

Parc1 Tower

Seoul

Case Study



An innovative facade access system for Parc1 Tower

Among the many wonders that make up the stunning skyline of Yeouido island in the Han River in Seoul, a new supertall development by Samoo Architects & Engineers and Richard Rogers Partnership is set to take its rightful place as an iconic landmark. The sheer scale of this complex, the facade surface area involved, and a number of challenging architectural features required a superior facade access solution. As a global leading provider of custom building maintenance systems, Manntech delivered a practical and streamlined access solution with precision-engineered building maintenance units (BMUs) capable of providing all of the functionality necessary to achieve comprehensive coverage.

Richard Rogers is famous for his building designs from the Centre Pompidou to Lloyd's of London. Parc1 features his signature use of red for accents at the building corners and mega trusses to create a sleek and sophisticated facade. The development consists of four buildings, primarily a hotel tower at 112-metres and two office towers reaching 280-metres and 330-metres respectively.

An earlier plan for building access proposed a total of ten building maintenance units across the three towers but even this design left some areas inaccessible. Manntech was able to deliver a superior solution using just three high-performance building maintenance units, one on each tower structure, to access every building elevation and navigate features such as helipads.

Each BMU features a telescopic jib for an outreach of up to 38 metres and Z-luffing to achieve a lower profile in parked position. A standard cradle and material winch services the main facade surfaces while a special cradle is used for cleaning and repairs of the glass corner recesses. In addition, the building maintenance unit for the hotel tower features a particularly manoeuvrable jib with elbow and luffing built into the design to ensure access to all facade surfaces.

The building design prevented the building maintenance units from being placed above the helipads on the two office buildings, but they also needed to be capable of lifting the cradle over the lift core. Similarly, the hotel tower features a helipad in the centre of the roof with the core higher than the rooftop itself. The solution Manntech provided utilises a complex elbow jib which reaches around the cores at both ends and, when not in use, allows for the building maintenance unit to be parked out of sight underneath the helipad.

The advanced technology that Manntech was able to bring to this project resulted in superior functionality and performance while also reducing the cost of the initial installation and ongoing maintenance of the system.

Facts and Figures

Completion:
July 2020

Commencement:
June 2007

Building Height:
Tower A 338m, Tower B 260m, Tower C 103m

Floor Count:
Tower A 68, Tower B 52, Tower C 26

Number of BMUs:
3

Outreach:
38 metres

Building Type:
Commercial

For more information

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