

**Product Evaluation**

**RE: Review of Terrafix Triangular Geogrid TTX - G160**

**PRODUCT INFORMATION**

Product Name: <u>Terrafix Triangular Geogrid TTX - G160</u>	Manufacturer: <u>Terrafix Geosynthetics Inc. Calgary</u>
Website: <u>https://terrafixgeo.com/</u>	Supplier: <u>Terrafix Geosynthetics Inc.</u>

**VENDOR CLAIMS AND INFORMATION**

**CLAIMS**

Terrafix TTXG-160 is a polypropylene single layer extruded in a three-dimensional direction with a nonwoven geotextile attached. This engineered geogrid is stabilized to resist degradation due to ultraviolet exposure. It is resistant to commonly encountered soil chemicals, mildew, and insects, and is non-biodegradable. Polypropylene is stable within a pH range of 2 to 13, making it one of the most stable polymers available for geogrids today.

**DESCRIPTION**

TTXG-160 is a Triangular Geogrid with a nonwoven geotextile attached. It is made up of extruded polypropylene. It is a geogrid that provides separation, filtration, interaction, confinement, and reinforcement.

**POTENTIAL USAGE**

Terrafix Geogrid TTX - G160 is used as an effective base reinforcement and subgrade improvement.

**STANDARDS**

ASTM D6637 - Determining Tensile Properties of Geogrids by the Single or Multi-Rib Tensile Method  
ASTM D4632 - Standard Test Method for Grab Breaking Load and Elongation of Geotextiles  
ASTM D4491 - Standard Test Methods for Water Permeability of Geotextiles by Permittivity

**ALBERTA TRANSPORTATION COMMENTS**

**EXPERIENCE**

Alberta Transportation and Economic Corridors has used similar products in its projects.

**APPLICABLE STANDARDS**

Alberta Transportation and Economic Corridors does not have a standard for geogrids.

**RECOMMENDATIONS**

Terrafix Triangular Geogrid TTX - G160 be listed as a Potential Product under Transportation and Economic Corridors Products List, Geosynthetics – Geogrid and Geotextile Composite Geosynthetics – Proprietary, based on the information provided. Final acceptance as a proven product will be based on field performance.

**RESTRICTIONS ON USE**

Caveat: All geogrid applications must be properly designed by a Professional Engineer registered with APEGA. The use of extensible reinforcement in MSE bridge abutments or wing walls applications shall confirm to the requirements of Alberta Transportation and Economic Corridors Standard Specifications for Bridge Construction Section 25, Mechanically Stabilized Earth Walls.

**TRIAL PROJECTS**

Rishi Adhikari

cc New Products Evaluation Group – Kristen Tappenden,  
Rocky Wang