

Synteen

INSTALLATION GUIDELINES

SF Base Reinforcement GEOGRIDS

Material Identification:

Each roll of SF Series geogrid will be wrapped with a plastic shrink-wrap. Each roll of material will have a label on the wrap that will show product code (SF 11 or SF 12) This label will have Roll Number, size and date of production.

Material Handling:

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

Geogrid Placement:

The area that the geogrid is placed should be cleared of any objects that will create a void condition. The geogrids needs to be in direct contact with the soil. It is suggested that the geogrid be placed in accordance with the contract drawings. It is critical that the correct geogrid be placed at the elevations shown on the contract documents. Some tension on the geogrid is required prior to the placement of the fill material. The geogrid should be smooth and free of wrinkles. Any method of tension is acceptable. **DO NOT DAMAGE THE GEOGRID WITH WOOD STAKES OR OTHER TYPE OF MECHANICAL FASTENERS.** If staples or stakes are used, they need to be placed through the openings of the geogrid. Tension should be maintained until soil cover is compacted.

DO NOT SPLICE the geogrid. The geogrid shall be laid smooth without wrinkles or folds on the prepared subgrade in the direction of construction traffic. Adjacent geogrid rolls shall be overlapped, or joined as required in the plans. Nylon tie wraps, every 6” to 10” may be used to tie overlapped adjacent panels. Overlaps shall be in the direction as shown on the plans. See table below for suggested overlap requirements for adjacent rolls and at end of rolls.

Soil CBR	Method of Joining
Greater than 3	300 mm (12 in) overlap
1 – 3	600 mm (24 in) overlap
0.5 – 1	900 mm (36 in) overlap or w/ mechanical ties

COMPLETE COVERAGE is needed for the geogrid 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 geogrid 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. 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 six inches of fill on top of the reinforcement shall be placed before tracked equipment can be operated.

Tension should be maintained in the geogrid until at least 70 percent of the grid area is covered with fill. Proper tensioning is required to minimize facing movement for reinforced soil structures.