FMBusinessDaily

When Was the Last Time you Revisited your Fire Safety Strategy?

3 hours ago

(And when to upgrade or replace your systems)

As much as it can feel like a box to tick and move on, fire safety is never a “set and forget” responsibility for building owners, developers, property managers and housing providers. Even when fire safety is planned perfectly, systems and strategies can become outdated, either through general wear and tear, or through changes to how a building is occupied or used.

In this article, Brad Crisp, Commercial & Specification Manager at Sertus, explores when to review, upgrade or replace your building’s fire safety strategy and systems.

Fire Safety is an ongoing process

Even well-planned strategies need regular updating. Buildings can evolve from their original intended use surprisingly quickly. This could be due to an increase in occupancy levels, the addition of extensions or changes to internal structures, or refurbishment that changes access and how people behave in the space. In addition to this, regulations and guidance relating to fire safety are updated regularly, with increasing scrutiny especially for high-occupancy and high-rise buildings.

As well as changes to the building or to regulations, as time passes, systems require replacing. Smoke control and automated ventilation systems require ongoing maintenance and will eventually need replacing. It’s important that your fire safety routines include continual assessment, rather than an approach of only acting once faults are reported. Building managers have both a legal and a moral responsibility for maintaining strong fire and smoke safety systems and maintaining safe evacuation conditions.

Why smoke control systems need regular attention:

Smoke control systems protect escape routes such as corridors and stairwells, so that building occupants can safely evacuate in the case of a fire.

The two types of smoke control system, mechanical and natural, both unfortunately degrade with age. This means that they need to be routinely assessed for efficiency.

As they degrade, the following issues could reduce performance in life-threatening ways:

- Fans could lose efficiency
- Dampers could fail
- Automatic Opening Vents (AOVs) could fail to open correctly
- Electrics or controls could fail

Without testing, these systems will only come into play in real fire conditions, which could be too late if you realise they have degraded.

Depending on how old they are, some older smoke control systems may not meet modern expectations or performance standards.

Key signs it's time to review or upgrade:

Even technically functioning fire safety systems need to be reviewed and upgraded on a regular basis.

Consider thorough review and upgrades if:

- The system is older than ten years
- Commissioning records or documented testing records are missing
- There are frequent faults, breakdowns or recurring maintenance issues
- There have been building alterations that impact airflow or fire compartmentation
- Complaints or concerns have been raised by occupants, staff or maintenance teams
- There have been changes to regulations, standards or guidance since the system was designed

The risks of an outdated fire safety strategy:

An outdated fire strategy can mean occupants are at risk and that you, or whoever is legally responsible for the building, are liable for that risk.

Smoke spread is a key risk to consider, and one that can have grave consequences. Smoke can compromise escape routes, such as corridors and stairwells, interfering in evacuation processes. It can also demonstrably reduce visibility and create dangerous tenability conditions for occupants.

Outdated fire strategies and systems can also increase risks faced by firefighters attending incidents, because they might face confusion or a change in the expected emergency procedures.

The greatest risk to consider, that we are all working to avoid, is fire leading to fatalities. In addition to loss of life, businesses with outdated fire strategies will be risking consequences through legal, insurance and compliance routes, as well as risks to business continuity and reputation.

The benefits of upgrading your fire safety system and strategy:

The key benefit of upgrading your fire safety is improving the safety for your occupants and staff during an evacuation.

Newer fire safety and smoke control systems will be more reliable, giving everyone involved more confidence in their performance. Many also have better monitoring, diagnostics and performance validation capabilities, taking advantage of newer technologies. Having new fire safety technology installed can also mitigate insurance increases and, in many cases, decrease your insurance premium.

Updated fire safety strategies that consider changes in a building and how it is being used are more likely to get over the compliance hurdles in current regulations and fire safety guidance.

Taking a proactive approach to upgrading can literally save lives. It can also be much more affordable to address early, rather than waiting until there is an urgent need to replace.

Upgrade or replace?

Upgrading may be the better choice when the following conditions are in place:

- Your existing infrastructure is still fundamentally sound
- Only a few selected components require replacement or modernisation

Upgrades will likely be considered first, due to being cheaper. They also allow for phased implementation that can help to spread costs and reduce building disruption.

Full system replacement will always be a better long-term solution, and ultimately, more cost effective than having to run a continuous upgrade programme.

Replacement will be needed if:

- Your existing system has reached an end-of-life condition, or is old enough that replacement parts are obsolete
- Repeated faults and false alarms indicate wider reliability issues
- The original design is no longer relevant to the building's current or future use

Whether upgrading or replacing, always make sure that your solution is in line with the latest regulations and guidance, for both safety and compliance reasons.

Any new system or upgrade will have to work within the practical constraints of your business, whether that is retrofitting in an occupied building, managing limited space for new ductwork or equipment, or integrating with existing building management systems. Cost will also be a consideration, with the need to balance upfront costs with long-term maintenance and replacement savings, as well as compliance benefits.

Fire safety strategies must evolve alongside the building itself. Rather than waiting for an emergency or a point of failure, proactive reviews of your system and strategy will help you keep occupants safe and your building fully compliant.

A proactive approach and a clear plan for when to upgrade and when to replace will help safeguard lives and property, as well as helping ensure your building remains safe, compliant and resilient.