PRINCESS TOWER

Dubai Marina

On completion in 2012 Princess held the Guinness World record as tallest residential tower at 414m and 100 storeys.

Developed and constructed during the 2008 Global Financial Crisis, Princess was delayed due to financial stress on the developer and their purchasers.

A monumental structure of "tube in tube" design to manage the wind and earthquake stresses of a waterfront position on the Arabian Gulf, the project presented many challenges in implementation.

CONSTRUCTION SYSTEMS

Collaboration between ACC and Grocon saw the implementation of the Lubeca hydraulic jump-formwork system for both the lift core and the perimeter column and beam system - the 'tube in tube' structure.

Both the core and the perimeter structures had a significant transfer structure at level 6 and belt structures at plant floors 24, 52 and 78; requiring the formwork systems to expand and contract in thickness at each of these, and then further contract as wall thicknesses reduced through the tower height.

Following immediately after Eureka in Australia, Princess adopted the same vertical transportation systems - utilising internal man materials hoist and jump-lifts. A key innovation was the erection of the façade from the trailing perimeter protection screen, attached to the column and beam jump-form. The facade installation kept pace with the structure throughout its entire height.

EPPIC PARTNER

As Project Director seconded to Arabian Construction Company (ACC) from Grocon International, Bill was responsible for the development and implementation of all construction systems for the tower, project delivery to the client and handover to the purchasers. A key to maintaining delivery was negotiation with the Developer for a modified programme to facilitate finance for contractor and subcontractor payment plans, to ensure continuous construction and manage customer confidence.

Client/Developer: Tameer

Architect: Adnan Saffarini

Contractor: Grocon

Project Director: Bill Parker

Contract Value: 200M USD







