

MahaNakhon Tower

Bangkok, Thailand

A pixellated contemporary skyscraper that flows downward to meet the city

A discreet and efficient solution for an architectural reference.

Architecture: Buro Ole Scheeren

MahaNakhon is a new 77-storey high-rise complex located in Bangkok's Central Business District and will be the most ambitious project of contemporary architecture and urbanism in Thailand and the tallest building in the capital city. The tower defies the typical podium typology, creating a skyscraper that has been carved to introduce a three-dimensional ribbon of architectural pixels that coil up the tower's full height to reveal the inner life of the building.

The pixels have been designed to maximize unobstructed panoramas and offer rare birds-eye views of Bangkok and the Chaophraya river: double-height living spaces equipped with multiple bays of full-height bi-fold balcony windows -sections of facade that fold inwards and upwards- transforming living areas into indoor/outdoor environments.

The top of the tower houses a three-floor Sky Bar and restaurant with double-height spaces and an outdoor rooftop bar with 360° views, floating 310 meters above the city.



MahaNakhon Tower in a Bangkok's Business District.

Scope

Design and produce a building maintenance system according to the non-typical facade that reaches all facades and can be easily hidden once is not in use.

Strategy

To cope with the unique design of pixels, no other building maintenance system than the flexible semi temporary Davit System for rappelling operation was acceptable. Therefore a careful study has been carried out for FBA Gomyl and its partner companies to locate Davit bases in the most discreet way on the different terraces where extra lightweight aluminium Davit booms with pivoting outriggers can be used. For safe access the new RopeClimber -a man-riding hoist developed by Fallprotec S.A - has been combined with the Davit system to reach all facades at different levels. Once the cleaning system is not in use, it is not visible.



RopeClimber man-riding autonomous hoist suspended on Davit system.



Fixed base for temporary davits.

The RopeClimber man-riding hoist manually operated and battery powered
4 interchangeable machines for the whole complex

Davits for RopeClimber suspension
338 fixed pedestals with 20 portable bases for the temporary installation of 10 interchangeable Davits. Easy to remove after use