

## Q1 Tower

Gold Coast

### Case Study



#### Manntech offers replacement BMU for Australia's tallest tower

At 337 metres tall, Q1 is a supertall skyscraper, the 6th tallest residential building in the world and the tallest building in Australia. The landmark building dominates the skyline and it was officially recognised as one of Queensland's icons during the state's 150th birthday celebrations. It is also home to the SkyPoint observation deck on level 78, a popular tourist attraction. The design is inspired by the Olympic torch of the 2000 Sydney games and by the Sydney Opera House's sail motif. A series of ribbons wrap concentrically around the tower form and provide cover and shade for the plaza area.

Clearly, such an important and iconic building requires effective building access systems in order to maintain the facade in prime condition. Several years after opening, it became apparent that the existing Building Maintenance Unit (BMU) did not sufficiently reach to service the full exterior of the building and was also seriously corroding. The brief therefore called for a replacement BMU which offered better performance and could also be safely lifted and installed on the roof with minimal impact on the day-to-day operations of the building.

**Manntech** provided a new crane type BMU for a horizontal track on the roof, and vitally were able to carry out full scanning of the building and 3D modelling of the system to ensure that it would operate within the existing parameters of the building. The next stage of this challenging project was devising a practical method to transport the BMU up to roof level and assemble it without the use of a tower crane. The system was designed so that each component of the jib could be transported in the goods lift and assembled utilising the old BMU as a crane.

Manntech were the clear choice of provider for this project, offering complete peace of mind with advanced scanning and modelling techniques, along with expertise and ingenuity in the manufacture and installation of the new bespoke BMU.

### Facts and Figures

**Commencement:**  
December 2013

**Completion:**  
August 2015

**Building Height:**  
322 metres

**Floor count:**  
78

**Access solution:**  
▶ Type 6.1/3000

**Building Type:**  
Residential

#### For more information

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