

Project Info



June 2018



CC5™ Bulk Rolls



5,200m²



Vertical and Transverse
layers



Tuxpan, Veracruz, Mexico



Undisclosed



CC5™ used to provide
erosion protection to
slopes and channels
around the perimeter of
compressions stations



Completed slope section lined with CC

Between June and October 2018, Concrete Canvas® (CC) GCCM* was used to provide erosion protection to perimeter slopes and channels of compression stations at the site of the South Texas to Tuxpan Gas Pipeline run by TransCanada on behalf of Bonatti, SPA.

This series of installations was carried out as part of a larger project where works were required on short-term and discontinuous job activities around the site. The aim of this project was to reduce costs related to the human resources v productivity on the works. As a result, there was a possibility of installing sections of CC material between 50 – 500m² for the final works. Traditional systems such as shotcrete or in-situ cast concrete would have involved excess material waste and downtime of on-site assets as a result of the time required on site for installation.

The installation was carried out largely by manual means, with only one crane used during the project for the movement of bulk rolls from a warehouse to the site. Following ground preparation, the CC material was cut to required lengths based on the heights of each slope or channel section to reduce wastage and eliminate heavy plant requirement. The CC was then installed vertically down the slopes or transversely across channel profiles, with edges of CC fixed to the substrate using 9" ground pegs which were later covered with mortar at the crest, and buried within anchor trenches at the toe. Stainless steel screws were used to joint overlapping CC layers at 200mm centres.

The installation was carried out in temperatures between 30 – 35°C during the rainy season. A total of 5,200m² of CC5™ were installed at the Monte Grande, Higueros and Tamihaia Stations in Veracruz, Mexico.

*Geosynthetic Cementitious Composite Mat





Channel following excavation and ground preparation



Laying pre-cut CC lengths



Securing CC to substrate using ground pegs



Completed channel section



Channel termination detail



Completed small perimeter slope section