

CASE STUDY

QUEEN STREET, PORTSMOUTH MIXED USE



fire design solutions



Queen Street is a landmark residential development in Portsmouth. The FDS Group were originally appointed to value engineer the scheme, however this highlighted various issues with the fire strategy and FDS Consult were enlisted to overcome these issues to ensure the development would gain approval, avoiding any penalties associated with fire approval failure. FDS was then appointed to carry out the installation works.

The FDS Group offers a groundbreaking approach to fire safety, combining end-to-end fire consultancy and in-depth building regulations knowledge with expert system design and installation. As a result the company was able to:

- Overcome the issues and enhance the existing scheme to bring it up to the level required for building regulations approval by resolving the main fire safety issues associated with the as-built atriums within one of the cores. A mechanical ventilation concept was shoehorned into the fabric of the building without the need to modify the existing structure
- Rectify the issues within a very short timescale so that no penalties were incurred
- Deliver on time and within budget

By using a scientific approach to designing fire safety solutions based on the team's understanding of fire engineering first principles, FDS carried out a thorough CFD (Computational Fluid Dynamics) analysis to the atrium. FDS's experienced team also consulted with the building control authorities to overcome their concerns and to gain approval within the necessary timescales.

Based on the company's knowledge and experience, FDS Consult then supplied a new fire strategy that incorporates a natural ventilation system, smoke detection and fire alarm system throughout the development, whilst incurring substantial value engineered savings. These systems were then installed throughout by FDS.

Type of project:
Re-engineering of Completed New Build Residential and Retail Development

Client:
Ardmore Construction

Architect:
David Richmond & Partners Ltd

