

Project Info



23 / 07 / 12



CC5™ Bulk Rolls



416m²



Vertical layers



Bogota D.C., Colombia



MERT S.A.S.



CC5™ was used to protect a steep slope and prevent damage to residential dwellings and a road above



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Right justified picture caption

In July 2012, Concrete Canvas® GCCM* (CC) was used to protect a steep slope in Bogota D.C, Colombia. The slope had suffered severe surface erosion and slip which threatened the integrity of the slope and the road at its crest, and risking damage to the houses at the crest and toe of the slope.

Due to the steep nature of the slope and the lack of access from the toe, the installation had to be carried out from its crest., which ruled out many traditional solutions such as shotcrete or poured concrete. CC was specified instead, preventing full closure of the road, minimising disruption to residents and traffic. The works were carried out by MERT S.A.S.

CC bulk rolls were delivered to the site and deployed using a spreader beam, with the installation team using climbing equipment to allow them to guide the material down the slope and safely and easily fix and joint the CC in place. Prior to installation, the team had installed soil anchors and drainage pipes. The leading edges of the CC lengths were pegged into an anchor trench at the crest of the slope, while overlapping layers of the material were jointed down the slope's face at 200mm intervals using screws. The CC was fixed to the slope itself using 200x200mm steel plates and soil anchors to ensure intimate contact with the substrate. Once completed along the width of the slope, the CC was hydrated and the anchor trench at the crest backfilled with concrete to prevent ingress and provide a neat termination.

A total of 416m² of CC5™ were installed on a site with very limited access.

*Geosynthetic Cementitious Composite Mat





Slope prior to works



Deployment of CC



CC overlaps jointed using screws



CC fixed to slope face using steel plats and soil anchors



Completed installation



Crest anchor trench backfilled with poured concrete