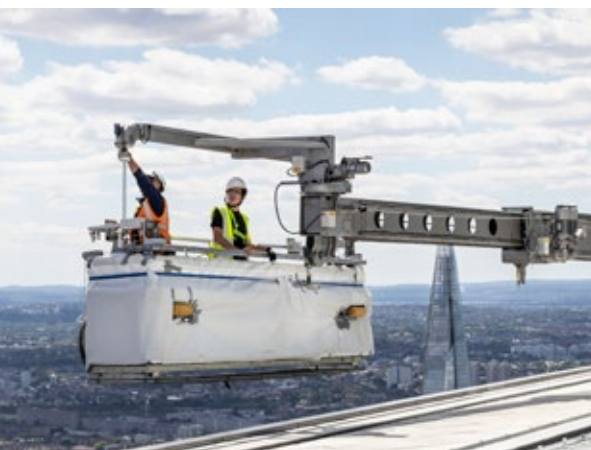




Providing comprehensive access for the City of London's new icon

Facts & Figures

Commencement	2017
Completion	2020
Building Height	278m
Floor Count	62
No. of BMUs	4 + 4 lifting tables
Outreach (metres)	2 x 2.8, 15.5, 6
Building Type	Commercial



The bold and inventive structure of 22 Bishopsgate is set to create a remarkable new landmark for the historic City of London's financial district. CoxGomyl's portfolio of successful high-quality building maintenance systems has earned them a strong reputation for delivering the kind of safe, reliable and cost-effective access solutions that this challenging project demanded.

With 62 storeys reaching 278 metres over the historic London streets, 22 Bishopsgate will become the tallest building in the City of London. Beyond the scale of the building, the striking design by PLP Architecture features numerous angled sections which create a faceted glass facade texture. Numerous terraces and canopies at various levels also help define the intricate faceted exterior. Overall, the building is comprised of no fewer than 23 sides to the facade. In addition, the tower also presents external diagonal bracing which provides structural stability for the steel frame and pre-cast floors while also forming a key aesthetic feature.

This technically challenging project called for a comprehensive building maintenance system with four Building Maintenance Units (BMU) to deliver complete facade coverage. Due to the complexity of the building form and the limited space available for building maintenance unit operation, the system also provides for the additional flexibility and functionality provided by four lifting tables.

Starting at level 62, two matching BMUs are designed to travel on twin tracks and both provide for a 20.8 metre outreach with three stage telescopic jibs and jib slewing. Two double deck lifting tables allow for the building maintenance units to rise 4.3 metres. Further down the building, two BMUs are located at level 59. Both BMUs travel on twin tracks with one providing a three stage telescopic slewing jib for an outreach of 15.5 metres and the second building maintenance unit providing a six metre outreach with mono slewing. Once again, two double deck lifting tables at this level allow the BMUs to be raised up 4.4 metres. The system required precise calculations to allow the two building maintenance units at each level to share the same track and navigate through each working position safely and reliably.

The functionality of the lifting tables was a vital feature of the design. This involved close coordination with the other teams involved in the construction, through which CoxGomyl were able to develop a system where the lifting tables are supported by concrete plinths and columns and tied in to the building structure. This made the lifting table equipment lighter than was anticipated and provided for a more economical solution without any loss of functionality.