

SPECIAL SPECIFICATION

5816

Geogrid for Environmental Cracking

1. **Description:** This Specification governs the placement of geogrid used to reduce cracking in pavement structures induced from volumetric shrinkage of soils. Grid used in this application is intended to intercept cracks and prevent the transmission of cracking to other pavement layers above the grid. Grid used in this application is not intended for structural improvement.
2. **Materials.** Provide geogrid meeting the requirements of DMS-6270, "Biaxial Geogrid for Environmental Cracking." Use roll widths and lengths shown on the plans or as approved.
3. **Construction.** Prepare the subgrade as indicated on the plans or as directed. Set string lines for alignment if directed. Install geogrid in accordance with the lines and grades as shown on the plans. Do not operate tracked construction equipment on the geogrid until a minimum fill cover of 6 in. is achieved. Rubber tire construction equipment may operate directly on the geogrid at speeds of less than 5 mph if the underlying material will support the loads. Correct any substructure where excessive deformation is apparent, correct grid placement operations as recommended by the manufacturer or as directed
 - A. **Geogrid Placement.** Orient the geogrid length as unrolled parallel to the direction of roadway. Overlap geogrid sections as recommended by the manufacturer, as shown on the plans, or as directed. Use plastic ties at overlap joints or as directed. Placement of geogrid around corners may require cutting and diagonal lapping. Pin geogrid at the beginning of the backfill section as directed. Keep geogrid taut at the beginning of the backfilling section but not restrained from stretching or flattening.
 1. **Longitudinal Joints.** Overlap longitudinal joints by a minimum of 1 ft. Space longitudinal ties 10 ft. to 20 ft. or as directed.
 2. **Transverse Joints.** Overlap transverse joints by a minimum of 1 ft. Space transverse ties 4 ft. to 5 ft. or as directed.
 - B. **Damage Repair.** As directed, remove and replace contractor-damaged or excessively deformed areas without additional compensation. Lap repair areas a minimum of 3 feet in all directions. Tie each side of repair grid in at least three locations; do not exceed normal construction spacing. Tie spacing for odd shapes will be as directed. Repair excessively deformed materials underlying the grid as directed.
4. **Measurement.** Geogrid will be measured by the square yard of roadway placement as shown in the plans with no allowance for overlapping at transverse and longitudinal joints.

5. **Payment.** The work performed and materials furnished in accordance with this Item and measured as provided under “Measurement” will be paid for at the unit price bid for “Geogrid for Environmental Cracking.” This price is full compensation for furnishing, preparing, hauling and placing materials including labor, materials, freight, tools, equipment, and incidentals.