



Project Info



10 / 08 / 21



CCX-Mat™ Bulk Rolls



285m²



Longitudinal layers



Putendo, Chile



Junta de Vigilancia Rio Putaendo



CCX-M™ was used to eliminate water losses on an irrigation channel.

Channel in action, 24 hours after installation

In August 2021, Concrete Canvas® GCCM* (CC) was used to eliminate water losses on an irrigation channel in Putaendo, Chile. An alternative method considered was to demolish and rebuild the channel, which would have been more expensive with a larger time scale. The works were carried out by Agrotek Spa for Junta de Vigilancia Rio Putaendo.

Holes and irregularities were filled with a low strength concrete mix to present an even surface ready for the application of CCX-Mat™ (CCX-M™). To fix and seal the CCX-M™ at the perimeter edges, expansive anchor bolts were installed on the shoulders and a flat steel bar was used at the start and the end of the channel, finished with epoxy grout to create an even transition. The overlap was thermally bonded and screwed at 100mm intervals with #8x3/4" stainless steel screws. These screws were short enough not to penetrate the 0.3mm thick LLDPE backing of the CCX-M™ underlap. CCX-M™ was hydrated with a garden hose 3 times to saturation.

285m² of CCX-M™ was installed in 2 shifts of 8 hours each by 6 people, in mild conditions. Traditional methods of installation would have taken approximately 21 days for the construction of 80m with a team of 10 people and heavy equipment.

The project was deemed successful as the channel was rehabilitated in a very short period of time available with a reduced cost.

*Geosynthetic Cementitious Composite Mat





CCX-M™ being rolled out on site



Holes being drilled for anchor bolt fixing



Thermal bonding overlap



Screws are being fixed every 100mm



CCX-M™ being hydrated



CCX-M™ Lined Channel in action