

## Project Info



29 / 12 / 14



CC8™ Bulk Rolls



3,550m<sup>2</sup>



Vertical layers



Undisclosed Tank Farm,  
Oman



Undisclosed



CC8™ was used to prevent the weathering of a roadside slope which was leading to rockfall onto the road.



Completed installation

In December 2014, Concrete Canvas® GCCM\* (CC) was used to protect a roadside slope near a petrochemical facility in Oman. The slope was suffering from weathering erosion which was causing rocks to fall onto the road below. CC was installed in a trial, with shotcrete simultaneously installed on a different part of the slope to establish which was the better method for this application.

Loose rock was removed from the slope face to ensure intimate contact with the CC. Bulk rolls of CC8™ were delivered to site and mounted onto a spreader beam and hung from a crane. The rolls were lifted to the top of the slope and the leading edge placed in an anchor trench and pegged in place. The CC was then unrolled down the slope and cut to length, to avoid wastage. Layers were overlapped by 100mm and then sealed with an adhesive sealant and screwed at 100mm intervals. Pegs were also inserted where needed, and mortar used to seal the CC to the concrete substrate and to the pipes installed to allow the egress of water. Hydration was achieved using a 200-gallon tanker at the crest of the slope and a bowser at the base. Due to high temperatures, a second hydration was given an hour later.

A total of 3,550m<sup>2</sup> of CC8™ was installed over a period of five days, compared to the 12 days installation time for the shotcrete. The CC also resulted in cost savings and allowed the road to remain open for the duration of the installation. Unlike the shotcrete, there have been no signs of cracking or failure, and CC is being considered by this client for further projects.

\*Geosynthetic Cementitious Composite Mat





*The CC was delivered to site in bulk rolls*



*The CC was suspended from a spreader beam and excavator for unrolling*



*Overlapping layers of CC were secured with adhesive sealant and screws*



*Edges of the CC were backfilled using concrete at the crest of the slope*



*The end of the slope was covered using longitudinal and transverse layers*



*Completed installation*