



Project Description

The Abraj Quartier is the landmark component of a major mixed-use development in Doha known as "The Pearl". The two beacon-like office towers flank the main access road and serve as the gateway to the overall Pearl development. The Abraj Quartier will include 2,200 residential units and a total of more than 350,000 m² of built area.

Firemac FM Fire Ducts have been installed throughout the main towers including an eight level parking podium and forty three levels of high rise office space.

System Specification

- Car park ventilation Ducts
- Ventilation / Smoke Outlet Ducts
- Fire resistance period: 2 hours

Performance Summary

The purpose of fire resistant ductwork in enclosed car parks and basements are two fold:

Smoke control:

Systems designed to extract smoke during the early stages of a fire, when temperatures are around 250°C to 350°C.

Smoke clearance:

Systems designed to clear the building of smoke following the extinction of a fully-developed fire.

Testing

The fire safety strategy in the AQ Tower incorporated smoke control and smoke clearance systems as a key component. These duct systems often operate as standard ventilation duct systems during regular operation in non-fire conditions. The relevant test method for any ductwork system to be used in smoke extract systems is BS476: Part 24: 1987 (ISO 6944:1985).