



Fire Safety Solutions for IT Managers



How much downtime
can you afford?

Fire Safety Solutions for IT Managers



When your job is protecting your company's data and communications, Chubb's job is to protect you.

IT Managers from thousands of companies have entrusted their most valuable computer systems, servers, networking and communications equipment to the care of Chubb, the UK's leading fire and security specialist.

[How much downtime can you afford?](#)

Information is the lifeblood of most companies today. Losing that information can create anything from a minor inconvenience to a major disaster. However, most IT disaster recovery plans are designed to address equipment failure. Rarely do they adequately address catastrophic incidents such as a fire. Disaster recovery, if even possible, is expensive and time-consuming. Business and service interruption, downtime and the loss of your company's reputation are usually more costly than the loss of assets.

[Stop a fire in its tracks](#)

Before fire is even visible, early warning advanced fire detection technology can detect a fire and then automatically activate the release of a fire suppression agent to eliminate fire within seconds – long before smoke damage occurs. With less fire growth, there is less damage to your business. Stopping a fire within the critical first few seconds can save vital damage to equipment and consequent loss of production. Fixed fire extinguishing systems can stop a fire in under 10 seconds by flooding the high risk area with a choice of fire extinguishing agents to ensure rapid fire knockdown. They are used to protect high-value and high risk assets, such as computers, communications, data files, medical equipment, aerospace or marine applications.

[Installing your system](#)

Chubb Fire is backed by the technical and financial strength of UTC Fire and Security, a world leader in the field of fire protection. When it comes to designing a fire suppression system, Chubb is committed to achieving the highest levels of quality and reliability of all our products and services. All our fire systems are designed and installed in compliance with the latest European and British Standards and systems and components are CE Marked, showing they meet the requirements of all the relevant European Directives. Our qualified Design Engineers have a wealth of technical experience in the design and installation of systems, using sophisticated computer-aided design and analysis software.

Choosing the system that is right for your business

Chubb, with over 100 years of experience in providing fire fighting equipment, take the best products from the market and help you select a fire fighting system that is technically capable of protecting your risk. Finding the most appropriate system requires a thorough discussion and assessment of numerous site specific circumstances, but the most widely accepted extinguishing agents are as follows:



FM200™

FM200™ is a liquefiable gas, stored in liquid form and only achieving its operating gas state when released at the dispersion point.

Advantages

- Requires a relatively limited volume of stored liquid, so is the preferred choice where space is limited.
- May be used in occupied areas in automatic mode

Considerations

- High agent cost
- Some Global Warming Potential

Inert agents (i.e Argonite™)

Inert gas systems work by reducing the concentration of Oxygen in the atmosphere to a level which will not sustain combustion (below 14%).

Inert gases such as nitrogen can be used alone but inert gas mixtures (typically blends of nitrogen and argon) are also available. These systems use natural gases obtained from natural sources.

- Fast acting and effective
- No post-fire residues or damage to protected equipment
- Electrically non-conductive
- Safe for occupied areas
- Environmentally neutral – zero Ozone Depleting Potential and zero Global Warming Potential

- A relatively large volume of the gas needs to be released to achieve suppression - with implications for space and weight.
- High storage pressures – IT Managers may need to consider installing pressure vents
- High Install cost

Novec 1230

Novec 1230 Fire Protection Fluid is stored as a liquid and discharged into the protected space as a colourless gas. It puts fires out quickly by a combination of heat absorption and chemical interference with the flame.

- Fluid at room temperature - unique amongst gaseous agents therefore compact storage
- Fast extinguishing action
- Over-pressurisation relief vents not normally required
- Novec™ 1230 fluid poses no safety risk to people in occupied spaces
- It also offers a safety margin of up to 100% - that's higher than any other type of clean fire suppression agent
- Electrically non-conductive
- Non-corrosive
- No post-fire residues or damage to protected equipment

- High agent cost

Carbon Dioxide

A carbon dioxide flooding system works by reducing the oxygen concentration in the atmosphere to a level below that required to sustain a fire. This option is effective on deep seated fires, and is safe for use on electrical equipment.

- A naturally occurring gas and therefore has zero ozone depletion potential.
- A low cost agent, and is non conductive, non corrosive and there is no clean up required after discharge.

- Toxic at the concentrations required to suppress fire and therefore is only suited to unmanned areas such as mainframe computer rooms or machinery space.

Watermist

Water mist or fine water spray systems are relatively new technology for fire fighting. Their method of extinguishing is cooling plus some localised oxygen reduction.

- Research has shown that fine water sprays do not conduct electricity in the same way as a solid stream of water, so sprays can be considered for use on live electrical equipment.
- Water mist systems cause no environmental damage and are safe to use in occupied areas.

- There is likely to be some water damage, although this is considerably less than that associated with a sprinkler system.

Maintaining your fire suppression system

Routine maintenance is essential to the health of your fire suppression system. In accordance with the recommendations made in the British Standard, BS 5306, the recommended service schedule for gaseous fire suppression systems are two visits a year. Customised service plans include an agreed schedule of inspection and visits can be scheduled to take place out of office hours or during shut down periods if necessary.



A servicing and maintenance agreement ensures:

- Systems are fit for purpose
- Compliance with legal obligations
- Compliance with British Standards and Codes of practice
- Compliance with Insurance Company requirements
- Reduced risk of false alarms and potential false activation
- Reduced risk of equipment failure in the event of a real fire
- Extends the life of your original installation

The Service Visit

Chubb Fire is capable of servicing any type of fire suppression system, regardless of who manufactured and installed it. All service and maintenance work is undertaken by our competent and experienced service engineers who are based locally and are available 24 hours a day, 365 days a year, offering immediate assistance at any time, day or night. Only once the service work is carried out will an invoice be raised. A certificate is issued after each visit along with a detailed inspection report to keep the customer fully informed and to satisfy legal and insurance requirements.

Customer Service

Our Customer Service centres are available 365 days a year, 24 hours a day to help you with any general and technical enquiries, as well as booking in appointments for your routine service visits. If you have an urgent problem with your existing fire suppression system it will be dealt with by one of our skilled Service Engineers who provide a prompt response throughout the year.

Room integrity testing

Fire fighting systems designed and produced by Chubb are renowned for their reliability. However, there is a factor that is beyond the control of Chubb engineers that is one of the most common causes for the failure of a system; the 'Integrity' of the protected room, i.e. its capacity to hold the fire suppression gas.

No matter how effective or well serviced your fire suppression system is, if your gaseous agent discharges and your protected area is not well sealed, the gaseous agent may escape through vents, ceiling voids and door seals causing the fire to possibly re-ignite.



Integrity Testing is a mandatory requirement of BS ISO 14520 or should be undertaken every time building work is done in the protected area. Integrity testing does not involve the discharge of a suppression system and is non-disruptive to your working day.

Halon decommissioning

Chubb specialises in the safe removal and disposal of Halon 1211 and 1301 that was prohibited for use from the 31st of December 2002 under EC Regulation 2037/2000. All halon is required to be recycled, reclaimed or destroyed by registered companies. The decommissioning and removal of halon containers will need to be carried out by trained and certificated engineers.

Our mechanical engineers are trained in the safe decommissioning of gaseous fire fighting systems. They have attended the BFPSA Halon decommissioning (competence certificate) course. All are certificated to a minimum of Class 2 status and over 90% to Class 1 supervisory status.



Issues for the IT manager to consider

When deciding which agent to use, it is sometimes easy to forget that the primary reason for having a fire extinguishing system is to put out a potential fire as quickly and as safely as possible, with the minimum business disruption.



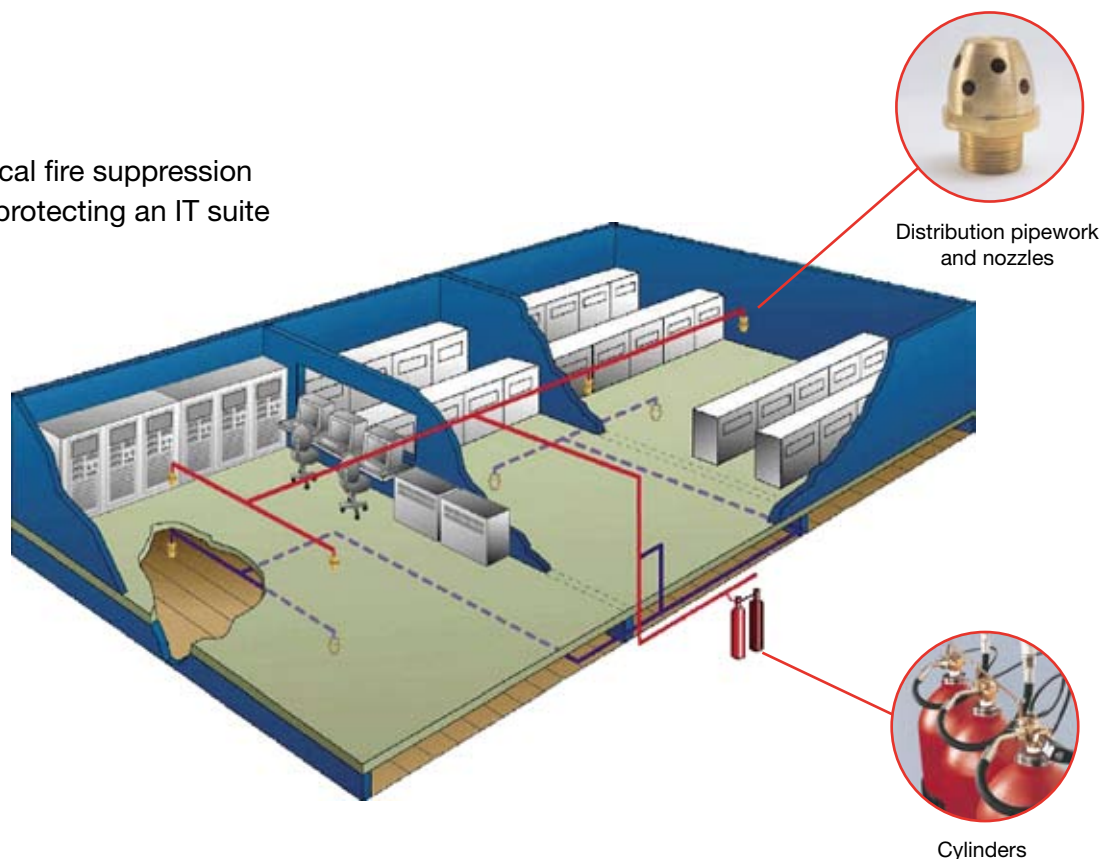
Some subsidiary issues that should be considered when deciding between the systems are:

- How will the protected space be affected by allowing the fire to burn for longer if an inert gas system is used?
- What implications are there for storing inert gas cylinders with a storage pressure of 200 bar on the site?
- Is it feasible or cost effective to have pressure vents installed when using an inert gas system?
- Is there enough space to install the number of cylinders required for an inert gas system?
- Does company policy or other guidelines prevent the use of HFC-227ea which does have a global warming potential and does produce a minimal amount of decomposition product?
- Is the initial cost of each system comparable?
- Is the maintenance cost of each system comparable?
- Can the system be maintained and supported by any other company other than the original supplier/installer?

Typical System

A Chubb Engineered Fire Suppression System consists of the suppression agent stored in cylinders which enters the protected areas via distribution pipework and nozzles. System design, the quantity of gas used, together with the computer calculated pipe and nozzle dimensions ensure that the correct amount of suppression agent is released to effectively extinguish the fire. If space is an issue, cylinders may be installed in any suitable location, even in excess of 100 metres away from the protected areas.

A typical fire suppression system protecting an IT suite



Why choose Chubb

- **A company you can trust.** One hundred and eighty years of history and innovation have made Chubb into a global leader in security and fire protection. The name Chubb is synonymous with fire protection and security solutions.
- **A company with resources.** Chubb employs over 40,000 people around the world and sales exceed £1.5bn per year – supplying systems and services to most of the FTSE 100 companies.
- **National service with local back-up.** Chubb can design, install, maintain and monitor systems using the latest technologies. With a nationwide team of local engineers, Chubb can look after the needs of single sites or high street multiples.
- **Working to suit your individual needs.** With a fire risk assessment led approach, Chubb can work with businesses large and small to help them comply with the latest fire, health and safety regulations.
- **Maintaining and raising standards to ensure customers comply.** Chubb is BS EN ISO 9001 approved for the manufacture and maintenance of fire extinguishers and only provides approved fire safety signs. Chubb is also independently audited to British Standards by the BSI.
- **Government approved.** Chubb Fire is the approved supplier of fire protection for the NHS and for Central and Local Government offices, schools and universities.

Security and Fire Protection

Prevent fire

Fire risk assessment
Fire risk management
Fire training
Gas detection
Service and maintenance

Detect fire

Fire detection systems
24/7 fire alarm monitoring

Contain fire

Fire extinguishers
Hose reels
Fire extinguishing systems
Sprinklers

Escape fire

Emergency lighting
Training
Voice alarms
Fire safety signs

Electronic Security

Security Personnel



www.chubb.co.uk

01932 777264

Although great care has been taken in the compilation and preparation of this leaflet to ensure accuracy, the publishers cannot in any circumstances accept responsibility for errors, omissions or advice given in this publication. Readers should be aware that only Acts of Parliament and Statutory Instruments have the force of law and that only the courts can authoritatively interpret the law.

GCF1008 10/06