

Project Info



01 / 06 / 14



CC5™ Batched Rolls



45m²



Transverse layers



Naganohara-town,
Gunma-Prefecture, Japan



Watanabe Kensetsu
Co.



CC5™ used to line
an outfall to prevent
erosion.



Completed installation

In June 2014, Concrete Canvas® GCCM* (CC) was used to line an outfall at the base of Mt Asama in Naganohara-town, Gunma-Prefecture, Japan. The CC was installed by Watanabe Kensetsu Co. for the Ministry of Land, Infrastructure, Transport and Tourism (MLIT). The outfall was causing large amounts of soil erosion and the water was penetrating the slope, risking slip. In-situ concrete was considered, however with limited site access it would have been difficult getting the raw material to site. Additionally in-situ concrete would have taken much longer and works would have been halted by inclement weather.

The ground was compacted and any areas of deep erosion were filled to prevent any voids under the CC. The outfall was then profiled by hand and batched rolls of 5mm thick CC (CC5™) were delivered to site. The CC layers were manoeuvred into place by the labourers, who ensured each layer overlapped the previous by 100mm. Each CC layer was pegged at the crest and the overlaps were screwed at 200mm centres. The edge of each CC layer was folded back underneath itself to provide a neat termination. Hydration was achieved using a hose and bowser combination.

45m² of CC5™ were installed by 4 people in 3 hours in wet weather conditions. The client was impressed with the speed of and ease of installation and deemed the project a huge success.

*Geosynthetic Cementitious Composite Mat





Ground preparation



Overlapping the CC



Overlapping the CC



Edge treatment



Hydration



Completed installation