

## Project Info



October 2017



CC8™ Bulk Rolls



300m<sup>2</sup>



Vertical layers



Kopar-Divača, Slovenia



Monterra d.o.o.



CC8™ used to provide slope protection alongside a rail line to prevent fires in Slovenia.

## MONTERRA

PRVI KORAK STABILNOSTI



Completed installation

In October 2017, Concrete Canvas® GCCM\* (CC) was used to provide protection to part of a slope adjacent to a rail line in Kopar-Divača, Slovenia. The slope is situated very close to the rail track, which sits below a residential area and was quite heavily vegetated, putting the area at risk of fire due to the sparks produced by the train traffic on the tracks.

The project had been started using shotcrete, however the client was finding the logistical aspects of shotcrete installation on a restricted site complicated. As a result, a better solution needed to be found which would allow easier installation, easier transportation of materials on site and would not disrupt train traffic. Based on these requirements, CC was found to be the most suitable solution. The works were carried out by Monterra d.o.o. for SŽ Infrastruktura d.o.o.

Prior to installation, sharp or unstable rocks were removed from the slope, along with vegetation. The team then dug an anchor trench at the top of the slope section which was to be protected with CC. The CC was then delivered in bulk rolls and batched to required length on site. The lengths were transported to the slope by hand with the leading edge secured using ground pegs in the anchor trench at the crest. The material was then unrolled down the slope, with subsequent layers overlapping the previous by 100mm. The overlaps were then jointed with screws before the material was hydrated.

A total of 300m<sup>2</sup> of CC8™ were installed in just 2 days by a team of 4 people on a site with restricted access. The use of CC allowed for a quicker installation, and allowed the client to avoid line closures, with no required mechanical support. Compared to the shotcrete installation, CC will not require any regular maintenance and will provide high abrasion resistance. The installation was also carried out 10x faster than the shotcrete section, or any other traditional concreting alternative.

\*Geosynthetic Cementitious Composite Mat







*CC butted up to previous shotcrete installation*



*Proximity of installation site to residential buildings*