

# Project Spotlight



## Brisbane Airport: Runway Maintenance - Brisbane, Australia

Owner: Brisbane Airport Commission

Installer: Mainmark



### Background Information

There is no question that runway maintenance is one of the most vital aspects of an airport's functionality. During the removal of a temporary pipe installed in a concrete enveloper culvert underneath one of the runways at Brisbane Airport, it was discovered that the enveloper pipe was irreparably damaged. In order to maintain the runway's structural integrity, the Brisbane Airport Commission decided to completely fill the culvert.



### Project Details

The first phase of this project involved sealing the pipe; the second phase required filling the 280-meter culvert. Because of the location of this culvert, the fill material had to meet stringent requirements: extreme lightweight, high flowability, a minimum 300kPa compressive strength at 24 hours, and a minimum value of 1 MPa at 28 days. The fill product also had to provide quick-and-easy installation to minimize downtime on the airport's runway. Local contractor, Mainmark, chose to use Terefil™ (their private label of Aerix Industries AERLITE-iX™ cellular lightweight concrete) to fill the culvert. The installation crew pumped the concrete through six high-pressure grouting conduits installed throughout the 1,400-cubic-meter culvert.



### Aerix Added Value

With its extreme light weight, high compressive strength, and enhanced flowability, Aerix's AERLITE-iX™ provided incredible performance for this project, which was warranted for 50 years. The use of AERLITE-iX™ also enabled the project to be completed within three separate two-day periods, enabling airport functions to continue with minimal disruption.

