

Product Evaluation

RE: Review of Terrafix TGC Composite Geogrid (3030-4, 3030-6, 4040-6)

PRODUCT INFORMATION

Product Name: Terrafix TGC Composite Geogrid (3030-4, 3030-6, 4040-6)
Website: https://terrafixgeo.com/

Manufacturer: Terrafix Geosynthetics Inc. Calgary
Supplier: Terrafix Geosynthetics Inc.

VENDOR CLAIMS AND INFORMATION

CLAIMS

Terrafix TGC Composite Geogrid (3030-4, 3030-6, 4040-6) combines the most advanced geogrid technology with the added functionality of a nonwoven geotextile for applications where site conditions require additional filtration and/or separation. It is manufactured at a facility that has achieved ISO 9001:2008 certification for its systematic approach to quality. Terrafix TGC allows strong mechanical interlock with the soil being reinforced, while the geotextile provides separation and filtration without preventing the soil geogrid interlock. It is inert to biological degradation and resists naturally encountered chemicals, alkalis, and acids. Polypropylene is stable within a pH range of 2 to 13.

DESCRIPTION

Terrafix TGC is a Polypropylene Monolithic Extruded Biaxial Geogrid bonded with a non-woven geotextile, resulting in a geogrid that provides separation, filtration, interaction, confinement, and reinforcement.

POTENTIAL USAGE

Terrafix TGC 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 TGC Composite Geogrid (3030-4, 3030-6, 4040-6) 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