

## Canal lining with EPDM geomembranes

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### ABSTRACT

EPDM geomembranes have been used for more than 30 years in canal applications. They present many interesting advantages like high installation speed, versatility and durability. This presentation introduces three references with different constraints and therefore alternative designs and installation processes. The first project is a 150 km long irrigation earth canal in Australia that has been reshaped and lined with an EPDM geomembrane to reduce the water losses. The second reference presents the renovation of a cracked concrete hydroelectrical canal in Serbia where the geomembrane has been mechanically fastened due to high water speed. The last project shows the building process of a river derivation in Serbia in which the EPDM geomembrane has been covered with ground and rocks to reproduce a natural river bed and protect the liner.



Figure 1. Irrigation canal in Australia – Earth canal renovation



Figure 2. Canal for Hydroelectric production in Serbia – Concrete canal renovation



Figure 3. River derivation in Serbia for a coal mine