Aberta Government

Product ID: 8248-1-8 Initiation Date: November 22, 2023 Revision Date: February 16, 2024 Expiry Date: February 2027

Product Evaluation

RE: Review of RISP RDC shallow landslide/open hill debris flow protection barriers

PRODUCT INFORMATION	
Product Name: RISP RDC shallow landslide /open hill debris flow protection barriers	Manufacturer: Risp Srl, Vascon di Carbonera (TV), Italy
Website: https://risprockfallprotection.com/	Supplier: Engineered Asset Upkeep Ltd., Clearwater, BC

VENDOR CLAIMS AND INFORMATION

CLAIMS

RISP RDC debris flow protection barriers combine speed and easy assembly with lightweight of the whole kit, because the post sections and all the components have been optimized. Jobsite operations are minimized, with no need of big excavation works and short construction time. The relatively low weight helps handling of the kit even in hard site conditions, as rugged slope or irregular ground, but also means savings on transport costs, especially when helicopter-assisted installation is needed. The energy dissipation devices absorb the applied energy by deformation and not by friction. They guarantee high performance with high energy absorption allowing lower forces on anchors and limited structure deformations.

DESCRIPTION

The main interception layer of RISP RDC consists of a ring net, placed along the whole length of the downslope side of the barrier, thus forces are distributed along the barrier, reducing the stresses on the foundations. An additional interception layer of hexagonal wire mesh is installed on the upslope side of the ring panels, to retain even the small debris material which runs down together with larger blocks in shallow landslide/open hill debris flow events.

POTENTIAL USAGE

RISP RDC debris flow protection barriers is used for retaining shallow landslides, rocks and debris flows.

STANDARDS

European Assessment Document EAD 340020-00-0106

ALBERTA TRANSPORTATION COMMENTS

EXPERIENCE

Alberta Transportation and Economic Corridors has no experience with this product.

APPLICABLE STANDARDS

Alberta Transportation and Economic Corridors do not have a standard for rock fall and avalanche protection. The mentioned caveats should be taken into consideration while designing.

RECOMMENDATIONS

RISP RDC shallow landslide/open hill debris flow protection barriers be listed as a Potential Product under Alberta Transportation and Economic Corridors Products List, Rock/Debris Retaining System – Proprietary, based on the information provided. Final acceptance as a proven product will be based on field performance.



Product ID: 8248-1-8 Initiation Date: November 22, 2023 Revision Date: February 16, 2024 Expiry Date: February 2027

RESTRICTIONS ON USE

Caveat: RISP RDC shallow landslide/open hill debris flow protection are available for different energy absorption capability from falling rocks. Rockfall and Debris flow barrier systems should be designed by a qualified engineer registered with APEGA and should be designed for the specific debris flow / rockfall hazard and site conditions. Specific engineering experience with rockfall / debris flow assessment, analysis, design, and implementation is considered central to successful project outcomes. At locations where potential fish habitat may be disturbed, an assessment by a professional biologist should be done.

TRIAL PROJECTS

Rishi Adhikari

cc New Products Evaluation Group – Roger Skirrow, Rocky Wang