1. Geogrid (revised 2-2-2022)

Description. This work is furnishing labor, equipment, and materials necessary to construct geogrid layers as shown 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 subgrade stabilization geogrid property values. All property values, with the exception of maximum opening size represent minimum average roll values (MARV). Identify, store, and handle geogrid according to ASTM D 4873.

**TABLE 1. GEOGRID PROPERTY REQUIREMENTS**

|  |  |  |  |
| --- | --- | --- | --- |
| PROPERTY | TEST METHODS | UNITS | REQUIRED VALUE1,2 |
| Ultimate Tensile Strength | ASTM D 6637 | lb/ft | 820 |
| Tensile Strength at 2% Strain | ASTM D 6637 | lb/ft | 270 |
| Geogrid Percent Open Area | CW-02215 | % | 50 |
| Minimum Opening Size | Direct measure with caliper | inches | 0.75 |
| Maximum Opening Size | Direct measure with caliper | inches | 2 |
| Junction Strength | GRI GG23 | lb | 25 |
| Ultraviolet Stability | ASTM D 4355 | % at 500 hrs | 50 |

Notes:

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

Minimum strength direction

Geosynthetic Research Institute (Drexel University, Philadelphia, PA) GG2 Individual Geogrid Junction 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 Biaxial Geogrid are paid at the contract unit price Geogrid – Biaxial. Payment at the contract unit price is full compensation for all resources necessary to complete the item of work under the contract.