

Product ID: 8150-4-1-39 Initiation Date: June 24, 2019 Revision Date: April 25, 2024

## **Product Evaluation**

# RE: Review of Tensar AmeriGrid (formerly Earthlock) Biaxial Series Geogrids (BX11 and BX12)

## **PRODUCT**

Tensar AmeriGrid Biaxial Series Geogrids (BX11 and BX12) are manufactured by Tensar International Corporation located in Morrow, Georgia, USA and it is distributed in Alberta by Whitecap Canada located in Winnipeg, MB. Website: <a href="https://www.tensarcorp.com">https://www.tensarcorp.com</a>

## VENDOR CLAIMS AND INFORMATION

#### **CLAIMS**

Tensar AmeriGrid Biaxial Series Geogrids (BX11 and BX12) are used for subgrade base course reinforcement in roadways application.

#### **DESCRIPTION**

Tensar AmeriGrid Biaxial Series Geogrids (BX11 and BX12) are manufactured of a select grade of polypropylene (PP) or polypropylene/polyethylene copolymer extruded into a thick, continuous sheet. After punching the sheet with a precise arrangement of holes, the sheet is preheated and then stretched first in its machine direction (MD) and then in its cross-machine direction (CMD) thus drawing the holes into large, rectangular apertures. Biaxial stretching pre-stresses the sheet, thus enhancing its tensile strength in both the MD and CMD.

## **POTENTIAL USAGE**

The Biaxial geogrid is used to laterally reinforce and confine granular aggregates to create a stronger composite structure, which increases the performance of the underlying subgrade or aggregate base course in roadways application.

## **STANDARDS**

ASTM D 6637: Tensile Strength ASTM D 7737: Junction Strength

ASTM D 7748: Flexural Rigidity ASTM D 7864: Aperture Stability Modulus

#### ALBERTA TRANSPORTATION AND ECONOMIC CORRIDORS COMMENTS

#### **EXPERIENCE**

Alberta Transportation and Economic Corridors has no experience with this product

## **APPLICABLE STANDARDS**

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

#### **RECOMMENDATIONS**

Tensar AmeriGrid Biaxial Series Geogrids (BX11 and BX12) be listed as Potential Products under Alberta Transportation and Economic Corridors Products List, Geosynthetics – Geogrids – Biaxial - Proprietary, based on the information provided. Final acceptance as a proven product will be based on field performance.

#### **RESTRICTIONS ON USE**

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