

Product Evaluation

RE: Review of Terrafix Biaxial Geogrids TBX3000

PRODUCT

Terrafix Biaxial Geogrids TBX3000 is manufactured and supplied by Terrafix Geosynthetics Inc. Toronto.

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 TBX3000 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 TBX3000 is mainly used for “soil stabilization” and 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*.

<http://www.transportation.alberta.ca/Content/docType246/Production/SpecificationsforBridgeConstruction2013.pdf>

RECOMMENDATIONS:

Terrafix Biaxial Geogrids TBX3000 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

Rishi Adhikari

cc Innovation Evaluation Group – Abid Malik
Roger Skirrow, Corinna Mulyk