








Project information

-  April 2017
-  CC5
-  337 sq m CC5
-  Vertical lining
-  Undisclosed
-  Sanclara Corp & Morgan Construction
-  Tunnel lining to prevent falling rock



In April 2017, Concrete Canvas (CC) was used to line 4 sections of an underground tunnel in Eastern Canada. The installation was conducted by the Sanclara Corporation, alongside Moran Mining, who had chosen CC over Shotcrete.

Shotcrete had originally been considered but was deemed unsuitable due to the amount of dirt and dust produced during installation.

The tunnel sections were approximately 16' x 17', with good tunnel working conditions and temperatures ranging between 5 to 8 degrees Celsius. There was good overall ventilation throughout the tunnel and all locations were typically dry with only minimal water infiltration at one location.

In preparation for installation, the back walls and top-head of the tunnel were scaled to remove any loose debris and to make sure all surfaces were as smooth as possible.

The CC was first cut into strips and submerged into a water tank for 15 minutes of hydration prior to being fixed to galvanized screens with industrial cable ties. The screens were then pinned to the walls and the top-head of the tunnel using rock bolts. The CC was additionally hydrated during installation via drill water.

The installation of each section was completed by a crew of 3 installers over an average of 2.5 shifts, with 12 hours per shift. The installation crew was much happier using CC vs. Shotcrete with the installation being much cleaner and less labour intensive.

The ventilation for the underground complex would also have been adversely affected due to the dust generated during Shotcrete applications. Overall the client was very pleased with the Concrete Canvas ease of installation and quick material supply.



Walls all cleaned off of crumbling material



CC attached to galvanized screens for support



One of the four completed tunnel sections