

# Fire protection

## AQ3000 case study

High-rise flats, full domestic fire sprinklers to BS9251

### Project

High-rise apartment block, 53 apartments over 11 floors. Conversion from commercial offices.

### Fire risk analysis

Residential/domestic fire sprinklers had been specified as part of the plans for conversion of the 10 storey City centre office block into 53 modern 1 Br & 2 Br apartments

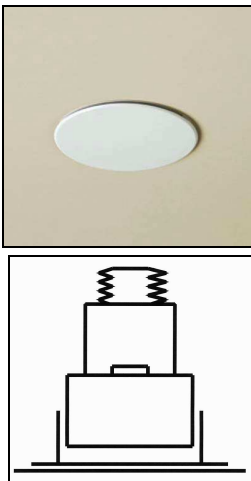
A full fire sprinkler system to BS9251 was proposed to protect all habitable spaces within the apartments and also the corridors and escape routes from the building.

### Further information

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### Solution

Using concealed low flow residential heads it was possible to provide a scheme without needing a new water supply. The boosted mains water supply was upgraded to provide the required flow and pressure for the sprinklers at each floor level.

Installation of the fire sprinkler system was undertaken at the same time as the main services first fix, with all distribution pipe work being fully concealed with the ceiling voids.

Isolation valve sets and flow alarms were installed within the dry riser cupboards on each floor, with all floors being connected to the main fire alarm panel in the ground floor foyer. In addition, the auxiliary electrical mains supply providing emergency power to the fire lift was connected to the water pumps so that in the event of a primary power fail, the water pumps would still operate.



Founder members of the Residential Sprinkler Association

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