

Project Info



03 / 04 / 18



CC5™ Bulk Rolls



280m²



Longitudinal layers



Mining site, Thio,
New Caledonia



SODISCAL



CC5™ used to protect a
slope on a mining site



Aerial image of the completed installation

In April 2018, Concrete Canvas® GCCM* (CC) was used to protect the wall, or slope, of a settling basin at a mining site in Thio, New Caledonia.

The client specified CC for this project as a trial in order to understand how the material works and its advantages over alternatives. They had previously used HDPE but found it had limited durability. CC's 50 year design life and unique properties, offering durability and erosion control among others, made CC a great contender for the scheme. The works were carried out by SODISCAL for SLN – Eramet.

Prior to installation, anchor trenches were created at the top and bottom of the slope. The CC was then delivered to site in bulk rolls of CC5™. The material was then mounted onto a spreader beam hoisted by an excavator and deployed from the crest of the slope to its toe. The CC was fixed to the rocks using masonry screws to secure it, while 375mm ground pegs were also inserted through the CC and into the substrate at 2m intervals to further prevent movement of the material. A combination of CT1 sealant and 20mm screws at 200mm intervals along each material overlap to prevent ingress. Once installation was completed, a 5000L bowser with pressure hose was used to hydrate the material. Hydration was given twice, with a 1-hour rest period.

280m² of CC5™ were installed in 9 hours in temperatures of between 25-30°C. The client was satisfied with the end result and will continue to observe its performance. They are considering using CC for a new environmental application.

*Geosynthetic Cementitious Composite Mat





Digital plan of installation area



Installation - applying sealant to joints



Burying edges of CC at toe of slope using excavator



Close-up of completed CC installation



Drone image of completed installation