

Project Info



01 / 05 / 14



CC13™ Bulk Rolls



30m²



Longitudinal layers



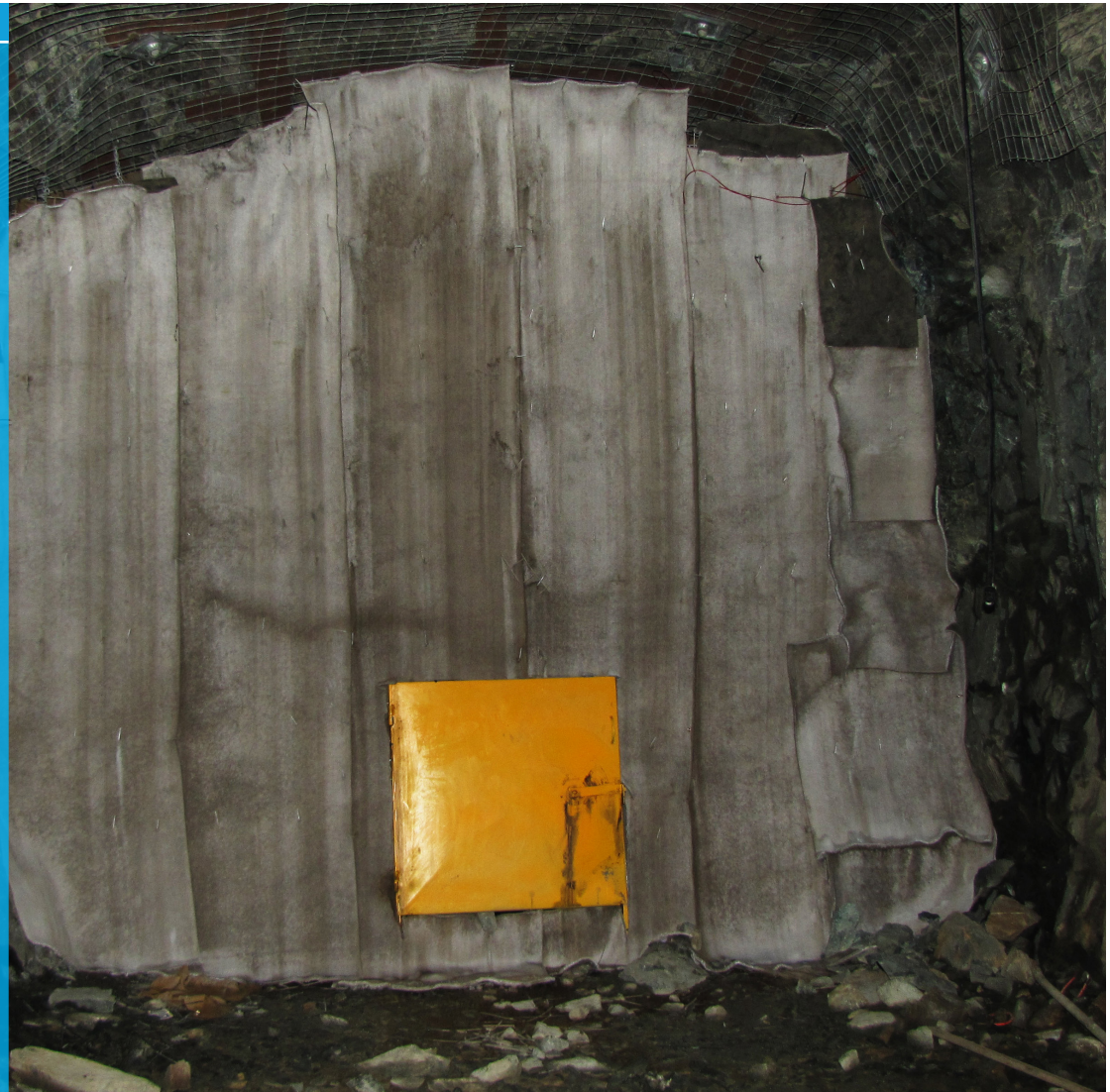
Kalgoorlie,
Goldfields W.A., Australia



ROCK Australia for
KCGM



CC13™ used to
construct a vent wall to
improve ventilation in
a mine



Finished vent wall

In May 2014, Concrete Canvas® GCCM* (CC) was used to create a vent wall at The Super Pit mine in Kalgoorlie, Goldfields W.A., Australia.

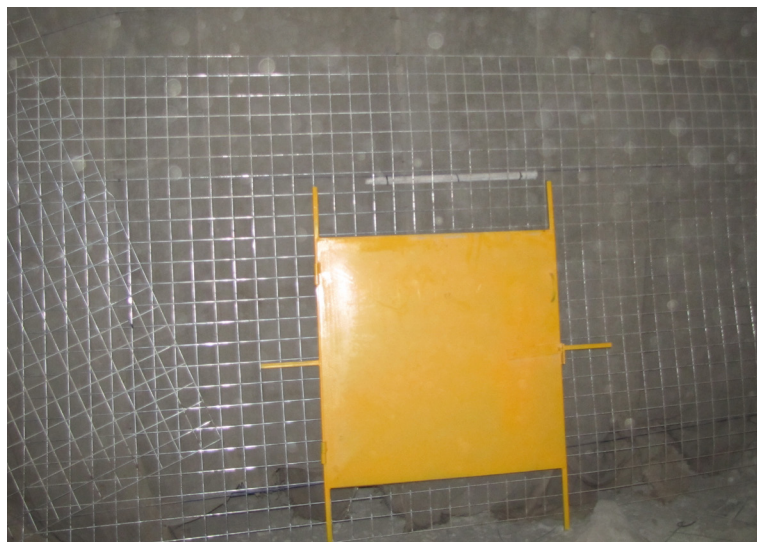
It was identified that ventilation needed to be improved in the lower levels of Mt. Charlotte Underground Mine. In order to do this several permanent walls needed to be constructed. As the area was difficult to access the use of conventional wall construction methods such as shotcrete were not an option. Investigation was carried out to find the best alternative method to construct walls in remote areas of the mine and it was decided to trial CC. The works were carried out by Barrick and Newmont in a joint venture, for KCGM (Kalgoorlie Consolidated Gold Mines).

A wall of mesh was constructed which covered the drive to be blocked, with a knocker line running around the perimeter and across the installation area. A 500mm x 500mm grid of prongs was created by bending parts of the mesh; these would be used as fixings for the material. A door was then installed and secured with cable ties. The bulk roll of CC was lifted onto an elevated work platform and lowered gradually to deploy the material. The CC was then secured by pushing it onto the prongs, penetrating the material, which were then bent 90 degrees. Any gaps around the perimeter of the wall were infilled with off-cuts of CC before hydration, which was repeated an hour later.

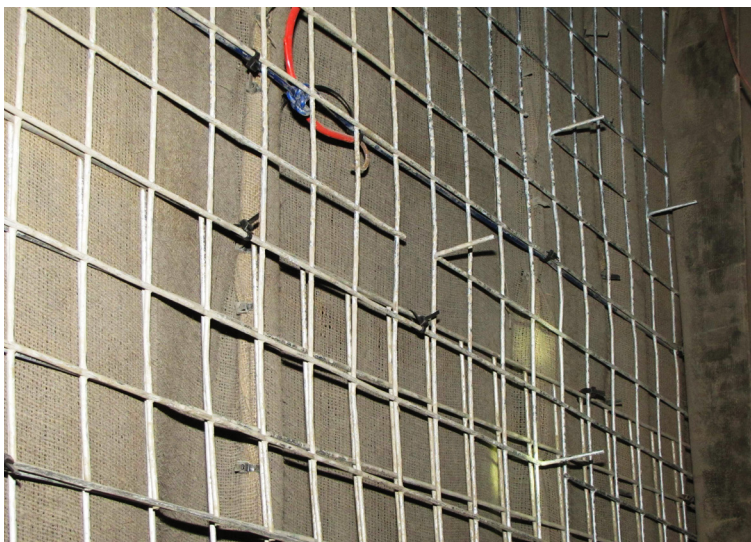
30m² of CC13™ were installed by 3 people in 3 days. The project was deemed a success and it is likely that CC will be used for further vent walls within the mine.

*Geosynthetic Cementitious Composite Mat





Door installed



Prongs created in mesh



CC loaded onto elevated work platform



CC unrolled down mesh



Prongs holding CC to mesh



Finished vent wall installation