SOME OF OUR PRODUCTS AT A GLANCE.....

Launched SuperNails®

GSI's Launched SuperNails® offer yet another innovation in the suite of proven technologies and methodologies for improving the stability of embankments, embankment foundations and excavations. Advantages are immediate contribution to stability, high rate of production, low impact access and competitive costs.

Tests confirm that the nail/soil bond is typically higher than nails installed with traditional drilling methods. Both ungalvanized and galvanized bar will survive for a very long time in most soil environments.

GSI also uses GalvaDized™ bars.
GalvaDized™ is a specialized hot-dipped galvanization process that produces a plurality of surficial asperities compromised of zinc dross that both roughens the surface and produces a multitude of small anodes.

Drilled Soil Nails

Drilled SuperNails® - drilled soil nails with a grouted outer tube and inner bar which look very similar to the launched nail and provide the same value.

SuperMicropiles™ - these are SuperNails® installed vertically. Typically SuperMicropiles are installed to bridge landslide materials and provide a bearing point for our GCS™ walls.

BioWall™

BioWall™ provides a green alternative to shotcrete facing without sacrificing stability or performance. BioWall™ prevents soil erosion on a vertical or near vertical slope while offering an attractive ground covering alternative to shotcrete.

Geosynthetically Confined Soil™ Wall/Slope

Geosynthetically Confined Soil is technology based on closely spaced of fabric reinforcement. This cutting edge design provides revolutionary flexibility.

Mesh and Steel Plates

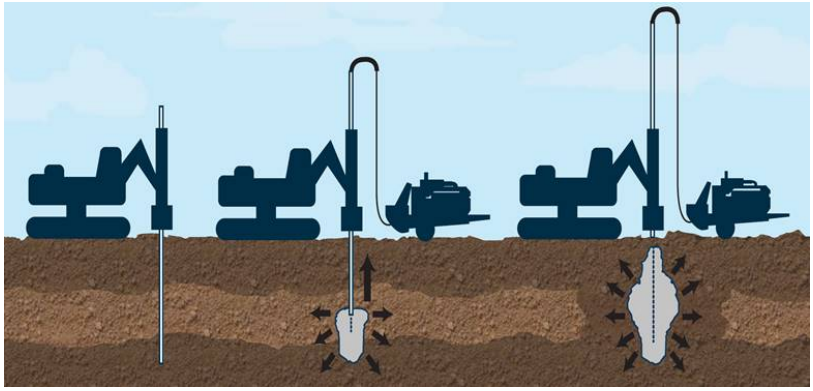
Mesh and steel plates are often used to stabilize a sloped surface in which the end goal is to enable vegetation to grow. The result is stability in the land while promoting the natural environmental landscape.

Shotcrete/Gunite

Shotcrete is a process where concrete is projected or "shot" under pressure using a feeder or "gun" onto the land surface to form a structural wall. The surface can be wood, steel, polystyrene, or any other surface that concrete can be projected onto.

Shotcrete has high strength, durability, low permeability, excellent bond and limitless shape possibilities. These properties allow shotcrete to be used in most cases as a structural material. Although the hardened properties of shotcrete are similar to conventional cast-in-place concrete, the nature of the placement process provides additional benefits, such as excellent bond with most substrates and instant or rapid capabilities, particularly on complex forms or shapes.

Compaction Grouting



Compaction grouting improves ground conditions by volumetric displacement. A very viscous (low-mobility), aggregate grout is pumped in stages to displace and densify the surrounding soils. By sequencing the work from primary to secondary locations, this densification process can be performed to achieve significant improvement. Spacing of the compaction grout locations will be as necessary to accommodate the environment and the desired level of densification. The primary purpose of the compaction efforts will be to densify the soils and mitigate the potential for future settlement. The grout is manufactured on-site so adjustments in flowability and slump can be made in real-time. For sinkhole remediation, a combination of surface grouting (void fill from surface) and grouting through drilled-in compaction grout casing is typically used.

Rockfall Stabilization

When measures are needed to handle rockfall hazards, GSI has the ability to provide many services routinely used to mitigate these hazards. GSI has expertise, knowledge and personnel trained to handle any rockfall geohazard. Methods such as scaling, dowels, tensioned anchors, draped mesh, pinned mesh, rockfall fences (barriers), and providing an adequate catchment area. Selecting the best method relies heavily on a good working knowledge of the local ground conditions in determining the most effective design.

Scaling involves the clearing of loose rock and the controlled removal of large blocks from cliff faces. It can be used as a short-term solution to stabilize hazards or as a precursor to more extensive works.

Slope drape systems contain raveling material where rockfall containment is limited and should be considered where rockfall hazards are prone. The application includes areas of highly weathered rock near high traffic areas such as tunnels. The drape mesh system is not pinned or anchored at the base and reduces rockfall energies and contains the rocks to a catchment area or base of the slope.

Pinned mesh systems contain rock blocks that are prone to failing on the slope, preventing them from falling to the base. This system removes the hazard of falling blocks to personnel below the slope. A pin mesh system offers an increased level of protection and reduces ongoing maintenance (minimal debris removal).

OHIO Non-IT State Term Schedule

Launched SuperNails® / SuperMicropiles™

Fiberglass SuperNail® (perforated fiberglass tube up to 20 ft. length, pressure grouted with #6 epoxy coated inner Bar)	$450.00 Each
GalvaDized™ SuperNail® (perforated GalvaDized™ steel tube up to 20 ft. length, pressure grouted with #6 epoxy coated inner bar)	$345.00 Each
Temporary Launched SuperNail®(steel tube up to 20 ft. length, pressure grouted)	$275.00 Each

Launched SuperDrains™

Fiberglass SuperDrain™ (perforated fiberglass tube up to 20 ft. length)	$360.00 Each
GalvaDized™ SuperDrain™ (perforated GalvaDized™ steel tube up to 20 ft. length)	$275.00 Each

Drilled SuperNails® / SuperMicropiles™

Drilled GalvaDized™ SuperNails® (GalvaDized™ steel tube, drilled and grouted with #6 epoxy coated inner bar) up to 20 ft. length	$400.00 Each
Drilled GalvaDized™ SuperNails® (GalvaDized™ steel tube, drilled and grouted with #6 epoxy coated inner bar) 21 up to 30 ft. length	$550.00 Each
Drilled GalvaDized™ SuperNails® (GalvaDized™ steel tube, drilled and grouted with #6 epoxy coated inner bar) 31 up to 40 ft. length	$625.00 Each
Drilled GalvaDized™ SuperNails® (GalvaDized™ steel tube, drilled and grouted with #6 epoxy coated inner bar) 41 up to 50 ft. length	$700.00 Each
Drilled GalvaDized™ SuperNails® (GalvaDized™ steel tube, drilled and grouted with #6 epoxy coated inner bar)	$825.00 Each

51 up to 60 ft. length	
Drilled GalvaDized™ SuperNails® (GalvaDized™ steel tube, drilled and grouted with #6 epoxy coated inner bar) 61 up to 70 ft. length	$950.00 Each
Drilled GalvaDized™ SuperNails® (GalvaDized™ steel tube, drilled and grouted with #6 epoxy coated inner bar) 71 up to 80 ft. length	$1,075.00 Each

Self-Drilling SuperNails® / SuperMicropiles™

Self-Drilling Hollow Bar SuperNails® (up to 40 mm bar) up to 20 ft. length	$455.00 Each
Self-Drilling Hollow Bar SuperNails® (up to 40 mm bar) 21 up to 30 ft. length	$625.00 Each
Self-Drilling Hollow Bar SuperNails® (up to 40 mm bar) 31 up to 40 ft. length	$925.00 Each
Self-Drilling Hollow Bar SuperNails® (up to 40 mm bar) 41 up to 50 ft. length	$1,125.00 Each
Self-Drilling Hollow Bar SuperNails® (up to 40 mm bar) 51 up to 60 ft. length	$1,345.00 Each
Self-Drilling Hollow Bar SuperNails® (up to 40 mm bar) 61 up to 70 ft. length	$1,555.00 Each
Self-Drilling Hollow Bar SuperNails® (up to 40 mm bar) 71 up to 80 ft. length	$1,775.00 Each

SuperNail® Testing

SuperNail® Proof Testing	$350.00 Each
SuperNail® Verification Testing	$650.00 Each

BioWall®

BioWall® Construction	$16.50 per Square Foot of Face

Geosynthetically Confined Soil™ (GCS®) Components

Geosynthetically Confined Soil™ (GCS®) Wall **Note – this is for systems widths reinforced up to 10 feet.*	$8.50 per Square Foot of Face
GeoSynthetically Confined Soil™ (GCS®) Wall Galvanized Wire Basket Units (approximately 10" x 120")	$85.00 Each
GeoSynthetically Confined Soil™ (GCS®) Wall Concrete Masonry Units (approximately 8" x 8" x 16")	$4.75 Each
GeoSynthetically Confined Soil ™ (GCS®) Wall Woven Geotextile	$0.50 per Square Foot of Fabric Reinforcement

Turf

Permanent Turf Reinforcement Mat – Erosion Control Mat used in permanent applications	$1.00 per Square Foot of Face
Biodegradable Turf Reinforcement Mat – Erosion Control Mat used in combination with Mesh applications to prevent soil erosion	$0.25 per Square Foot of Face

Shotcrete/Gunite

Wet Mix Reinforced Shotcrete – sold per inch thickness over one square face foot of area (includes reinforcing steel)	$3.25 per Square Foot per inch of thickness
Dry Mix Reinforced Shotcrete (Gunite) – sold per inch thickness over one square face foot of area (includes reinforcing steel)	$4.50 per Square Foot per inch of thickness
Steel Fiber Reinforcement – sold per inch thickness over one square face foot of area and used in combination with either wet or dry mix shotcrete	$0.65 per Square Foot per inch of thickness

Mesh and Steel Plates

High Capacity Diamond Mesh – Pinned	$10.00 per Square Foot of Face
Double Twist Wire Mesh – Pinned	$8.00 per Square Foot of Face
Galvanized Steel Plates (8” x 8” x 3/8”)	$25.00 Each
Galvanized Steel Plates (10” x 10” x 1/2”)	$32.00 Each
Galvanized Steel Plates (12” x 12” x 1/2”)	$43.00 Each

Drainage Components

Drilled PVC Horizontal Drains	$15.00 per Linear Foot
Stripdrain (6” Wide)	$2.50 per Linear Foot
PVC Drain Collector Pipe System	$11.50 per Linear Foot

Rockfall Stabilization

Scaling	$3.00 per Square Foot of Face
Trim Blasting	$122.00 per Square Foot of Face
Slope Drape – Double Twist Wire Mesh	$32.50 per Square Yard of Face
Slope Drape – Cable Net	$102.00 per Square Yard of Face
Slope Drape – Tecco Mesh (4mm)	$102.00 per Square Yard of Face
Temporary Rockfall Barrier	$375.00 per Linear Foot
Low Reach Drilling (<25 feet)	$16.50 per Linear Foot
High Reach Drilling (>25 feet up to 60 feet)	$32.00 per Linear Foot
Limited Access Drilling	$75.00 per Linear Foot
Rock Dowels – #8 GR 75 All Thread Bar (Galvanized)	$13.25 per Linear Foot
Rock Dowels – #8 GR 150 All Thread Bar (Galvanized)	$16.50 per Linear Foot
Rock Dowels – #11 GR 75 All Thread Bar (Galvanized)	$21.00 per Linear Foot
Rock Dowels – #11 GR 150 All Thread Bar (Galvanized)	$25.00 per Linear Foot
Rock Anchor Testing	$635.00 Each

Compaction Grouting

Compaction Grouting Casing Installation	$16.75 per Linear Foot
Compaction Grout Injection for Soils Densification	$12.65 per Cubic Foot
Compaction Grout for Void Fill	$7.65 per Cubic Foot
Polyurethane Grouting for Void Fill and Re-Leveling	$6.90 per Pound

Large Diameter Micropiles

5" Micropiles (with steel casing)	$78.25 per Linear Foot
7" Micropiles (with steel casing)	$107.75 per Linear Foot

Mobilization/Demobilization

Standard Mobilization	$5,650 per Crew
Limited Access, Rockfall & Compaction Grouting Mobilization – In addition to Standard Mobilization	$6,660.00 per Crew + Standard Mob
Specialty Equipment Mobilization	Cost + 15%

Daily Crew Rates

Soils Stabilization Crew (4 Man Crew)	$7,135.00 per Work Day
Rockfall Stabilization Crew (3 Man Crew)	$7,470.00 per Work Day
Compaction Grouting Crew (5 Man Crew)	$8,760.00 per Work Day