

## Product Evaluation

### RE: Review of Maccaferri Terramesh System

#### **PRODUCT**

Maccaferri Terramesh System is developed and supplied by Maccaferri Inc. of Williamsport, Maryland, and distributed in Alberta by Maccaferri Canada Ltd.

#### **VENDOR CLAIMS AND INFORMATION**

##### **CLAIMS:**

Terramesh System (Terramesh Retaining Wall System) is a mechanically stabilized earth structure comprised of stone-filled gabion type baskets for facings and metallic double-twisted, grid-type soil reinforcement. It is manufactured from one continuous piece of woven mesh. Product web link: <http://www.maccaferri-canada.com/home/13891.html>

##### **DESCRIPTION:**

The Terramesh System is fabricated from a double twisted steel mesh, which is galvanized and subsequently PVC coated, and features a gabion-type basket facing section. The facing basket is integrally manufactured with the double twisted wire-mesh soil reinforcement. The facing section of the unit is formed by connecting the back panel and a diaphragm to the main unit that forms rectangular-shaped cells used for infill facing stone confinement. Terramesh System units are manufactured with all components mechanically connected at the production facility.

##### **POTENTIAL USAGE:**

The Terramesh System structures can be used for a variety of applications, including: retaining walls for roads and railways (for both embankments above and below roadways), protection of culverts, parking structures, land development projects and landscaping.

##### **STANDARDS:**

The Terramesh System has been HITEC evaluated and copy of report is on file. Design of this type of structure 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:**

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

**TRIAL PROJECTS**

Diamond Cove, SE Calgary

Fred Cheng

cc New Product Evaluation Standing Committee – Roger Skirrow