

**ITEM 234**  
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**BASE REINFORCEMENT**

*This item shall govern for the furnishing and placing of polymer grid reinforcement of the size and quantity designated for use with the flexible base requiring reinforcement as shown on the plans and in accordance with these specifications.*

**MATERIALS:**

The geogrid supplied shall be a synthetic planar structure meeting the requirements of Texas Department of Transportation Materials Specification DMS-6240, "Geogrid for Base/Embankment Reinforcement", of the type as shown on the plans. The sampling, testing and rejection criteria of that specification shall govern.

**CONSTRUCTION METHODS:**

1. Subgrade soil shall be prepared in accordance with Specifications Item No. 104 "Street Excavation and No. 107, "Embankment", prior to placement of geogrid reinforcement.
2. Geogrid reinforcement shall be rolled out parallel to the road direction at the proper elevation and alignment as shown on the construction drawings.
3. Geogrid sections shall be overlapped a minimum of one 1 foot in both directions. Placement of geogrid around corners will require cutting of geogrid product and diagonal overlapping. Unless otherwise directed by the Engineer, plastic ties shall be used at overlaps. The transverse spacing of the ties shall be 4 to 5 ft. and the longitudinal tie spacing shall be 10 to 20 ft., as approved by the Engineer.
4. The geogrid shall be pinned at the beginning of the backfilling section, but shall be left free to stretch or relieve tension throughout the remainder of the work area.
5. Contractor shall take steps to ensure that geogrid sections do not separate at overlaps during construction.
6. Base material shall be placed and compacted in accordance with Specification Item 200, "Flexible Base". This material shall be back dumped from trucks

riding on top of the reinforced base material and bladed on to the grid ahead.

7. Tracked construction equipment shall not operate directly upon the geogrid. A minimum base thickness of 6 inches is required prior to operation of trucked vehicles over the geogrid.

8. Rubber tired equipment may pass over the geogrid at slow speeds, less than 5 miles per hour if the subgrade material is capable of supporting the loads without excessive rutting or causing damage to the grid. Equipment operators shall avoid sudden braking or sharp turning.

9. If ruts are created in the base material due to construction traffic, they shall be filled with additional base material rather than blading adjacent material into the rut.

10. Sections of geogrid, which are damaged by construction activity, shall be repaired or replaced at the Contractor's expense. All repaired sections shall contain a minimum 3 ft. lap in all directions.

**MEASUREMENT:**

Accepted work as prescribed by this item will be measured by the square yard of base reinforcement complete in place in accordance with the plans with no allowance made for width of overlaps required.

**PAYMENT:**

The work performed as prescribed by this item will be paid for at the contract unit price bid per square yard, measured as prescribed above, for "Base Reinforcement" which price shall be full compensation for furnishing all labor, materials, equipment and other items necessary and incidental to completion of work.

**BID ITEM:**

Item 234: Base Reinforcement - per square yard.