

SOILCRETE-FILLED GEOCELL LAYER FOR LINER PROTECTION

NATURE OF INTERVENTION

Exposed geomembrane liners are often threatened with damage from a number of operational and natural elements when left exposed.

Such protection interventions need to take into consideration the nature and quantity of threats during both the installation process and then also for the full service life of the liner.

There are many methods to protect the liners ranging from temporary to more permanent long term solutions.

The stability, ease of construction and relative cost of such methods is an important consideration. Many geosynthetic products offer benefits in these areas over more conventional approaches such as reinforced concrete slabs.

Location:

Rasimone Platinum Mine, Rustenburg,
North West Province, South Africa

Products:

- *TeMa-CELL 150 B*

Quantity:

86 000 sqm

Application:

Liner Protection Layer

Date:

October 2020

SOLUTION

TeMa-CELL 150 B, TeMa's Polyethylene (PE) coated, Polypropylene (PP) woven tape geocell system with stabilizing perimeter border, was used in conjunction with a locally sourced soilcrete infill. This combination provided for a durable surface finish to the side slopes and basin areas that offered exceptional levels of stability and protection.

The product was easy to install using the integrated stabilizing perimeter border to each panel which reduces the number of anchoring points and effectively expands open the honeycomb structure for filling. Due to the underlying geomembrane liner, anchoring had to be achieved from above using weighted plinths, anchor trenches and customized steel frames.

The use of the TeMa Geo products, provided significant benefits over other conventional materials to the project in terms of cost, ease of installation and a reduction in construction time.



TeMa South Africa (Pty) Ltd

79 Watt Street, Meadowdale, 1609, SOUTH AFRICA
Tel: +27 (0) 72 873 0101
Email: temaSA@temacorporation.com

Web site: www.temaSA.co.za

TeMa Technologies and Materials srl

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

Web site: www.temageo.com