

Project Info

 11 / 08 / 15


 CC5™ Bulk Rolls

 400m²

 Transversal layers

 Enna Province, Sicily

 Geo Consulting Service

 CC5™ was used to cover a slope 281m in length, and 14m in height in Piazza Armerina, Sicily



The slope prior to installation

In August 2015, Concrete Canvas® GCCM* (CC) was used to protect a steep slope in the Piazza Armerina in the Enna Province, Sicily. The slope was 281 metres in length, and 14 metres high, and had been exposed after a historical wall (built in the 1900s) collapsed, and dragged the parking areas above down with it. The slope was in need of temporary protection to prevent further collapse on the site.

A HDPE geomembrane had initially been considered, however, this area of Sicily is subject to very high Summer temperatures and strong winds in Winter, so this solution would not have lasted long enough to protect the slope in these conditions. Shotcrete was also considered, but the expense and difficulties involved in organising and carrying out the job with shotcrete would have been too great.

As a result, CC was found to be the only option which could quickly protect the slope face, be easily manageable, and would not require an expensive professional installation.

The works were carried out by Geo Consulting Service from Caltagirone City, headed by Mr Gaetano Palazzo.

*Geosynthetic Cementitious Composite Mat



Muro ante crollo

The historical wall which previously occupied the site



The site following the wall's collapse



The wall's collapse also took down some of the carpark above



Two rock climbers assisted on the installation



The CC was fixed with screws every 200mm



Completed installation



Completed installation

Work began with ground preparation, which consisted of the removal of any stones, rocks and moving soil parts which could disturb the CC or make its fixings less effective. The CC was then fixed with screws at intervals of 200mm, along with top anchor trenches and ground pegs every 1 metre along the top of the slope, before being hydrated with a hose.

400m² of CC5™ were installed over a period of four days by a team of three people, including two rock climbers, in temperatures upwards of 35°C. The Client was very happy with the ease of installation of the CC and how well it met their needs.

“After 2 years the CC5™ protection is still there, the original request was for a temporary protection, until the municipality could find the money to re build the collapsed wall, but until now the funds to rebuild have not materialised and the situation has not changed, and will in all likelihood not do so for another 2 years.”

Gaetano Palazzo
Geo Consultants LLC