

Product Evaluation

RE: Review of Layfield E'Grid 2020 and E'Grid 3030 Bi-axial geogrids PP

PRODUCT

Layfield E'Grid 2020 and E'Grid 3030 Bi-axial geogrids PP are manufactured by Beijing Orient Science & Development Co. (BOSTD) and distributed in Alberta by Layfield Group.

VENDOR CLAIMS AND INFORMATION

CLAIMS:

Layfield E'Grid 2020 and E'Grid 3030 Bi-axial geogrids are manufactured with polypropylene and provide good tensile strength in both directions. The reinforcing action of geogrids lies mainly in increasing the shearing resistance within a soil by a process of interlocking between the square ribs and the soil. The load dispersal effect from the interlocking mechanism is more effective and can reduce sub-base thickness and construction cost. Company website: www.layfieldgroup.com.

DESCRIPTION:

Layfield E'Grid geogrids can be used with any kind of fill material. One layer or multi-layer construction distributes loading and disperses stress more effectively, leading to the reduction in differential settlement and improved foundation bearing capacity.

POTENTIAL USAGE:

Used as base reinforcement for roads, storage yards and parking lots and other load bearing structures.

STANDARDS:

ASTM D6637 Wide width tensile strength,	ASTM D6637 Strengths at 2% strain and 5% strain,
GRI-GG1 / GG2 Junction efficiency,	ASTM D1388 mod. Flexural rigidity,
US Army COE method Aperture stability,	ISO 10319 Geosynthetic – Wide Width Tensile Test

ALBERTA TRANSPORTATION AND ECONOMIC CORRIDORS COMMENTS

EXPERIENCE:

Alberta Transportation and Economic Corridors has no experience with this product.

APPLICATION STANDARDS:

Alberta Transportation and Economic Corridors does not have a standard for geogrids. All geogrid applications must be properly designed by a Professional Engineer (registration 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*.

RECOMMENDATIONS:

Layfield E'Grid 2020 and E'Grid 3030 Bi-axial geogrids PP be listed as Reviewed Products under Alberta Transportation and Economic Corridors Products List, Geosynthetics – Geogrids - Proprietary, based on the information provided.

TRIAL PROJECTS

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