INSTALLATION GUIDELINES
SF SERIES HIGH-STRENGTH GEOTEXTILES

Material Identification:

Each roll of SF Series high-strength geotextile will be wrapped with a plastic shrink-wrap. Each roll of material will have a label on the wrap that will show product code. This label will have Roll Number, size and date of production.

Material Handling.

It is suggested that if a project requires several types of fabric, the contractor color-code the styles to avoid the wrong product being placed. The contractor should avoid obvious conditions that will damage the integrity of the high-strength geotextile. Do not drive equipment directly on the grid; do not use the grid as a staging mat for tools or other materials. The high-strength geotextile should be considered structural material and care needs to be used to avoid any damage to the fabric.

High-strength geotextile Placement:

THE STRENGTH DIRECTION IS IN THE LENGTH—NOT THE WIDTH OF THE fabric

Site of placement should be clear of any objects that will create a void condition. The high-strength geotextiles needs to be in direct contact with the soil. It is suggested that the correct high-strength geotextile be pre cut to the imbedment length as required in the contract drawings. It is critical that the correct high-strength geotextile be placed at the elevations and orientation shown on the contract documents

Some tension on the high-strength geotextile is required prior to the placement of the fill material. The high-strength geotextile should be smooth and free of wrinkles. Any method of tension is acceptable. DO NOT DAMAGE THE HIGH-STRENGTH GEOTEXTILE WITH WOOD STAKES OR OTHER TYPE OF MECHANICAL FASTENERS. Tension should be maintained until soil cover is compacted.

DO NOT SPLICE the high-strength geotextile. The high-strength geotextile should be a continuous run in the reinforcement direction. Adjacent panels can be butted, seamed or overlapped in accordance with the engineer’s instructions. COMPLETE COVERAGE is needed for the high-strength geotextile reinforcement performance.
Placement of fill material

Control of the fill placement should be performed using the standard method utilized in the contract as defined in the project specifications or as directed by the engineer.

Care should be taken to prevent wrinkles and/or movement of the high-strength geotextile during fills placement and spreading. When practical, fill is to be placed in the direction in which the reinforcement was laid out, to aid tensioning. However, if fill must be placed transverse to the roll length, slight (4-inch) overlaps between roll widths with the top panel of reinforcement being the first to receive fill, will prevent permanent folding of reinforcement. Rubber-tired equipment is allowed to pass over bare reinforcement at slow speeds, (less than 10 mph) and without sudden braking. Track equipment should not be allowed onto uncovered reinforcement. To avoid damaging the reinforcement, a minimum of eight inches of fill on top of the reinforcement shall be placed before tracked equipment can be operated.

Tension should be maintained in the high-strength geotextile until at least 70 percent of the fabric area is covered with fill. Proper tensioning is required to minimize facing movement for reinforced soil structures. The high-strength geotextile should be installed on one continuous piece with the principal strength direction extending from the face of the reinforced soil structure back into the embankment.

Place only that amount of high-strength geotextile required for construction. This will prevent potential damage by others as well as prevent excessive exposure to sunlight. After a layer of high-strength geotextile has been placed, the next lift of soil shall be placed, compacted and prepared as required. After the proper soil lift has been placed and compacted to the required elevation, the next high-strength geotextile layer shall be installed. This process shall be repeated for each subsequent layer of high-strength geotextile and soil.

Each soil lift should be compacted to a minimum 95 percent of Standard Proctor or as directed by the engineer. It is recommended that cohesive soils be compacted in lifts not to exceed 6 inches to 8 inches of compacted fill and granular soils be compacted in lifts not to exceed 10 inches to 12 inches of compacted fill. It is also recommended that compacted soil layers between high-strength geotextile layers not be less than 6 inches. Positive drainage shall be maintained during and after to construction in such a manner as to prevent erosion of the reinforced soil structure.