Alberta ▮ Government

Product Evaluation

RE: Review of Layfield E'grid Uni-Axial HDPE Series (50R, 65R, 90R, 110R, 130R)

PRODUCT
Layfield E'grid Uni-Axial HDPE Series geogrids are distributed in Alberta by Layfield Group.

VENDOR CLAIMS AND INFORMATION

CLAIMS:
Layfield E'grid Uni-Axial HDPE Series is manufactured of high density polyethylene (HDPE). It's primary function is for high strength applications. Company website: www.layfieldgroup.com.

DESCRIPTION:
Layfield E'grid Uni-Axial HDPE Series geogrids are open structures composed of pre-stressed, high strength bars, with excellent long term creep strengths. They are made of high density polyethylene (HDPE) by punching square holes and stretching sheets of HDPE. The bars are oriented in one principle strength direction. The strength of a geogrid allows positive reinforcement of embankments and retaining walls. Geogrids interlock with the soil and have excellent long term creep strength.

POTENTIAL USAGE:
Primary application is for soil reinforcement.

STANDARDS:
ASTM D6637 Ultimate Wide Width Tensile Strength
ASTM D5262 Creep Reduced Strength
GRI-GG4 Long-term Design Strength

ALBERTA TRANSPORTATION COMMENTS

EXPERIENCE:
Alberta Transportation has no experience with this product.

APPLICATION STANDARDS:
Alberta Transportation does not have a standard for geogrid. All geogrid applications must be properly designed by a Professional Engineer (e.g., registration with APEGGA). The use of extensible reinforcement in MSE bridge abutments or wingwalls shall conform to the current AT MSE Wall Specifications.

RECOMMENDATIONS:
Layfield E'grid Uni-Axial HDPE Series geogrids be listed as a Potential Product under Alberta Transportation Products List, Geosynthetics – Geogrids - Proprietary, based on the information provided. Final acceptance as a proven product will be based on field performance.

Fred Cheng
cc   New Product Evaluation Standing Committee – Roger Skirrow