

Case Study China World Trade Centre, China



CoxGomyl oversee facade maintenance on China World Trade Centre Tower

Facts & Figures

Commencement	2014
Completion	2018
Building Height	295m
Floor Count	58
No. of BMUs	4
Outreach	18m
Building Type	Commercial



The China WorldTrade Centre Phase 3B tower is the latest addition to the continuing development of the wider China WorldTrade Centre (CWTC) complex, a thriving new part of the Beijing Central Business District. Standing next to the already famous CWTC Phase 3A tower, this will form a key part of the iconic new city skyline in a highly visible location.

Following the successful design and deployment of a complete facade access solution for sister building the CWTC Phase 3A tower, CoxGomyl's expert team were once again called upon to develop a comprehensive building maintenance system for the Phase 3B tower which would be capable of overcoming a variety of facade access challenges.

The CWTC Phase 3B tower reaches an impressive scale, rising 58 stories and 295 metres over Beijing's bustling streets. Beyond its height, the building also presented a number of complex architectural features which called for carefully considered and highly engineered facade access solutions. The building tapers inwards towards roof level with a series of horizontal bands and angled glass surfaces which have been described as reminiscent of natural forms or an inverted pagoda. This distinctive design creates numerous recessed facade surfaces. The curtain wall also rises above the main roof line to form a complex crown structure which also presents challenging recessed surfaces.

The complete facade access solution CoxGomyl delivered is made up of four Building Maintenance Units, all located on the main roof travelling on a twin track system. One BMU is specifically designed to provide the manoeuvrability required for the complex geography of the crown feature with a telescopic mast and a knuckled jib combined with an outreach of 18 metres. The three other BMUs also deliver enhanced manoeuvrability to safely and efficiently access the recessed sections of the sloping, stepped facade with telescopic jibs and masts combined with special cradles providing a self-approaching mechanism (SAM) and outreach ranging from 16.6 to 18 metres. Three goods handling units have also been employed to provide the functionality for a wide array of maintenance tasks.

This complete facade access system provides for all of the flexibility and functionality the complex building geography demanded.