BluCem HE80

AIRPORT LINK TBM TUNNELS, BRISBANE

Australia's largest road infrastructure project being a 6.7km toll and 3km dedicated busway road network featuring twin 5.1km tunnels connecting Brisbane city with the northern suburbs and airport precinct.

PROJECT COMPLETION: DECEMBER 2011

CLIENT/END USER: THIESS JOHN HOLLAND JOINT VENTURE

APPLICATION

WHERE WE USED BLUCEM HE80

Grouting of all joint gaps of 20mm and 90mm between precast concrete roadway elements and between the elements and the segmental tunnel.

WHY WE USED BLUCEM HE80

The project specification called for a low shrinkage, non metallic, non-corrosive grout that was pumpable into a 20mm wide x 540mm deep gap. Pre-construction trials showed that the specified strength of 42MPa could be achieved using BluCem HE80 within 4 to 5 hours. This allowed rapid tunnel cycle times.

FEATURES

- Automated batching plants
- Fast setting
- High flow non shrink

BENEFITS

- Fast advancement of works
- Reduced labour costs
- Minimisation of dust in the tunnel
- Controlled quality outcome

SUMMARY

The customer benefited from the technology offered by the BluCem HE80 grout where the tunneling program and roadway construction was within expected construction timetables. Through support from Bluey Technologies' engineers the client operated the batching facilities on each TBM in a safe, efficient and environmentally acceptable manner. The availability of the BluCem HE80 grout in the tunnel allowed the customer to utilise it's unique strength gain properties to solve numerous other issues associated with TBM tunneling activities.