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Fire Alarm Regulations – a simple guide to UK legislation

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UK fire alarm regulations can feel less than straightforward if you're not a fire safety professional.

Below is a simple guide to the latest UK fire alarm legislation.

Fire alarm regulations form part of 'The Regulatory Reform (Fire Safety) Order 2005', known as the 'RRO'.

In addition, the UK government recommends that all fire alarm and detection systems should be installed and maintained in accordance with the relevant British Standard, BS 5839. (our guide below is based on BS 5839-6).

Despite the regulatory literature, as a fire safety company with more than 50 years' standing, we know that there is often confusion around the exact requirements of **UK fire alarm legislation**.

We are frequently asked:

- Do I need a fire alarm system?
- How often should fire alarms be serviced?
- How do I carry out a weekly fire alarm test?

We answer these questions and more in our simple guide below.

If you'd like to read a guide about all kinds of fire regulations, click here.

Do I need a fire alarm?

Current UK fire alarm regulations state that all business premises must have 'an appropriate fire detection system'. This basically means that an outbreak of fire can easily be detected, and occupants can easily be warned.

This does not necessarily mean that all business premises will need a fire alarm system.

You are unlikely to need a fire alarm system **if all of** the following statements are true:

- Your premises are small, simple, and single-storey or open-plan
- You don't store any high-risk substances, such as chemicals
- You don't undertake any high-risk activities, such as cooking
- You don't have any vulnerable occupants, such as the very young, elderly or disabled
- A fire would be easily spotted if it broke out anywhere in the premises
- A shout of 'fire!' would be easily heard by all occupants

If one or more of these statements does not apply to your business, then you probably need a fire alarm system.

If you are in any doubt, then your **Fire Risk Assessment** should specifically state whether you should or shouldn't install automatic fire detection. View a 5-step checklist to help people responsible for the simplest premises to complete a fire safety risk assessment.

If you don't have a Fire Risk Assessment then we would recommend you carry one out first, as this is the cornerstone of your business's fire safety plan (read more about fire safety legislation here).

Contact us to request a Fire Risk Assessment

What type of fire alarm do I need?

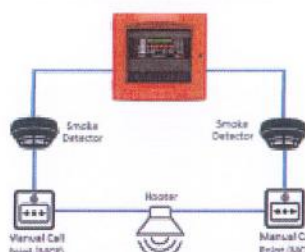There are **3** main types of fire alarm system: **Conventional, Addressable,** and **Wireless:**

Conventional Fire Alarm

- divides your premises into broad zones
- in the event of an alert, the fire alarm panel identifies the zone, but not the precise area
- most suitable for smaller or lower risk environments

Addressable Fire Alarm

- each individual device has its own unique electronic address
- if one activates, the fire alarm panel tells you precisely where the problem is
- most suitable for larger or higher risk environments – e.g schools, care homes, hospitals

Wireless Fire Alarm

- uses a secure wireless link between the sensors and the fire alarm panel
- typically works like an addressable system, just without the wires
- most suitable for premises which don't want lots of cable – e.g. churches, historic buildings

UK fire alarm legislation doesn't specify exactly which each type of fire alarm system should be used in which types of premises, again, it comes down to what is 'appropriate' for your particular business.

To make sure you get the right fire alarm system to meet UK fire alarm regulations, it is recommended that you use a reputable fire safety company to design it.

You should also make sure they design to BS 5839-6 specifications (the relevant British Standard), otherwise, you may not be covered for regulatory or insurance purposes.

Contact us to discuss your Fire Alarm System

What are fire alarm system 'grades' and 'categories?

This is a complex area but basically 'grades' and 'categories' respectively define how your fire alarm system should be constructed (grades), and which areas of your building it should cover (categories).

Grades

Fire alarm grades run from 'A' through to 'F', with 'A' being the highest grade and 'F' being the lowest.

Residential buildings can usually meet UK fire alarm regulations with a lower-grade system (D-F). These are not wired into a central control panel and may not have back-up battery power.

However, **businesses** generally need a more substantial system to comply with UK fire alarm legislation – from 'A' through to 'C' grade.

At a very simplistic level, these higher-grade systems are wired into a central fire alarm panel, connected to the mains power supply, and have a back-up power supply.

Categories

There are 2 main fire alarm categories:

Category 'P' systems – protect property. Category P systems are usually installed at the request of insurers.

Category P	Description of cover
P1	Detection is installed everywhere in the building, including voids in the construction.
P2	Detection is used only in certain areas to manage a particular fire risk

Category 'L' systems – protect life

	Category L	Description of cover
Lowest level of cover	L5	Detection is only installed in areas where a particular fire risk needs to be controlled
	L4	Detection is installed in circulation areas only, such as corridors and stairways
	L3	Detection is installed in circulation areas and rooms which open onto circulation areas
	L2	Detection is installed in circulation areas, rooms which open onto circulation areas, and additional high risk areas
Highest level of cover	L1	Detection is installed in circulation areas and every room of the building including cupboards

Which grade and category of fire alarm system you need is very much dependent on the nature of your business and the size and layout of your premises.

Again, the grade and category of fire alarm system you need should be specified in your Fire Risk Assessment, or advised by whoever is designing your fire alarm system (don't forget to make sure this conforms to British Standard BS 5839.)

Who can install a fire alarm?

UK fire alarm regulations make no requirement as to who can install a fire alarm, other than that they must be 'competent'.

This therefore means that the person or company who installs your fire alarm should: –

– Understand the various types of fire alarm system and how they work
– Be familiar with the main makes and model of fire alarm
– Be able to identify which grade and category of fire alarm system you need
– Be able to design a fire alarm system to meet the grade and category requirements
– Have a good understanding of British Standard BS 5839
– Be able to design a system to meet BS 5839 requirements
– Have sound electrical knowledge

Contact us to discuss your Fire Alarm Installation

How often should a fire alarm be serviced?

UK fire alarm regulations only state that your fire alarm system must be 'adequately maintained', however BS 5839 recommends that a fire alarm system should be inspected by a competent person at least every 6 months and the government recommends following this standard.

In fact, if you work out of large premises, we would recommend a quarterly service, as there are many more components to your fire alarm system, and therefore more opportunities for something to go wrong.

Why is fire alarm servicing important?

There are 2 main reasons to keep your fire alarm in working order:

• To alert occupants in the event of fire and so prevent loss of life
• To prevent false alarms

Whilst the 1st reason may seem obvious, the 2nd reason is less well known.

The fact is that false alarms account for a huge number of fire brigade call-outs. This incurs a lot of expense and, more importantly, could mean that the fire brigade is otherwise occupied when a real emergency arises.

The fire brigade has now imposed charges for call-outs at premises which have a high number of false alarms, as an incentive for businesses to keep their fire alarms better maintained.

What is weekly fire alarm testing and do you have to do it?

Weekly testing is different to fire alarm servicing, which we describe in section 6. Both are required.

Whilst a fire alarm service is a thorough investigation of the whole fire alarm system, weekly testing is more of a 'spot check'. It's purpose is to quickly test that your fire alarm is in working order and help identify any issues.

Having a fully operational fire alarm is a regulatory requirement for those premises that need them, which is why regular testing is important.

The guidance to test weekly comes from British Standard BS 5839. This the standard that the UK government recommends should be followed with regards to fire alarm maintenance.

You could decide to test less frequently, however you would need to explain why you've deviated from BS 5389 to any investigating fire officers, should they pay a visit.

How do you carry out a weekly fire alarm test?

Your 'responsible person' can carry out your weekly **fire alarm test**, although if you look after a number of properties, you may prefer to ask your fire alarm company to do this for you.

In each weekly test, you should activate at least one fire alarm call-point and check that the alarm sounds and the panel receives the signal.

Each week you should test a different call-point.

Once you've performed a successful check, you can re-set your fire alarm panel (on the other hand, if you encounter a problem, contact your fire safety company).

Finally, record the test in your fire alarm log book, including the location of the call-point(s) that you tested.

What should you do if something goes wrong with your fire alarm?

If your fire alarm goes wrong, for example an alarm is sounding but there's no fire
- A light on your fire alarm panel says there is a fault
- Your fire alarm panel is beeping
- There's no power going to your fire alarm panel

then you must report it immediately to your fire protection company. This is because the system can't be considered to be 'adequately maintained' if there is a fault and you would therefore be non-compliant with fire alarm regulations.

A fire alarm company should attend site within 24 hours at the very latest, or for major faults where the fire alarm is disabled, within 4 hours.