

# Technical Specifications Summary

---

## Architectural and Structural

Concrete structure with concrete core, columns and post-tension slab designed for seismic zone 2A and local wind loads to relevant UBC-1997 and BS codes.

Office floors designed for 3.0 kPa live load and 1.0 kPa dead load.

Aluminium facade glazed curtain wall with energy-efficient low-emissivity coated glass.

Raised floors of up to 150 mm can be achieved within the tenants demise.

Elevator lobbies, corridors, walls and floors are finished with emperadore brown and crystal black polished marble.

Toilets and pantries on each floor are finished with white ceramic tiles to the floors and walls.

## Elevators

Elevator cars are fitted to a high standard with polished marble and mirrored glazing and stainless steel fittings.

All passenger elevators are equipped with high-speed variable voltage and variable frequency overhead traction drive systems. The latest destination control system is installed to ensure a highly efficient elevator service is provided to reduce waiting time.

18 dedicated office passenger elevators:

- 6 low-rise elevators, serving floors 2-16
- 6 mid-rise elevators serving floors 18-32
- 6 high-rise elevators serving floors 34-52 of which 3 have panoramic views of Abu Dhabi.

A single service and fire elevator servicing all floors.

## Electrical

Primary power is supplied by ADDC via an 11 kV feeder. The substation has 4 x 2000 kVA, 11/0.415 kV cast resin ABB high voltage transformers dedicated to the office tower.

Multi stage power factor correction equipment is installed to maximize energy efficiency, with the supply distributed to the office floors via bus bars.

The electrical cabling to each floor has been provided with 6 separate feeds to allow extremely flexible demising with a capacity of 16 kW per feed and 100 kW per floor.

Emergency power is provided to the development by 4 x 2000 kVA diesel driven generators for fire and life safety systems and house services, along with an emergency express feeder from ADDC.

Lighting to elevator lobbies, corridors and landlord's areas are provided via energy efficient fittings.

Lightning protection is provided using a conventional Faraday cage method.

## Air Conditioning and Ventilation

A district cooling system provides the development with the cooling capacity of 1250 TR.

The air conditioning and ventilation is provided by BMS controlled air handling units dedicated to each floor with a capacity of 8300 l/s to which VAVs can be connected. All fresh air requirements are provided to ASHRAE standards.



---

## Plumbing

A centralized multi-staged potable water filtration system is installed to the office tower with separate waste and foul water drainage stacks.

Water efficient sanitary fittings are installed with automatic taps and American Standard fixtures.

An environmentally friendly condensation water collected system is installed providing water for irrigation purposes.

Each floor offers 4 wet stacks that can be used for the installation of additional bathroom or pantry facilities.

## Fire and Life Safety

All fire-fighting systems are installed to NFPA standards with sprinklers and standpipes serviced from dedicated storage tanks and pressure booster pumps, with full emergency back-up systems. Main electrical rooms are protected with FM200 fire suppression equipment.

The office tower is equipped with a fully addressable voice announced fire alarm system linked to the central control room.

Emergency standby diesel powered generators are provided for all life safety equipment.

Each floor is fitted with a smoke extract system to maintain clear egress pathways along with all stairwells being pressurized to minimize the migration of smoke in the event of a fire.

The office tower is provided with a fire fighter elevator.

## Communications, Security and Control

Structural fiber cabling supporting the Etisalat network is provided as a backbone throughout the building. Each floor is installed with 6 fiber cable feeds with 6 optical network units allowing flexible demising options.

A centralized control room is operated 24 hours per day, 7 days per week, to ensure a safe and secure environment is maintained. The security, access control and CCTV systems are IP based with coverage of all landlord's areas and parking linking back to the control room.

A satellite delivered master antenna television system is located on the roof of the office tower with structured cabling to each floor providing 6 feeds per floor allowing tenants to subscribe to a multitude of television services.

The building management system is provided by Johnson Controls, along with an energy monitoring system and electrical switching system monitored and controlled from the central control room.