



PROJECT

South Glasgow University Hospital

LOCATION

Glasgow

INDUSTRY SECTOR

Healthcare

PARTNERS

Mercury Engineering

SOLUTIONS

FM-200® Gas Suppression Systems

BENEFITS

- reduced downtime
- safe for use where people are present
- critical asset protection, fast acting
- business continuity
- compact storage footprint

PRODUCTS

FM-200® Fire Suppression Systems

THE CHALLENGE

The new South Glasgow University Hospital which opened in May 2015, replaces four hospitals across the west and south of the city. In addition to the Sick Children’s hospital which was in the Yorkhill area of Glasgow, the new hospital replaces the Victoria Infirmary, the Southern General and the Western Infirmary.

The fourteen floor multiplex has over 1100 adult beds and in excess of 250 beds in the children’s hospital. Each patient in the general wards has their own ensuite room and enjoy views across the campus. It will be one of the largest acute hospitals in the UK and home to major specialist services such as renal medicine, transplants and vascular surgery. The hospital has state-of-the-art Critical Care, Theatre and Diagnostic Services and houses 29 theatres and a dedicated helicopter landing pad on the roof with fast access to A&E. Up to 10,000 NHS staff will be based on campus.

Both the Adult hospital and the Children’s hospital room each have a computer room which are key to the smooth running of this massive multiplex. Failure of the equipment in the rooms following a fire could be catastrophic and in terms of the huge complexity of the hospital, it’s not difficult to imagine the chaos which could occur if the computer rooms were out of commission.

The computer rooms must be resilient to the aftermath of a fire and a comprehensive and sensitive detection and suppression system would be required.

THE SOLUTION

It was clear from the outset that the computer rooms demand the most comprehensive type of fire protection system to safeguard the vital hospital computer equipment and processes. The two rooms involved are unconnected and each serve different parts of the hospital. As part of the selection process several factors were considered. Space to store the extinguishing agent of choice was a

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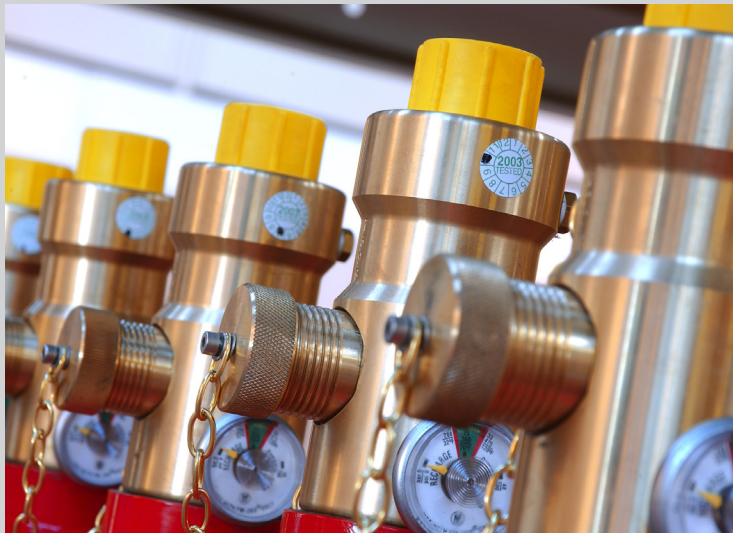
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“minimal interruption to the hospital’s vital computer operating systems”



primary consideration and any system selected had to be safe for anyone in the room during an activation. Other key factors were that the systems should provide a fast acting solution that would both detect a fire early and suppress it quickly without damaging vital equipment.

Downtime in a hospital is perhaps more important than most places and it is vital that interruptions to the electronic processes are kept to a minimum. Because of the importance of the computer rooms a fast acting system would be a favourable solution. For computer equipment gaseous suppression is most often the system of choice. The fire suppression agents in gas suppression systems are safe for use at normal design concentrations, they are compact and self-contained in dedicated storage cylinders.

With these outline system features established, the decision to use a gas suppression system was finalised. The decision now fell to a choice between a halocarbon system such as FM-200® or an Inert gas system. The Inert gases used in fire protection are stored in high pressure cylinders. The Halocarbon systems are stored as liquids but discharge from the nozzles as a vapour in the same way as Inert gases. The halocarbon systems offer more compact storage for the cylinders and consequently have a smaller storage footprint.

Where space is extremely limited within a room being protected, there is usually a wall space outside the room where the FM-200® storage containers can be positioned. At South Glasgow hospital the Adult Hospital computer room has storage containers positioned within the room whereas the level four Children’s Hospital computer room has the cylinders positioned just outside to the computer room.

FM-200® is the most widely used of these systems and has been used successfully over many years. With all things considered this was the customers system of choice.

THE OUTCOME

Each installation took two weeks to complete and this was carefully coordinated within the client’s fit-out programme.

The benefits of the fire suppression systems installed at the hospital cannot simply be measured in financial terms, although the cost savings made by using clean agent systems would be substantial. The true value of the systems must include the benefits of life safety to the patients and staff of the hospital. The systems offer protection from fire that permits the computer systems to continue to function whilst being safe for anyone in the protected spaces. This in turn helps to minimise troublesome interruptions to the hospital’s vital operating systems.



COMPANY PROFILE

Vipond Fire Protection Ltd has its roots going back to 1969, when it was started as a small family owned business. In 1998 it was acquired by Vipond Inc of Canada. The company has since expanded and grown and now has 5 offices covering the whole of the UK and Ireland. Vipond Fire Protection Ltd is ultimately owned by API Group Inc.

API Group Inc. is a multi-billion-dollar parent company for 38 independently managed construction companies in more than 200 locations worldwide. API Group combines the personal attention of small-to-medium sized construction companies with the strength of a global industry leader to build a safer environment, develop leaders and bring innovation to the construction and fire protection and suppression industry. Since 1926, API Group has grown by acquisition to become the stellar multi-billion-dollar company it is today.

The secret? Our subsidiaries maintain who they are. They keep the identity, reputation, customer relationships and culture they’ve worked hard to establish.

API Group’s subsidiaries have collectively served customers on all continents, including Antarctica.

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