

CASE STUDY



KAMPALA HILTON | HOTELS



fds consult

## CASE STUDY - KAMPALA HILTON | HOTELS

Offering world-class standards and poised to become Uganda's finest 5-star business hotel, the 22-storey Kampala Hilton Hotel is located on a 14-acre site. The hotel has been designed to offer facilities that enhance work, communication and relaxation and incorporates 272 rooms, a range of meeting suites, high specification indoor and outdoor restaurants and bars, a nightclub spread across the top three storeys and health & spa facilities including a pool and fitness studios. The architectural design also includes a feature lobby: a 15m curved glass structure set under a futuristic shell. The occupancy levels, architectural features and range of facilities made devising a coherent fire strategy quite a challenge, particularly in a country with no building design standards! As a result, FDS was brought in to apply the company's experience of international projects, tall buildings and the hotel sector and develop an innovative fire strategy for the scheme.

Along with their extensive experience of similarly complex schemes, FDS Consult's expert team used their comprehensive understanding of British fire codes to deliver a strategy that both optimised safety and provided value engineering benefits. The company advised the client on adopting the British codes as a benchmark and used the requirement for sprinklers as the foundation of an engineered solution that addressed several areas of the building, including the main reception atrium, the open main staircase, fire service access, protection to fire fighting stairs, plus the inclusion of a large nightclub on the top floor.

FDS Consult also provided safety and value engineering benefits to the scheme by:

- Using compartmentation and early warning smoke detection systems to demonstrate increased evacuation times, thereby justifying increased occupancy loads for the nightclub
- Justified the omission of fire rated glazing to the curved feature walls overlooking the main atrium
- Specifying an enhanced smoke control system for the central open atrium and the reception atrium to maintain lower temperatures and ensure smoke was kept above the level required to keep escape routes clear
- Including sprinklers in the specification to value engineer the entire solution requirements to a minimum
- Using CFD (Computational Fluid Dynamics) modelling to justify exits to external balconies
- Improving fire service access by considerably designing the landscaping to the building entrances. The slope on the site caused difficulty with travel to the fire fighting shaft entrances so FDS Consult worked with the architect to rate facilities, ensuring access arrangements

were maintained and easily accessible without compromising the architecture and appearance of the building

Thanks to FDS Consult's innovative approach and value engineering expertise, the client was able to achieve cost savings of £5 million on the scheme whilst maximising profitability by justifying increased occupancy loads and completing a scheme that remained true to the architect's vision.

Type of Project:  
Hotel

Client:  
AYA Investments Ltd

Architect:  
John Seifert Architects



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