

## Product Evaluation

### **RE: Review of Debris Flow Barrier System – Flexible Ring Net Barriers**

#### **PRODUCT**

The Debris Flow Barrier System – Flexible Ring Net Barriers is manufactured by Geobruigg North America located in Algodones, New Mexico and distributed by Western Geohazard Solutions Incorporated located in Kelowna, British Columbia.

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

##### **CLAIMS:**

Debris Flow Barrier System withstands high static and dynamic loads. Flexible Ring Net Barriers can be installed with a low outlay of material and man hours greatly reducing costs and construction time. Traditional debris flow protection systems are well suited for separating water from rubble but are not flexible and can be damaged by larger rock fragments. Product web link: <http://www.geobruigg.com/content/en-us/Home/Debrisflowbarriers/tabid/2067/Default.aspx>

##### **DESCRIPTION:**

Debris Flow Barrier System – Flexible Ring Net Barriers consists of: Rocco Ring Net; the brake ring; the abrasion protection; the posts; the spiral rope anchors and the self-drilling anchor with Geobruigg Flex head. The spiral rope is made from steel wires with strength of 1,770 N/mm<sup>2</sup>. The ropes and nets are treated with the Geobruigg supercoating zinc/aluminum coating compared to traditional galvanized ropes and wires which increases the service life by at least three times.

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

Debris Flow Barrier System has many application possibilities such as; retaining minor debris flow; multilevel debris flow barrier for larger debris flows; debris flow breakers; protection against blocking of passages; drain-off element of rubble collector; diversion structure for correcting channel course; protection against scouring and erosion and protecting the channel flanks against erosion.

##### **STANDARDS:**

Test results are available from the vendor in regards to wire mesh strength and oxidation resistance.

#### **ALBERTA TRANSPORTATION COMMENTS**

##### **EXPERIENCE:**

Alberta Transportation has no experience with this product.

##### **APPLICATION STANDARDS:**

Alberta Transportation does not have a standard for rock fall and avalanche protection. Rockfall barrier systems should be designed by a qualified engineer and should be designed for the specific rockfall hazard and site conditions.

##### **RECOMMENDATIONS:**

Debris Flow Barrier System – Flexible Ring Net Barriers be listed as a Potential Product under Alberta Transportation Product List, Rock/Debris Retaining System – Proprietary based on the information provided. Final acceptance as a proven product will be based on field performance.

**TRIAL PROJECTS**

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