

Product Evaluation

RE: Review of Terrafix Biaxial Geogrids TBX 1500

PRODUCT

Terrafix Biaxial Geogrids TBX1500 is manufactured and supplied by Terrafix Geosynthetics Inc. Toronto, and distributed by Brock White Construction Supply.

VENDOR CLAIMS AND INFORMATION

CLAIMS:

Terrafix® Biaxial Geogrids TBX series provide a simple, cost effective solution for soil reinforcement. Improve highways and other heavily trafficked areas, even when conditions are less than perfect, including: weak subgrades, contaminated soils, heavy loads, high granular costs and shallow-buried utilities. TBX series geogrids provide structural reinforcement of roads and parking areas through excellent stiffness and interlock capabilities. Product web link: www.terrafixgeo.com

DESCRIPTION:

Terrafix® Biaxial Geogrids TBX1500 is produced from an extruded sheet of polypropylene which is then punched and drawn. It has a wide range of pH resistance (2-13) and it claims 100% resistance to UV degradation.

POTENTIAL USAGE:

Terrafix® Biaxial Geogrids TBX1500 is mainly used for “soil stabilization” and for soil reinforcement applications such as strengthening road subgrade.

STANDARDS:

ASTM D6637 Tensile and ultimate tensile strengths, GRI-GG2 Junction strength
ASTM D7748 Flexural Rigidity, ASTM D4355 Resistance to heat, light and moisture

ALBERTA TRANSPORTATION COMMENTS

EXPERIENCE:

Alberta Transportation has some experience with bi-axial geogrids.

APPLICATION STANDARDS:

Alberta Transportation does not have a standard for geogrids. All geogrids applications must be properly designed by a Professional Engineer (e.g., registration with APEGA). The use of extensible reinforcement in MSE bridge abutments or wing walls shall conform to the *Standard Specifications for Bridge Construction Section 25, Mechanically Stabilized Earth Walls* at:

<http://www.transportation.alberta.ca/Content/docType246/Production/StandardSpecificationsforBridgeConstruction2017.pdf>

RECOMMENDATIONS:

Terrafix Biaxial Geogrids TBX1500 be listed as a Potential Product under Alberta Transportation Products List, Geosynthetics – Geogrid – Proprietary, based on the information provided. Final acceptance as a proven product will be based on field performance.

TRIAL PROJECTS

18,960 m² (Highway 8 and 101 Ave SW Calgary)

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