

Product Evaluation

RE: Review of Layfield Geogrid Uni-Axial (PET) T-Series (LP120T)

PRODUCT

Layfield LP Uni-Axial T-Series (LP120T) geogrids are distributed in Alberta by Layfield Group.

VENDOR CLAIMS AND INFORMATION

CLAIMS:

Layfield Geogrid Uni-Axial (PET) T-Series (LP120T) is used for high strength applications such as retaining wall and embankment reinforcement. Company website: www.layfieldgroup.com.

DESCRIPTION:

Layfield Geogrid Uni-Axial (PET) T-Series (LP120T) is made from a woven matrix of high tenacity polyester (PET) fibres that are coated with a protective polymer coating. The polyester fibres are oriented in one principle strength direction. Geogrid strengths can be very high. 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 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 (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 Geogrid Uni-Axial (PET) T-Series (LP120T) be listed as a Proven Product under Alberta Transportation Products List, Geosynthetics – Geogrids - Proprietary, based on the information provided.

TRIAL PROJECTS

Anthony Henday SE / Whitemud Creek arch culvert

Fred Cheng

cc New Product Evaluation Standing Committee – Roger Skirrow