

Product Evaluation

RE: Review of Rockfall Mitigation Simple Drapery Systems

PRODUCT INFORMATION

Product Name: <u>Rockfall Mitigation Simple Drapery Systems</u>	Manufacturer: <u>Maccaferri Canada Ltd. Cambridge, ON</u>
Website: <u>www.maccaferri.com</u>	Supplier: <u>Maccaferri Canada Ltd. Cambridge, Ontario</u>

VENDOR CLAIMS AND INFORMATION

CLAIMS

The Maccaferri Rockfall Mitigation Simple Drapery System is a high resistance composite mesh system. It is hung over the rock slope so that falling debris is contained behind the rockfall netting. Retained debris are allowed to fall to the foot of the rock slope in a controlled manner without inflicting any damage to infrastructure or personnel adjacent to the rock face. All the mesh products are galvanized as a standard, with PVC coating as an option, in order to achieve maximum durability. Mesh products can be ordered in various colors to match the rock slope face.

DESCRIPTION

The Maccaferri Rockfall Mitigation Simple Drapery System (SteelGrid) comprises rock anchors or bolts drilled at the crest of the slope, used to attach the drapery to the slope. Drapery mesh is then unrolled all the way to the toe of the slope, covering the face and directing any detaching fragments to the toe area in a controlled and safe manner. A ditch at the slope toe is often used to retain and accumulate the debris. Drape mesh options are MACRING 4PM Ring Net panels or SteelGrid double twisted wire panels.

POTENTIAL USAGE

Reinforcement of the slope face, prevention of rock debris from reaching the infrastructure. Overall product purpose is to protect infrastructure and facility users adjacent to rock exposures on natural and cut slopes.

STANDARDS

ETAG 027 - 2008; ASTM A53 - Pipe, Steel, Black and Hot-Dipped, Zinc-Coated, Welded and Seamless; ASTM A36 - Carbon Structural Steel, ASTM A325 - Structural Bolts, Steel, Heat Treated, 120/105 ksi Minimum Tensile Strength; ASTM A123 - Zinc (Hot-Dip) Coatings on Steel Products; ASTM A764 - Metallic-Coated Carbon Steel Wire Coated at Size and Drawn to Size for Mechanical Springs; ASTM A975 - Double-Twisted Hexagonal Mesh Gabions and Revet Mattresses; ASTM A1023 - Stranded Carbon Steel Wire Ropes for General Purposes. Other related standards: ASTM A153, ASTM A856, ASTM A641

ALBERTA TRANSPORTATION AND ECONOMIC CORRIDORS COMMENTS

EXPERIENCE

Transportation and Economic Corridors has no experience with this product.

APPLICABLE STANDARDS

Transportation and Economic Corridors does not have standard for debris flow, rock fall and avalanche protection.

RECOMMENDATIONS

Maccaferri Rockfall Mitigation Simple Drapery System be listed as a Trial Product under Transportation and Economic Corridors Products List, Slope Stabilization – Tensioned Anchored Wire Mesh System – Proprietary and also be listed as a Potential Product under Rockfall – Mesh Draped – Proprietary, based on the information provided. Final acceptance as a proven product will be based on field performance.

RESTRICTIONS ON USE

Caveat: Maccaferri Rockfall Mitigation Simple Drapery System should be designed by a qualified professional engineer registered with APEGA and should be designed for the specific rockfall hazard and site conditions.

TRIAL PROJECTS

For Slope Stabilization this product is installed at Crestmont Blvd, a part of Stoney Trail DB1 project done by EllisDon

Rishi Adhikari

cc New Products Evaluation Group – Kristen Tappenden,