



PEPPERS PIER RESORT



Structural Systems has completed the post tensioning design and construction works for Peppers Pier Resort Hervey Bay. This landmark project is the largest post tensioned project undertaken on the Fraser Coast, and when completed will be Hervey Bay's most exclusive resort facility.

The project consisted of a post-tensioned beam foundation and seven fully post-tensioned suspended levels, with a total of 42,500m² of stressed area. With its striking but highly-irregular building shape, one of the keys to a successful project was deciding on a floor system that was both economical and fast to construct.

Structural Systems was contracted to design, supply and install the post tensioning system for all suspended and load-transfer structures. Post-tensioning was chosen for both the economic and structural benefits, allowing for reduced beam depths in the transfer area and thinner slabs resulting in reduced transfer loads. This reduction in slab thicknesses also allowed increased floor to floor heights achieved in the carpark areas.

The deflections of the structure were minimised to reduce associated risks with the finishing trades, thus ensure long term maintenance costs are reduced when compared to a conventionally reinforced solution.

The building was constructed by Plum Group in close association with Structural Systems. Our strong relationship with Barlow Gregg and Associates allowed for an improved design phase, in turn allowing for a reduced construction program.



Project Data Sheet

Year:
2005-2006

Location:
Hervey Bay, QLD

Client:
Plum Group

Division:
Structural Systems
(Northern) Pty Ltd

Scope:
Design and Construction
of Raft Foundation and
Suspended Slabs

Ph: 1300 SSL GRP (1300 775 477)
Web: www.structuralsystems.com.au

SSL-PDS-PT017