



Project Info



05 / 02 / 16



CC8™ Bulk Rolls



750m²



Vertical layers



Wadi Laban, Riyadh,
Saudi Arabia



DNGO Saudi
Contracting Company



Prevent rain water run-
off infiltrating a gulley
and causing a land slip

Completed, painted installation

In February 2016, Concrete Canvas® GCCM* (CC) was used to prevent rain water run-off infiltrating a gulley and causing a land slip at Wadi Laban, Riyadh Saudi Arabia, in February 2016. Concrete and shotcrete were the considered alternatives but would not have been as cost effective compared to using CC, also taking a significantly longer time to install. The work was carried out by FOQSCO (Freih Bin Owaidha Al-Qahtani Sons Co. LTD) for DNGO Saudi Contracting Comany.

The weather was mainly dry with intense sunshine and the temperature moderate as this installation was carried out during the winter months. Pre-installation preparation included removing loose gravel and sharp rocks from the surface, levelling of uneven areas and a single layer of geotextile being laid.

The CC was then laid longitudinally using a spreader beam and crane then cut to required lengths. Once laid, holes were drilled on the sides, and the CC was fixed using 200mm rock bolts. Multiple layers were jointed at 50mm intervals using 19mm stainless steel screws. The CC was anchor trenched at the top and backfilled with concrete before hydration was tanker with hose attachment.

Hydration was carried out in three 2-hour periods over two days due to the dry conditions and steep nature of the slope. Once set, the CC was painted with a client specified colour to blend in with the natural landscape of the surrounding area.

*Geosynthetic Cementitious Composite Mat





The slope before work



The slope prior to CC install



A geotextile was laid prior to installation of the CC



Contractors fixing the CC with bolts & pegs to the slope at 50mm centers



Hydration taking place



A 5,000 gallon water tank was used for hydration



The set CC8™



The slope after being painted for Aesthetics

The installation took 27 hours in total, over a course of 3 days. The project was a great success with the client being so satisfied, wishing to use CC again in the future.

Using CC was far quicker than using shotcrete, which would have also been much more difficult to work with, allowing the team to continue work in other areas of the site simultaneously while not raising any dust or causing issues with splash back. There was a large cost saving by using CC over more conventional methods due to the rapid and easy installation.

“The client was very happy. They would like to use it again and recommend CC to anyone who has similar requirements.”

Project Manager
FOQSCO.