

N THE last year, the media has reported several large fires in commercial buildings posing risks to people, property and responding firefighters. The fires brought into sharp focus the responsibilities of operators of all properties, particularly those with higher risk facilities such as commercial kitchens, not least because kitchen fire protection systems could have helped contain, if not extinguish these fires.

Kitchens are notoriously high risk environments for accidents and incidents. Fire industry and insurance data reported by BAFE – the UK's independent register of quality fire safety service providers – reveals kitchen fires as statistically the third most likely cause of large fires behind hot works and arson.

Safety aspects for staff and visitors and the protection of property are therefore key concerns which the responsible person neglects at their peril. Just over 12 years ago in England, Wales and Scotland – and a little over eight years ago in Northern Ireland – the responsibility for fire safety in a building was passed from fire and rescue services (FRSs) to the responsible person or duty holder.

# Improving safety

The MOT test first introduced in 1960 under the direction of the Minister of Transport, Ernest Marples, was initially greeted with some horror at the implied expense involved. Yet 60 years on, the MOT has long fallen into everyday parlance as an accepted necessity and its success in increasing safety on our roads is unquestioned. Why, one might ask, has the same idea not been applied to fire safety in buildings?

Now, BAFE has put down the challenge to us all that the MOT concept can be applied in the case of commercial kitchen fire protection systems and indeed could help save even more lives. Last year, BAFE launched the Kitchen Fire Protection Systems Scheme (SP206) in response to the significant fire risks posed.

The scheme, which tests the design, installation, commissioning and maintenance of commercial kitchen fire protection systems, is delivered by granting approvals to professional installers regularly audited by National Security Inspectorate (NSI) experts.

The UKAS accredited NSI conducts rigorous audit of fire safety and security providers nationwide, and its third party certification provides kitchen operators with an assurance regarding the quality of service and product installed. NSI is the only third party certification body licensed to verify competence of contractors for the full suite of BAFE fire safety schemes, approving the largest number of UK fire safety companies.

All companies approved by NSI hold a certificate of approval detailing the specific services for which they have obtained approval. Professionally approved fire safety providers now have authority to issue operators of commercial kitchens with NSI/BAFE Certificates of Compliance, which work along the lines of an MOT to provide peace of mind, and evidence that their kitchen fire protection system is fit for purpose at initial installation and is correctly maintained.

BAFE and NSI recommend that those who are responsible should obtain confirmation that their providers are authorised to issue an NSI/BAFE Certificate of Compliance for any installation as evidence of their competence in maintenance and assessment of the ongoing suitability of equipment installed, including when kitchen renovations impact use. Legislative responsibilities demand that competent companies must be appointed to undertake the work.

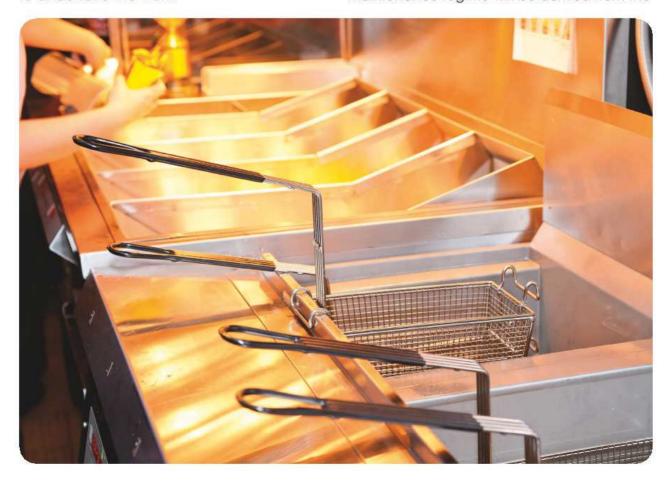
UK FRSs view mitigating risk by installing and suitably maintaining a kitchen fire protection system as good practice - such systems protect premises by automatically activating as soon as fire is detected and by preventing the spread of fire to other parts of the building.

## Scheme audit process

Independent audits of installers focus on two main elements: their technical competence and the robustness of their management system. Technical competence is assessed by a qualified auditor inspecting recently completed installations and those recently subject to a maintenance visit. The auditor will review the risk assessment used by the installer in assessing the appropriateness of the system specification, as well as the maintenance schedule.

Every kitchen works to a specific schedule and prepares a unique menu. Before specifying a system, the installer will complete a risk assessment taking into consideration the type of cooking involved, the amount of time the kitchen is in use, and the layout of the kitchen and its equipment. These are all important risk factors: for example, cooking in a wok or charcoal burner produces more fat and carries greater risk than boiling saucepans.

The frequency and extent of maintenance and system recharging defined in the planned maintenance regime will be derived from the





risk assessment: maintenance in a care home kitchen is likely to involve less frequent visits than an environment where chicken is fried 14 hours a day, seven days a week.

Kitchen fire protection designs work in a variety of ways to extinguish or suppress a fire. In any particular installation, auditors take into account the hardware manufacturer's instructions as a basis for inspection. NSI auditors undergo training to develop understanding of the technical aspects of each system design, equipping them to assess competently an installation's compliance with the instructions of the manufacturers.

In addition, the auditor checks the effectiveness of the installing company's business management system, which is tested to verify that the following areas are covered adequately:

- organisational resource, maintaining for example a stable management structure, and actively managing company policies and procedures and competency/training records
- quality objectives and planning, including the maintenance of a register of approved subcontractors
- operational planning and control
- products and services
- record keeping and documentation
- internal audit

NSI has long recognised the importance of a joined up approach to delivering fire safety and it conducts inspection audits of the management system (to ISO 9001, in the case of NSI Gold approval) alongside the technical competency audit to the relevant standards. This brings a significant benefit to the approved company, as a single audit programme integrates both quality management and technical competency; encouraging comprehensive operational efficiency between site installation activities, design, and overarching management.

### Audit observations

Since BAFE and NSI launched the commercial kitchen fire protection scheme, NSI auditors have encountered the following common issues, which those managing commercial kitchens should consider:

#### Communication and training

People working in kitchens are often unaware of the existence of an installed fire suppression system. Designed to automatically activate when fire is detected, flames will have developed somewhat before activation takes place. Early manual activation can significantly reduce the risk of damage and injury; yet if kitchen staff are untrained, clearly the outcome when called on in earnest might be reduced.

### Maintenance and cleaning

The system's effectiveness can be significantly reduced and the risk of more extensive

damage heightened where a regular cleaning regime of the ducts and extract system is not adopted. A buildup of grease - fuel for any fire - through a lack of cleaning can overwhelm a suppression system, taking longer to quench flames or even failing to extinguish them.

#### Changing kitchen layouts

Commercial kitchen equipment is frequently semi mobile and readily repositioned as needs change. When an original layout of the kitchen is adapted, there needs to be due consideration given to the positioning of the kitchen fire protection system for it to continue to be effective.

# **Customer perspective**

How can the responsible person or duty holder be confident that installation and maintenance are indeed in line with relevant standards and demonstrate that they are fulfilling their rightful duty?

The answer in large part can be addressed by the duty holder having confidence in the competence of fire safety contractors holding third party certification, that is a certificate of approval for each of the services they provide. It is unwise to assume that a contractor who is competent to install and maintain fire extinguishers is equally competent in the maintenance of a fire detection system or a kitchen fire protection system.

When considering kitchen fire protection systems, by choosing BAFE registered fire safety organisations it is now possible to obtain a Certificate of Compliance (an 'MOT', if you will) from the installer, at the time of installation and maintenance visits.

# Raising standards

Together, BAFE and NSI are raising standards, with the latter providing audits of approved installers for both newly installed and maintained systems. It should be noted that this new NSI/BAFE scheme for commercial kitchen fire protection systems has the broad support of insurers, who are convinced that fire risk to people and property will be reduced as the scheme becomes more widely adopted.

The endorsement by insurers of the impact that correctly installed and maintained systems can have on mitigating risk in commercial kitchens may be reflected in premiums - it is wise to check the terms of a policy with the insurer at installation

# Richard Jenkins is chief executive of the NSI. For more information, view page 5

Companies that are approved by NSI for kitchen fire protection systems can be found by searching the 'Find A Company' directory at www.nsi.org.uk

