

Taxiways Re-supported At Perth Airport

INDUSTRY

Infrastructure

STRUCTURE

Airport

PROBLEM

Sinking taxiway

LOCATION

Perth, Australia

DURATION / YEAR

5 nights / 2007

TECHNOLOGY

Uretek Deep Injection &
Uretek Slab Lifting

BUSINESS UNIT

Mainmark Australia



Summary

The West Australian Airports Corporation, had a problem with the taxiway slabs at Gates 13 & 14 of Perth Domestic Airport. These two gates are the only ones that service 747 aircraft.

The slabs in these taxiway areas were pumping and cracking under the load of the aircraft when travelling at their slowest in this area as they come to a stop at the gates. In five nights the team was able to completely re-support all the slabs and ensure that they were made precisely level. This was achieved without interruption to scheduled airport operations.

Objectives

To compact the sub-base ground and re-level the slabs to rehabilitate the taxiways at Gates 13 and 14 for 747s at the airport.

The problem location involved an area of approx. 2,000m² and 900 lineal metres of joints. The slabs were 350mm thick, doweled and keyed. Poor joint seals had been allowing water ingress beneath the slabs. The construction had not been designed for today's loads.

Solution

In just five nights, much less time than removal and replacement of the concrete slabs and at far less cost, the taxiway slabs were given greatly increased support to allow 747 usage well into the future.

Removal and replacement would have entailed huge disruption to airport operations and significant interruption to flight traffic over a lengthy period... apart from entailing much greater expense.

The proposed solution was quick, economical and caused no interruption to airport operations. It saved a huge amount of time, money and disruption.

Above: In five night shifts the Operations team completed the ground compaction re-support and precision re-levelling at Perth Airport.