



INSTALLATION SPECIFICATIONS FOR SOIL-SECURE

For the most cost-effective means of erosion, dust control, and soil stabilization, all stabilized DG from Southwest Boulder & Stone is blended with Soil-Secure, a non-toxic, organic binder, which works by binding soil or rock particles together. Soil-Secure is a concentrated psyllium husk powder that naturally binds aggregate surface material creating an aesthetically pleasing and cost-effective alternative to concrete and asphalt surfaces.

Southwest Boulder & Stone has premixed the Soil Secure with the specified material in preparation for installation. Blending Soil-Secure has been completed at a rate of 10 lbs. per ton of aggregate surface material for the following recommended application rates:

For ground cover, apply 1 ton per 200 sq. ft. at a 1" compacted depth. For pedestrian traffic, apply 1 ton per 100 sq. ft. at a 2" compacted depth. For vehicular traffic, apply 1 ton per 65 sq. ft. at a 3" compacted depth. When grading, maintain positive drain with sufficient fall to sheet water. Avoid excessive puddling and install drains if necessary. Smooth to desired finish.

Following the final grading, apply water until moisture penetrates to full depth of the material. Since moisture activates Soil-Secure, be sure that water penetration is total and complete. Using a core sample, test for complete saturation. After thorough moisture penetration, compact the aggregate surface material with a 5-ton roller. Divert all traffic until surface dries completely. Since drying time is weather dependent, allow additional dry time in cooler weather. Following installation, align sprinkler heads correctly, as standing water will void warranties.

KEYS TO SUCCESSFUL INSTALLATION

1. On-site positive drainage
2. Correct blending of the product
3. Thorough penetration of water throughout the blended material
4. The complete and full compaction of the material.

Soil-Secure

Organic Soil Binder

INSTALLATION GUIDELINES FOR SOIL-SECURE

Soil-Secure shall be blended thoroughly by approved methods using a decomposed granite that meets the performance requirements. Decomposed granites must have sufficient fines to insure proper binding of the finished product, and must be specifically approved by Southwest Boulder prior to blending.

Soil-Secure blends must be installed over a sufficient base to insure that the compacted finished product will perform as per specifications.

Blended material shall be installed loosely and framed in some fashion to prevent the migration of material. The material shall be graded in a manner to insure drainage and prevent puddling. Ideally the finish grade will have a slight crown to further enhance drainage. Water shall be added to the blended product to achieve compaction. It is necessary for the decomposed granite to reach a compaction of at least 90 % to insure the desired performance. The use of a vibratory roller, or a vibratory plate is generally required to attain compaction. If the installation requires a depth of greater than three inches it will be necessary to use multiple lifts. Upon installation of the product a sufficient drying time is required for the product to cure. This period is critical in that the re-introduction of moisture will degrade the finish product. After compaction a light brooming of the surface will provide a small amount of loose material to give that natural look.

Decomposed granites with soil binding agents provide a stable surface that will not blow away, will support traffic and provide a secure path or walkway. The surface will sheet water from rains and or sprinklers but is not intended for areas with a water problem. They will provide several years of trouble free service while maintain a natural look, but the material is not concrete.



Soil-Secure

Organic Soil Binder

INSTALLATION SPECIFICATIONS FOR MAINTENANCE OF EXISTING MATERIALS

Soil-Secure is a non-toxic premium organic soil additive for all dirt or hardscape surfaces. It is a colorless, odorless concentrated powder that is a natural glue which binds soil or other materials together to produce a firm surface. The regular maintenance schedule recommended for this surface is entirely dependent upon its use. Normal maintenance might include spot surface repair as necessary with general surface repair required every 2-3 years (contingent upon proper grade and amount of ambient moisture).



1. Till existing material to desired depth and apply Soil-Secure according to recommended rates.
1" Depth _____ 1 lb. per 20 sq. ft.
2" Depth _____ 1 lb. per 10 sq. ft.
3" Depth _____ 1 lb. per 7 sq. ft.
4" Depth _____ 1 lb. per 5 sq. ft.
2. Mix Soil-Secure thoroughly through total depth with rototiller or similar method.
3. Grade and smooth Soil-Secure to desired finish.
4. Apply water until moisture penetrates total depth of tilled area. Water activates Soil-Secure so it is ESSENTIAL that the FULL DEPTH of the material receives water at this time.
5. After the surface water disappears, compact area. Depending upon size of project, compaction can be done with a small riding roller or power walk-behind roller.
6. Allow finished surface enough time to dry completely. Set-up time varies, depending upon weather conditions. Hot, dry climate will set up sooner than cool, moist climate.

Note:

Failure to mix Soil-Secure thoroughly through the total depth of your materials will result in surface chipping, cracking, or excessive moisture retention that can cause the surface to remain spongy.

Soil-Secure

Organic Soil Binder

MAINTENANCE AND REPAIR PROCEDURES FOR STABILIZED DG PATHWAYS, WALKWAYS, CART PATHS, DRIVEWAYS, PARKING LOT AND PATIO AREAS

Maintenance

- Remove debris, such as paper, grass clippings, leaves or other organic material by mechanically blowing or hand raking the surface as needed.
- During the first year, a minor amount of loose aggregate will appear on the surface (1/16 to 1/4 inch). If this material exceeds 1/4 of an inch, 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. If cracking occurs, simply sweep fines into the cracks, water thoroughly and hand tamp with an 8" to 10" hand tamp plate.

Repairs

- Excavate damaged area to the depth of the stabilized aggregate and square up side walls. If area is dry, moisten damaged portion slightly.
- Pre-blend the dry required amount of Soil-Secure powder with the proper amount of aggregate in a concrete mixer.
- Add water to the pre-blended aggregate. Thoroughly moisten mix with 25 to 35 gallons per ton of pre-blended material or to approximately 10% moisture content.
- Apply moistened pre-blended aggregate to excavated area to finish grade.
- Compact with an 8" to 10" hand tamp or 250 to 300 pound roller (if area is high traffic, such as cart path, driveway, parking lot, use a larger 1000 lb. roller). Keep traffic cutoff areas for 12 to 48 hours after repair has been completed.



Soil-Secure

Organic Soil Binder

MATERIAL AND SAFETY DATA SHEET

Soil-Secure: Organic Powdered Soil Binding Agent

Product Name: Psyllium Husk Industrial Powder

Hazard Rating:

Health - 3

Flammability - 3

Reactivity - 0

OSHA Std: None TLV: None

Synonyms: Flea Seed, Plantago, Plantaginis Ovatae Testa

Chemical Formula or Composition: Natural material composed primarily of carbohydrate

Physical and Chemical Properties:

Boiling Point - N/A

Vapor Density (air=1) - N/A

Physical State - Powder

PH at Concentration - N/A

Melting Point - N/A

Vapor Pressure - N/A

Color - Light to dark brown

Odor Description - Musty

Fire/Explosion:

Flash Point - N/A

Explosive Limits - Class ST2 dust

Auto-Ignition Temp - N/A

Combustible Dust - Class ST2

K = 196 bar m/s Pmax = 12.5 bar

Reactivity: Stable, highly water soluble

Exposure Route Classification of Toxic Properties

Eye - May cause mechanical irritation unless rinsed immediately with water.

Skin - Single prolonged exposure (hours) causes no effect. Repeated prolonged exposures may or may not cause skin irritation.

Inhalation - Amounts which may be swallowed as a result of industrial handling are not likely to cause injury.