

COLETANCHE®

Australian mining companies are taking advantage of the big project savings enabled by the technical benefits of Coletanche reinforced geomembranes. April 2019



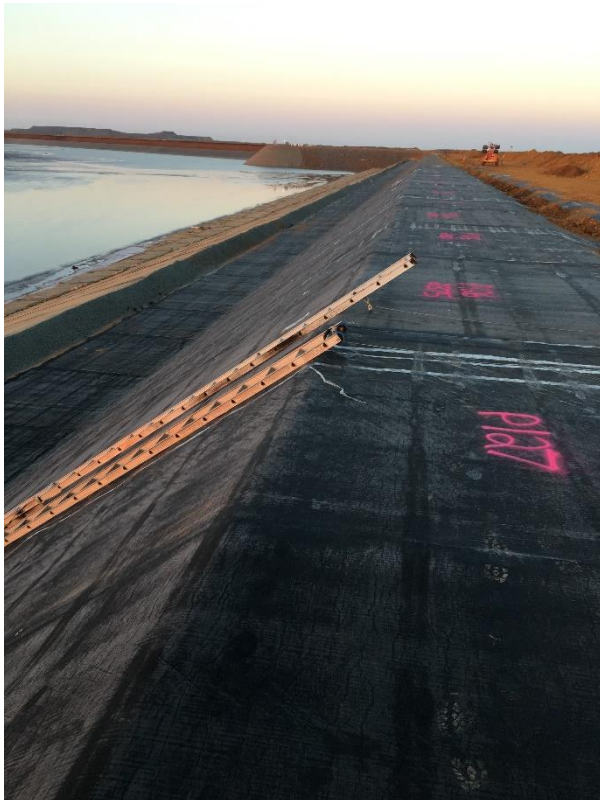
COLETANCHE®

by **AXTER**

CONTENT

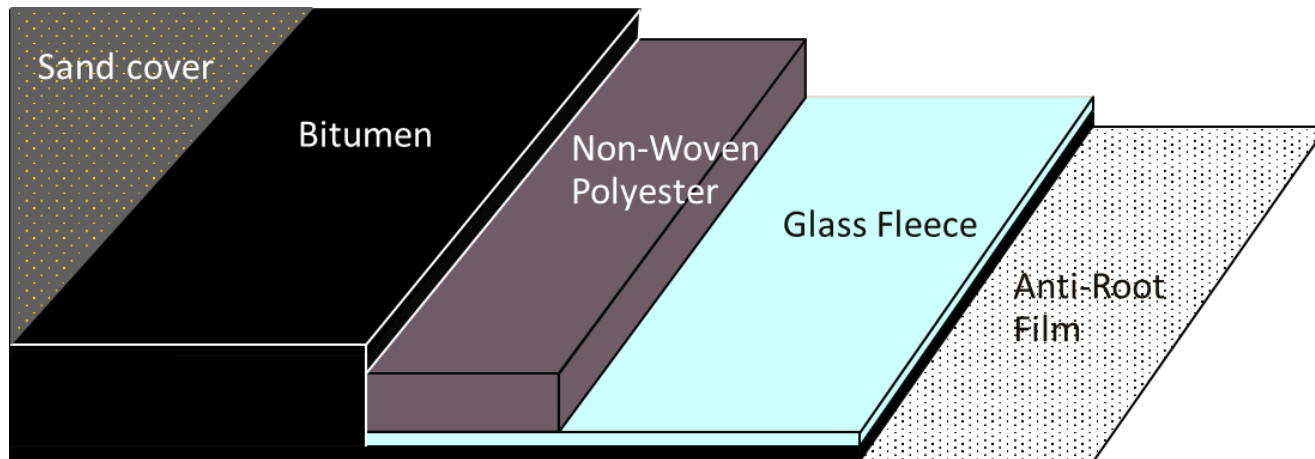


- 1) The technical reasons why Coletanche bituminous geomembranes (BGMs) can be used on some extreme mining projects where most other geosynthetics cannot.
- 2) Photos of Coletanche being used in a wide range of challenging mining applications in Australia. Coletanche has been used to provide solutions on gold, copper, zinc, coal, zircon, rutile and lithium mines here in Australia.





Coletanche is not a single-piece, plastic geomembrane, but a multi-layered composite, with each of the components providing a technical benefit on site. These technical advantages allow Coletanche to be laid more quickly over rough subgrades, in extreme temperatures (+40 deg C to -25 deg C), in high winds, and on steep faces, which allows the projects to be completed faster. There are also large savings on rockfill and earthworks as Coletanche can be used on very steep embankments.



Coletanche Technical Advantages in Mining Applications:



Extreme puncture resistance due to the internal reinforcement

Construction and maintenance vehicles directly on the Coletanche

Rocks directly on the Coletanche (Central Queensland, Australia)

TIRED OF SEEING WRINKLES???



Tailings Storage Facility:
Pilbarra, Western
Australia, January 2019.
46 deg C

New steeper 1.3H :1V
section using
Coletanche ES4HFA.
No wrinkles

Older LLDPE
3H:1V section
with lots of
wrinkles

NO PLASTIC SURGERY REQUIRED!!!

Coletanche has a very low coefficient of thermal expansion and does not wrinkle with changes in temperature like other polymeric membranes do. This provides a more secure project in the long run, with less risk of wrinkle-induced cracks and failures.

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Coletanche gold tailings dam. Western Australia

Installation at 45 deg C

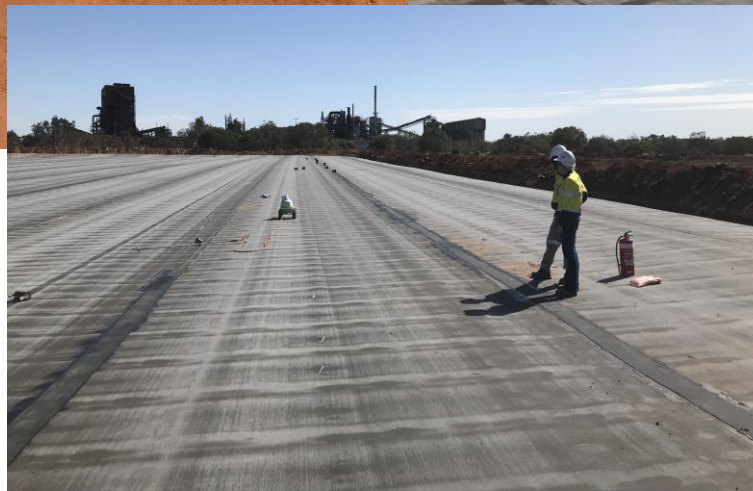


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Coletanche capping of rutile tailings facility Western Australia Installation at 38 deg C



Axter hydraulic beam used for high speed installation on site. This helps with labour fatigue in extremely hot environments

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Coletanche tailings dam installed in tough conditions at 46 deg C Queensland, Australia



Completed the zinc tailings dam, northern Queensland.
Steep 1.75H:1V slopes. Compacted aggregate subgrade. Hundreds of thousands of dollars saved for the client in rockfill by being able to use Coletanche. Completed ahead of schedule.

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Coletanche projects: Queensland, Australia



Coletanche ES2 used to cap old copper tailings facility to prevent rainwater ingress and groundwater contamination. It was far more practical, cost effective and technically superior to use Coletanche than to import a clay capping layer.

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Coletanche supplied into challenging projects around the world for more than 30 years.

For more information regarding Coletanche projects in Australia, please email info@axter.com.au

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