1. UNIAXIAL GEOGRID (revised 2-2-2022)

Description. This work is the furnishing of labor, equipment and materials to construct a geogrid layer as detailed in the plans or as directed by the Project Manager.

Materials. Provide geogrid manufactured using long-chain synthetic polymers, composed of at least 95 percent by weight of polyolefin, polyesters, or polyamides.

The geogrid must meet the requirements of the Build America Buy America (BABA) special provision.

Fabricate the geogrid into a stable network such that the ribs, filaments, or yarns retain their dimensional stability relative to each other, including selvages. Conform to Table 1 for geogrid property values. All property values represent minimum average roll values (MARV). Identify, store, and handle geogrids according to ASTM D 4873.

TABLE 1. UNIAXIAL GEOGRID PROPERTY REQUIREMENTS

|  |  |  |  |
| --- | --- | --- | --- |
| PROPERTY | TEST METHODS | UNITS | REQUIRED VALUE1,2 |
| Ultimate Tensile Strength | ASTM D 6637 | lb/ft | 2000 |
| Tensile Strength at 5% Strain | ASTM D 6637 | lb/ft | 1000 |
| Ultraviolet Stability | ASTM D 4355 | % at 500 hrs | 75 |

Notes:

Values, except Ultraviolet Stability, are MARVs (average value minus two standard deviations)

Machine direction strength

Construction. Install geogrid in accordance with the manufacturer’s recommendations. Place geogrid directly above geotextiles when both are specified, shown in the plans, or directed by the Project Manager.

Measurement. Geogrid is measured by the square yard. Measurement excludes laps, seams, and joints.

Basis of Payment. Accepted quantities of Uniaxial Geogrid are paid at the contract unit price bid for Geogrid – Uniaxial. Payment at the contract unit price is full compensation for all resources necessary to complete the item of work under the contract.