

Kai Tak Cruise Terminal, Hong Kong

System: Formwork, Safety, Shoring
Product: Airodek, Alshor Plus, Superslim Soldiers, Ultraguard
Structure Type: Airports and Ports, Commercial
Region: Asia Pacific

Case Study

RMD Kwikform supplied the formwork and shoring for the construction of Hong Kong's new cruise terminal building at Kai Tak. This prestigious project used a variety of RMD Kwikform's versatile product range to achieve impressive results on this Foster and Partners designed building.

Commissioned by the Hong Kong Government, the Norman Foster and Partners designed cruise terminal building (CTB) is 800 metres long, 30 metres high and 75 metres wide and sits on the side of the old Hong Kong International Airport at Kai Tak.

The mega project represents an essential part of the development of Hong Kong tourist infrastructure for the Special Administrative Region (SAR), as previous provisions for Cruise liners in the bay were not capable of housing the world's largest vessels.

Made up of 13 in-situ poured main concrete beams, each, linked by precast and in-situ constructed beams, the concrete works for the project began in April 2011, completing in November 2012.

With a shortage and increasing cost in labour in Hong Kong, in order to achieve the tight programme, primary contractor Dragages opted to move away from traditional methods used locally, taking a system based formwork and shoring approach to the project.

This led to the appointment of RMD Kwikform as a sole supplier of formwork and shoring for the project. In total some 3,000 tonnes of equipment; including Rapidshor steel and Alshor Plus lightweight aluminium shoring, hundreds of steel beams and a variety of other equipment were used onsite.

In addition to standard equipment and Ultraguard edge protection, RMD Kwikform engineers worked with Dragages team to design and fabricate six identical special column forms that could be crane lifted into place.

With each of the 13 pier structures requiring an individually designed formwork and shoring solution, engineers had to provide hundreds of drawings, with specialist RMD Kwikform staff conducting onsite familiarisation training and support. Each three tier pier structure was made up of core columns, cast using a specially fabricated column form, with integrated access built into the

unit for safe and easy striking. Raised by crane each column was able to be poured and struck in a matter of days, speeding up the overall construction process.

The Kai Tak Cruise Terminal is one of the most iconic structures in Hong Kong, operating 365 days a year and welcomes thousands of visitors daily.



Construction of Kai Tak Cruise Terminal



Over 3,000 tonnes of RMD Kwikform equipment was utilised, including Alshor Plus towers as show in the image above