LONDON FIRE BRIGADE

Fire Safety Guidance Note: GN54
Managing and reducing false alarms

Rev 12, 29 October 2024

Contents

The London Fire Commissioner (the Commissioner) is the fire and rescue authority for London. The Commissioner is responsible for enforcing the Regulatory Reform (Fire Safety) Order 2005 (Fire Safety Order).

This Guidance Note provides fire safety advice for all commercial premises experiencing false alarms.

This Note is one of a series produced by the Fire Authority to provide advice on various aspects of fire safety. If you require any further guidance on the advice given or require advice on another topic please visit the local Fire Safety Office, telephone 020 8555 1200 and ask for the nearest Fire Safety Office, or visit the London Fire Brigade web site at http://www.london-fire.gov.uk.

1 Introduction

1.1 In 2023/24, automatic fire alarms accounted for almost 40 per cent of all London Fire Brigade callouts – 52,000 calls. Less than 1 per cent of calls from commercial automatic fire alarms were subsequently recorded as actual fires. The remaining 99 per cent were false alarms. A false alarm is "any fire alarm or fire signal resulting from a cause other than fire".

1.2 People may gradually lose confidence in a fire alarm system that causes false alarms and may start to ignore its warning. False alarm actuations may also result in loss of production and general disruption of normal business activities. If a genuine fire alarm is ignored, this can cause extensive damage to the premises and lead to death or serious injury.

1.3 False alarm actuations that are passed through to the London Fire Brigade are considered 'Unwanted Fire Signals'. Repeated attendances to Unwanted Fire Signals places a burden on London Fire Brigade resources and may mean that fire appliances are unavailable to attend other emergency calls. Unwanted fire signals also increase the risk to firefighters and members of the public during unnecessary blue light journeys.

1.4 It should be noted that whilst national guidance recognises that there may be an acceptable rate of false alarms relative to the number of detector heads, there is no acceptable rate for these false alarms being transmitted to the LFB to become Unwanted Fire Signals (source: BS 5839 - 1, *Fire detection and fire alarm systems for buildings. Code of practice for system design, installation, commissioning and maintenance*).

2 Automatic Fire Alarm Policy

2.1 From 29 October 2024, between the hours of 7:00 am and 8:30 pm, London Fire Brigade will no longer attend automatic fire alarm calls from most commercial buildings unless a call is received from a person reporting a fire.

2.2 This policy does not apply to all buildings. Schools, residential buildings, and many other types of buildings are exempt. The Responsible person or other interested parties can check the London Fire Brigade website to see if a premises are exempt: AFA Exemptions | London Fire Brigade (london-fire.gov.uk).

2.3 Under this policy London Fire Brigade will only consider actual signs of a fire i.e. smoke or flames (sight, sound, smell, or heat) as confirmation of a fire.

2.4 If your premises is exempt from this policy, you should ensure the person responsible for calling the London Fire Brigade via 999 or 112, in the event of a fire, is aware of the exemption and can relay that information to the control room operator in that call.

2.5 All automatic fire alarm calls passed through to the London Fire Brigade via a 999 or 112 call, relating to a commercial buildings between 7:00 am and 8:30 pm, will be subject to consideration before any emergency response is made, so please ensure the advice in paragraph 2.3 is clearly understood by your call operators and do not assume any exemptions.

2.6 The London Fire Brigade will still attend automatic fire alarms calls between 8:30pm and 7:00am.

2.7 Reducing our attendance to commercial automatic fire alarm calls will allow the London Fire Brigade to focus its time and resources in other important areas such as increasing our fire prevention activities in the community and freeing up our firefighters to attend other emergency calls.

2.8 There is a list of frequently asked questions available on the London Fire Brigade website: AFA Exemptions | London Fire Brigade (london-fire.gov.uk). Further questions on this policy can also be submitted via this link.

3 Fire Safety Law

3.1 Fire safety law requires that employers and other people responsible for buildings must provide effective fire precautions to protect people using or visiting their premises. The fire detection and fire alarm system forms part of those fire precautions. A suitable and competent person must be nominated to be responsible for supervising the system and must have the appropriate skills, knowledge, experience, and training to carry out this role. The fire detection and fire alarm system forms part of the premises fire risk assessment and emergency evacuation plan.

3.2 Where a premises has an automatic fire alarm system, it should have been designed, installed, and commissioned to a relevant standard such as British Standard (BS) 5839. The system should be tested regularly and maintained to keep it in good working order. There is also a responsibility to manage false alarms and to take appropriate steps to reduce them.

3.3 Surveys show that most false alarms are attributable to human error. The key to effectively avoiding many of these human factors is in having suitable procedures, correct supervision, and a competent person to observe and keep a log of fire alarm activity and who has the authority to take appropriate action.

3.4 The competent person(s) should have a good understanding of the operation of the fire alarm system as well as the consequences of poor maintenance, inadequate routine testing, or changes to the risk, occupancy, or layout of the premises. They should keep a detailed record / logbook of system events and any trends identified. It is important that more than one person is competent with the operation of the fire alarm to cover for leave, sickness, breaks or shift variations.

3.5 A maintenance contract is essential to ensure the system remains in efficient working order and in good repair and will help to identify and remove the causes of false alarms.

3.6 Further detail on the Fire Safety Order is provided in London Fire Brigade Fire Safety Guidance Note No.66 which outlines the actions required by responsible persons to comply with fire safety law available.

4 Fire detection and fire alarm systems

4.1 The automatic fire detection and alarm system in a premises can be a significant factor in reducing the risk to life and the limiting of damage to the property in the event of fire if it is suitably designed, installed, commissioned, maintained and managed.

4.2 The use of a company with Third Party Certification in the relevant area of design, installation, commissioning, and maintenance is recommended to ensure the system will operate effectively and limit the number of accidental actuations. This will assist the Responsible Person to comply with the requirement of the Fire Safety Order when a 'competent person' is employed to manage this aspect of the fire precautions.

4.3 If the London Fire Brigade has been called to your premises for an alarm actuation, do not reset the alarm until the incident is resolved or you are asked to do so by the Incident Commander. The alarm panel should not be reset until information about the alarm event has been recorded. The London Fire Brigade staff are not responsible for resetting the alarm system.

4.4 If a fault cannot be cleared by resetting the alarm system, a competent fire alarm technician/engineer should be called, and the system placed out of order until the fault is repaired. During the period that the system is out of order extra vigilance will be required and interim measures such as organised patrols should be introduced to check the building for signs of fire at regular intervals.

5 Preventing False Alarms

5.1 Where a fire alarm system is producing an unacceptable level of false alarms the causes must be investigated and managed. This could range from calling out a technician/engineer to replace a faulty part or detection device to the Responsible Person enforcing a non-smoking policy in the premises. Changing a detection device from smoke to heat or the use of a multi sensor device can often eliminate false alarms. However, this must be assessed on a case by case basis as part of the fire fisk assessment and with advice from a competent fire alarm technician/engineer

5.2 The Responsible Person can help prevent false alarms by looking at what causes them in the building. If the causes are known, then steps can be taken to stop false alarms occurring.

The most common causes are:

The design of the fire alarm system: Make sure the fire alarm design is suitable for the type of premises and how the premises are used (it may be suitable to carry out a cause and effect survey by a competent person).

Faults: Poor design and maintenance can lead to false alarms. Make sure the alarm system is properly and regularly maintained to prevent these and ensure that the correct detection device for the area is installed.

Testing: Not taking the system off-line when testing or not informing the alarm receiving centre of a test to the system can cause false alarms.

Contractors working: It is a good idea to turn off or use temporary covers for detection devices where contractors are doing any building or hot works. Make sure the device heads and the covers are cleaned after their use as dust is also a common cause of false alarms.

Dust: Dusting or vacuuming smoke detectors can reduce false alarms caused by dust or insects in the devices.

Cooking fumes: Only cook in rooms intended for cooking as they usually have heat detectors rather than smoke detectors. This helps prevent cooking fumes from setting them off. Burnt toast is often a cause of false alarms so be careful where toasters are sited.

Smoking: Both cigarettes and vaping can set off a fire alarm. Do not allow staff or visitors to smoke near any of your detection devices.

Steam: From showers or industrial processes are a common cause. Closing doors and providing suitable ventilation is a simple and effective way to reduce false alarms from steam. There may be a need to relocate the fire alarm detection device if other options are not successful.

Aerosol sprays: Deodorant sprays and hair sprays commonly set off smoke detectors. Ensure staff or other occupants avoid using them near smoke detector devices.

Accidentally pressing the manual call point instead of the door opening button: Manual calls points now come with covers to prevent this.

Poor servicing and maintenance: Having a servicing and maintenance contract with an approved fire alarm company will ensure that the system is working correctly at all times Whatever action is taken, it needs to be recorded in the fire alarm logbook alongside the date the false alarm occurred and what caused the alarm. These records can then be used to assist the competent person and/or the fire alarm engineer identify why false alarms are happening in the premises.

6 Safe investigation of fire alarms

6.1 Where false alarms unreasonably impact on the premises and the staff at the premises, as well as the actions outlined in section 5, the Responsible Person can consider introducing filtering measures. These are measures and actions that could result in the prevention of a false fire alarm actuation being notified to the London Fire Brigade.

6.2 Whenever possible fire alarm actuations should be investigated (sometimes referred to as 'seek and search') and filtered on site to prevent false alarms being transmitted to the London Fire Brigade as Unwanted Fire Signals.

6.3 Filtering measures should only be used when it has been determined, through a suitable and sufficient fire risk assessment, that both the fire alarm system and the management practices can support them. If it is considered that filtering measures cannot be implemented, then appropriate action should be taken to improve the system and/or management practices accordingly.

6.4 If there are any signs of a fire, whether the sight, smell, sound or heat from smoke or flames, staff or an appointed person should call 999 or 112 and relay this information to London Fire Brigade control room operators. The early confirmation of a fire will enable them to mobilise the appropriate response for the incident.

6.5 Some degree of alarm investigation can be carried out by staff when the alarm sounds. Any investigation of a fire alarm should only be carried out by suitably training staff and only where it is safe to do so. Persons should not be expected to place themselves in unnecessary danger when carrying out a fire alarm investigation. The premises fire risk assessment must address the risk, training, investigation period and protective measures required for any staff that are required to investigate the cause of the fire alarm actuation.

6.6 Where, as part of fire procedures, it is necessary for persons on the premises to investigate a fire alarm signal prior to summoning the London Fire Brigade, it is essential that there are safe procedures to carry this out. This will require adequate planning when determining who to nominate to carry out this task. For example, in commercial premises in multiple occupation, there needs to be close co-operation between occupiers to pre-plan and coordinate the arrangements made. Those nominated for the task should be suitably trained and physically capable to perform the task.

6.7 Under The Fire Safety (Employees' Capabilities) (England) Regulations 2010 (Statutory Instrument No. 471 2010), every employer must, in entrusting tasks to employees, take into account their capabilities as regards health and safety, so far as those capabilities relate to fire.

6.8 Any staff entrusted with investigating fire alarms should receive appropriate training, which should cover the following (this is not an exhaustive list):

- the roles and responsibilities of those nominated to investigate fire alarm signals, including any time delays, investigation periods, calling London Fire Brigade etc.
- any special fire hazards within the premises (e.g. presence of gas cylinders and Battery Energy Storage Systems, fire suppression systems).
- identification of the location of a potential fire, including interpretation of the zone plan and control indicating equipment (fire alarm panel).
- whether lifts can be used during the investigation.
- use of any communications equipment.
- typical signs of fire.
- action on discovery of a fire, particularly the method of summoning London Fire Brigade and ensuring that an evacuation signal has been given.
- arrangements for coordination between those investigating fire alarm signals and any fire wardens in the premises.
- how to confirm a false alarm and reset the control indicating equipment and any ancillary systems.
- Arrangements for calling a fire alarm maintenance contractor if necessary.
- arrangements for recording the incident in the relevant logbook and, if necessary, initiating further investigation of the cause.

6.9 Some fire alarm system will also have an automatic transmission of a fire alarm signal directly to - an Alarm Receiving Centres. Staff working at the Alarm Receiving Centre can then place a 999 or 112 call to the London Fire Brigade. However, it is important that strict agreements and procedures are agreed and clarified with the Alarm Receiving Centre to make sure that false fire alarm actuations are not passed to the London Fire Brigade. To help avoid and manage this, there must be a suitable process whereby the staff at the Alarm Receiving Centre place a call to the premises first to confirm if it is a false alarm or a confirmed fire.

6.10 Where there is a high incidence of Unwanted Fire Signals from fire alarm systems and the Responsible Person is satisfied that all reasonable steps have been taken to reduce false alarms, but they continue at an unacceptable level, it may be desirable to delay the automatic signalling to the London Fire Brigade using a time delay system. This will allow time for the cause of the alarm to be investigated during working hours to confirm a fire or false alarm.

6.11 In addition to an automatic transmission delay, premises with automatic transmission to an alarm receiving centre may consider introducing a time related system that removes the automatic transmission when the building is occupied. If the transmission cannot be delayed when the building is occupied, then the relevant alarm receiving centre, or the alarm maintenance company can be contacted for alternative methods.

6.12 Any change that you make to the procedures or General Fire Precautions must be considered and justified in the premises fire risk assessment.