

Product Evaluation

RE: Review of Maccaferri Green Terramesh System

PRODUCT

Maccaferri Green Terramesh System is developed and supplied by Maccaferri Inc. and distributed in Alberta by Maccaferri Canada Ltd.

VENDOR CLAIMS AND INFORMATION

CLAIMS:

Maccaferri Green Terramesh System is based on units formed from a hexagonal plastic-coated galvanized wire mesh to provide soil reinforcement for unstable slopes and embankments. The products provide stability in embankments due to the interaction and interlocking of soils with the plastic-coated anchor mesh. Product web link: <http://www.maccaferri-canada.com/home/13891.html>

DESCRIPTION:

The Green Terramesh units are assembled at the production site and are formed from a single sheet of hexagonal PVC-coated galvanized woven wire mesh. It is formed into 3 sections, a horizontal soil reinforcement, a face section which is reinforced with steel bars inserted through the double twist every mesh opening and a horizontal return at the top. The face is lined with a bio-Mac or a 3-dimensional grid held in place by an inner panel of welded mesh.

POTENTIAL USAGE:

The Green Terramesh System structures can be used to provide soil reinforcement for unstable slopes and embankments.

STANDARDS:

Design of the Green Terramesh System is fully governed by AASHTO (2000a).
ASTMA641-97 Specifications for zinc coated (galvanized) carbon steel wire
ASTMA370-92 Testing of steel products
ASTMA90-93 Weight (mass) of coating on iron and steel articles with zinc
ASTMA313-92 Specifications for chromium-nickel stainless and heat-resisting steel spring wire
ASTMA764-93 Specifications for steel wire, carbon, drawn galvanized and galvanized at size for mechanical springs

ALBERTA TRANSPORTATION COMMENTS

EXPERIENCE:

Alberta Transportation has no experience with this product.

APPLICATION STANDARDS:

Design governed by design criteria in AASHTO "Standard Specifications for Highway Bridges" (2002).

RECOMMENDATIONS:

Green Terramesh System be listed as a Proven Product under Alberta Transportation Product List, Earth Retaining Systems – Reinforced Soil System (wall) - Proprietary based on the information provided. Final acceptance as a proven product will be based on field performance.

TRIAL PROJECTS

Discovery Woods Villa, SW Calgary
Elbow River Pathway near stampede grounds, Calgary

Fred Cheng

cc New Product Evaluation Standing Committee – Roger Skirrow