



TeMa
SOUTH AFRICA

South Africa



ROCKY SLOPE REHABILITATION

NATURE OF INTERVENTION

Slope stability is a significant challenge on mountain pass roadways where steep side slopes are required for both vertical and horizontal alignment within limited space. The challenge is further aggregated when such steep slopes are exposed to the natural elements and weather phenomenon such as high winds and rainstorms which further threaten the stability of both the slope and adjacent roadway with resulting excessive erosive actions.

Mechanically reinforced retaining walls, with concrete face panels and blocks are often used to stabilize such slopes, however these are intrusive, aesthetically unappealing, expensive and time consuming, often becoming the less favorable option, especially in rural areas where the natural appeal of the environment is to be upheld.

Through the introduction of various geosynthetics products as alternatives conventional retaining walls, the slope can be stabilised using a more natural-looking solution whereby the intervention is masked through promotion of the natural vegetation and look of the area.

These geosynthetic solutions also contribute through increased durability, lower cost and better performance thus greatly improving and lowering lifecycle maintenance costs and contributing to better structural efficiencies over an extended design and operational lifespan.

Location:

Franschhoek, Western Cape, South Africa

Products:

• K-MAT L LB

Quantity:

5 100 sqm

Application:

Erosion Control & Slope Stabilisation

Date:

May 2026

SOLUTION

K-MAT L LB is TeMa SA's 16mm thick, three-dimensional erosion control mat, consisting of extruded polyethylene (PP) monofilaments to form an entangled mat with high void ratios.

The multi-directional structure of the mat provides a highly compatible matrix for root growth of surface vegetation, thereby enhancing the resistance to both wind and hydraulic forces. The product is available in a range of colours was supplied in a light brown colour for this application to blend in with the existing environment.

The **K-MAT L LB** retains the natural material of the slope within its matrix structure thus allowing the vegetation of the slope to propagate and further secure the slope via its natural rooting system.

K-MAT L LB was supplied and placed on the rehabilitated slope and held in place using a 4mm, double twist steel mesh secured with intermittent rock anchors.



TeMa South Africa (Pty) Ltd

241 Joseph Road
Tunney Industrial, Germiston 1429
Gauteng, SOUTH AFRICA
Tel: +27 (0) 72 873 0101
Email: temaSA@temacorporation.com

32B Cabernet Road
Saxonburg 1, Blackheath 7580
Western Cape, SOUTH AFRICA
Tel: +27 (0) 73 873 0101
Email: temaSA@temacorporation.com

Web site: www.temasouthafrica.com

TeMa Technologies and Materials S.R.L

Via dell'Industria 21
31029, Vittorio Veneto
(TV), ITALY
Tel: +39 0438 5031
Email: info@temacorporation.com

Web site: www.temageo.com