

Case Study

application MSE Retaining Wall
location Randolph College Athletic Field, Lynchburg, VA
product Miragrid® 3XT, 5XT, 8XT

job owner Randolph College
engineer Circeo Geotechnical Engineering
contractor Sampson Construction
date of installation January 2009

TenCate® develops and produces materials that function to increase performance, reduce costs and deliver measurable results by working with our customers to provide advanced solutions.

THE CHALLENGE

Randolph College in Lynchburg, VA was building a new athletic field and track stadium. With the existing topography, they needed retaining walls designed to fit in the new facility. They also wanted to incorporate the stadium seating into one of the tiered walls to give better viewing.

THE DESIGN

The engineer decided to use the Rockwood Straight Face brown block with Miragrid® XT-series geogrid for reinforcement. The geogrid strength in the area near the stadium seating needed to be increased due to the additional loading anticipated.



Site prior to retaining wall construction.



Geogrid draped over the blocks while backfill and aggregate drainage liner is placed.



Backfill brought up and compacted prior to placement of drainage aggregate.



Retaining wall was needed to stabilize the cut slope.

THE CONSTRUCTION

The construction of the athletic field and stadium went extremely well considering the work was finished up during the winter months. The construction began on a 25 foot tall wall and finished with a roughly 30 foot tall two tiered wall. This tiered wall design allowed for placement of the stadium seating as well as incorporating the press box into the area.

THE PERFORMANCE

The use of Miragrid® XT-series geogrids allowed the Randolph College to select a wall design that met the aesthetics and strength requirements for their retaining wall. It also gave them the flexibility of positioning the stadium seats at the best elevation for viewing.



A two tier retaining wall allows for proper grading and placement of the stadium seating.



Randolph College completed athletic facility.

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