

Cost effective facade access solutions to meet the challenges of a unique building

The Jumeirah Gate represents a luxurious high-end mixed use development in a prime location at Dubai Marina encompassing a five-star hotel, residential and serviced apartments along with an array of dining and leisure facilities. The building itself is an unusual and imaginative achievement by KILLA Arch Design & WSP. Two towers both reach a height of 301 metres and are linked by two large scale steel bridges; one at the base of the towers and one at the highest levels. This creates a large void space between the two interlinked towers. The outer shape of the development is defined by curving lines which create an elliptical form. All of these factors presented a number of significant challenges for the CoxGomyl and Manntech design and engineering teams when developing systems for practical facade access to effectively maintain the entire building facade. In addition, the visual impact of any building maintenance equipment also needed to be minimised.

The successful building access system developed by CoxGomyl and Manntech is based around two Building Maintenance Units on each tower. Both towers feature a highly flexible and adaptable Building Maintenance Unit which, when not in use, is hidden from view completely within the building itself between floors 74 and 75. The BMU utilizes a launch trolley which is integrated into the building facade, allowing it to traverse the periphery of the building on uniquely developed tracks. A second type of BMU is located in the bridge at levels 63 and 64. This is designed to be completely hidden from view within the soffit as it travels the length of the bridge and performs vertical drops from this position.

The expert teams at CoxGomyl and Manntech proved themselves capable of meeting the specific challenges of this project. From the limited space available for the main BMU, to the difficulties of installing the bridge based BMU while construction was ongoing, our team met all the client's requirements while presenting a competitive and cost-effective solution.

Facts & Figures

Commencement	2018
Completion	2020
Building Height	301m
Floor Count	77
No. of BMUs	4
Outreach	10
Building Type	Mixed

