand tamp plate.

3.7 REPAIRS

- A. Excavate damaged area to the depth of the Stabilized aggregate and square off sidewalls.
- B. If area is dry, moisten damaged portion lightly.
- C. Pre-bend the dry required amount of Stabilizer powder with the proper amount of aggregate in a concrete mixer.
- D. Add water to the pre-blended aggregate and Stabilizer. Thoroughly moisten mix with 25 to 45 gallons per 1-ton of pre-blended material or to approximately 10% moisture content.
- E. Apply moistened pre-blended aggregate to excavated area to finish grade.
- F. Compact with an 8" to 10" hand tamp or 250 to 300 pound roller. Keep traffic off areas for 12 to 48 hours after repair has been completed.

END OF SECTION 1