

# **Essential fire safety checks**

50 "duty of care" checks to help you comply with fire safety legislation



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## Welcome to this essential guide

Please find your 50 Essential fire safety checks, this guide will help you understand your responsibilities under the latest fire safety legislation.

You are probably not an expert in this field and are most likely very busy in your own organisation with a minimum amount of time to go and gather the information required.

Well, it can be a bit tricky, but with the right guidance, coupled with a reliable competent company that provides excellent service, the whole process can be made a lot easier and less time consuming than you think.

#### Which is exactly why we created this check point plan.

The guide will give you the best advice and help you to gain the essential knowledge required in order to understand your responsibilities and avoid any expensive mistakes. This will save you money and time which you can spend on your own business.

At Golant Fire and Security we want to make sure you can take further steps with confidence. That's why our guide has been created with the benefit of many years of experience and valuable industry knowledge and it only contains factual information so you can understand your responsibilities.

And of course should you have any further questions, or require specific guidance in any area of fire safety or security please call our friendly team on 01726 861116 or email us at info@gfsfire.co.uk and we will be happy to help you.

PS – To help you that bit more, we have provided further advice in the annex section at the end of this check list, look out for the notes under certain checks



#### Check point 1.

Do you have a named person who is the "Responsible Person" for the fire alarm system and fire safety and is this documented

See advice and recommendation in Annex 1

#### Check point 2.

Has responsible person read and understood the RRO

See advice and recommendation in Annex 2

#### **Check point 3**

Has a suitable and sufficient Fire Risk Assessment been carried out by a person who is competent in fire safety and is the Fire Risk Assessment reviewed annually?

See advice and recommendation in Annex 3

#### Check point 4

Are you carrying out correct weekly and monthly testing of your fire alarm system.

See advice and recommendation in Annex 4

#### Check point 5

Are you carrying out monthly testing of your emergency lighting system?

#### Check point 6

Are you carrying out a monthly visual inspection of your fire extinguishers?

#### Check point 7

Are you carrying out fire drills (recommended 6 monthly).

#### **Check point 8**

Do you have a written fire evacuation procedure which is reviewed annually?

#### Check point 9

Is your fire safety and evacuation procedures explained in your induction to new employees and temporary staff.

#### Check point 10

Are visitors to your site made aware of your fire safety and evacuation procedures?

#### Check point 11

Do all staff and visitors sign in and out of the premises so you can account for them in a fire?

#### **Check point 12**

Do you have regular fire training on the use of extinguishers for all staff?

#### **Check point 13**

Do you have regular fire training for fire marshals?

Do you have fire safety signage & assembly point signage throughout your premises?

#### Check point 15

Do you have a maintenance agreement for your fire alarm and ensure a regular preventative maintenance service schedule is met by your fire maintenance company.

See advice and recommendation in Annex 5

## Check point 16

Do you have a maintenance agreement for your fire extinguishers and ensure a regular preventative maintenance service schedule is met by your fire maintenance company.

#### Check point 17

Do you have a maintenance agreement for your emergency lighting and ensure a regular preventative maintenance service schedule is met by your fire maintenance company.

#### Check point 18

Do you have a maintenance agreement for your fire sprinkler / fire suppression and ensure a regular preventative maintenance service schedule is met by your fire maintenance company.

#### Check point 19

Do you have a maintenance agreement for your smoke vents and control and ensure a regular preventative maintenance service schedule is met by your fire maintenance company.

#### **Check point 20**

Do you have a maintenance agreement for your dry / wet risers and ensure a regular preventative maintenance service schedule is met by your fire maintenance company.

#### Check point 21

Are you aware that the RRO (Fire Safety) Law recommends that you use a maintenance company who can prove their competence in fire safety?

See advice and recommendation in Annex 6

#### Check point 22

Do you keep copies of all certificates and paper work for your fire safety maintenance in a safe and secure place for fire safety officer, insurance representative inspection?



Do you have a fire safety log book for logging all weekly, monthly and annual user and maintenance company events / checks /records for the following:

Fire alarms
Fire extinguishers
Emergency lighting
Fire Sprinklers
Fire door
Fire training
Fire risk assessment
Fire evacuation drills
Fire officer visits.

See advice and recommendation in Annex 4

Check point 24

Do you have annual PAT testing carried out.

Check point 25

Are all fire escapes clear and checked on a regular basis.

#### Check point 26

Do you receive timely and regular corrective works reports for any failures to your preventative maintenance checks by your maintenance company

See advice and recommendation in Annex 7

#### Check point 27

Is your fire alarm monitored through to an Alarm Receiving Centre (ARC) for Fire Brigade or 3rd party remote response.

#### **Check point 28**

Do you have the correct category of fire alarm system.

See advice and recommendation in Annex 9

#### Check point 29

Do you have the correct type of automatic fire detection (AFD) to protect people.

See advice and recommendation in Annex 8

#### Check point 30

Do you have the correct type of automatic fire detection to protect key business assets and continuity?

#### Check point 31

Do you have the correct type of automatic fire detection to protect key high risk areas such as Kitchens, boiler rooms, switch rooms, etc.

Have your key staff responsible for fire safety or health and safety attended a Fire Training course.

#### Check point 33

Do you require any fire alarm evacuation visual warning for high back ground noise levels.

See advice and recommendation in Annex 10

#### Check point 34

Do you require any fire alarm evacuation warning (other than audible) to comply with the disability Discrimination Act.

#### **Check point 35**

Would you like to register for an email service for updates on fire safety news and advice on fire safety?

#### Check point 36

Are any fire doors wedged open?

#### Check point 37

Does external basic security protect against arson.

#### **Check point 38**

Are there any external fire risks in close proximity to the building?

#### **Check point 39**

Is the use of portable heaters restricted?

#### **Check point 40**

Are fixed heating installations subject to regular maintenance.

#### Check point 41

Are fixed electrical installations subject to regular periodic inspection and testing underBS7671. (5 years most commercial premises, 3 years industrial, 1 year hotels, theatre's etc.)

#### Check point 42

Is there an agreed fire assembly point.

#### Check point 43

Have you asked the fire service to attend for familiarisation visits?

#### Check point 44

Do you have a fire alarm zone chart plan for users and fire service for the of Identification fire zones.

#### **Check point 45**

Are all cooking areas cleaned and checked, filters changed, ductwork cleaned etc.

Is the correct type of firefighting equipment (extinguishers) in place in Kitchen's? E.g. Dry Powder? And fire blankets as standard and/or wet chemical for deep fat fryers.

#### Check point 47

Is kitchen automatic fire suppression installed for large / commercial kitchens with hobs and fryers etc.

## Check point 48 Are there fire exit signs on all fire escape routes?

#### Check point 49

Are there fire action notices displayed, and written instructions on what to do in the event of a fire, and are they correct.

#### **Check point 50**

Have you used our on line fire safety questionnaire.

### Annex 1 - The Responsible Person

Under The Regulatory Reform Fire Safety Law Order and as per British Standards, every fire system should be managed by a Responsible Person. This person is responsible for weekly testing of the system and managing of the maintenance carried out by the fire alarm company. There should be 2 responsible persons or the responsible person should train at least 1 other person in how to test and operate the systems in case of absence or holidays etc.

## Annex 2 – The Regulatory Reform Fire Safety Order

All companies in the UK must comply with the Regulatory Reform (Fire Safety) Order (RRO). Amongst other requirements this states that you must have means of warning of fire (fire alarm) escape from fire (fire escapes, emergency lighting etc.) and fighting of fire (fire extinguishers). It is also important to have a fire risk assessment, a written fire safety procedure and to ensure your staff have training on how to use fire extinguishers.

More information can be found at;

http://www.legislation.gov.uk/uksi/2005/1541/contents/made

### Annex 3 – Fire Risk Assessment

It's important to get a get a fire risk assessment carried out by a person who can prove their competence in this field, if you cannot prove your competence do not carry it out yourself!!, the risk assessment MUST be fit for purpose and be suitable and sufficient, be warned there have been many court cases brought about by The Fire Service because the Fire Risk Assessment was not "suitable and sufficient"!!!

This risk assessment will let you know the level of fire safety cover you need: from what category of fire alarm system you need, extinguishing requirements, emergency lighting requirements, training and maintenance etc.

## Annex 4 – Testing of your fire system.

The majority of people don't weekly test their fire alarm system.

Most that do are not aware how to do this properly. Before we begin here are some common mistakes when testing fire systems:

- 1 Triggering the fire system from the evacuate button on the main fire alarm control panel
- 2 Testing from the same break glass call point each week
- 3 Leaving the break glass test key in & then resetting the main panel
- 4 Completing the test & not writing it down in the log book
- 5 Not writing full details in the log book

#### The following procedures should be followed for Fire alarm weekly testing:

An agreed time & day for testing the alarm should be noted in the fire testing procedure & all staff notified, also letting everyone know that if the alarm lasts for longer than 1 minute then to treat the alarm as genuine.

Before starting testing if the fire alarm is monitored the system should be put on test with the Alarm Receiving Centre (ARC)

- 1. Every week a break glass call point should be operated during normal working hours & the results recorded. A different call point to be tested each week, there is no maximum period for this e.g. 150 call points would take 150 weeks
- 2. Any occupants should report any poor audibility of sounders
- 3. Systems with staged evacuation or alert should be run through their full procedure, e.g. test, alert & evacuation
- 4. In premises with shift patterns or out of normal working hours then a separate test should be made available once a month
- 5. Voice alarms should be tested in accordance with BS5839-8
- 6. Ensure that for monitored systems that the fire alarm & reset signal was received at the Alarm Receiving Centre (ARC)

#### For monthly testing carry out the above weekly testing & the following:

If any generator is used as stand by power supply, then it should be started & fully checked Any back up batteries should be visually inspected by competent person.

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Further to weekly & monthly testing the following considerations & procedures should be carried out.

#### Action in the event of pre-alarms.

Determine & fully inspect the area from whence the pre-alarm has originated

If fire discovered, carryout the pre-determined fire evacuation procedure.

If no fire is discovered, record the events or activities near the suspected detector in the log book & if work further inspection or corrective works required then to contact the fire alarm service company.

#### Action in the event of genuine fire.

Follow your own written fire procedure, if you do not have this then please contact us for more information.

The log book completed

The integrity of the system must always be checked after a fire to determine whether any damage has taken place that may affect the proper use of the system. You are advised to contact the service company for an inspection in accordance with the British Standards

#### Action following a fault.

Determine the area of the fault & if any special action is required such as fire patrols If possible determine the reason for the fault

In all circumstances note any activities in the area prior to the occurrence of the fault Record all details in the log book

Notify the fire alarm maintenance company

Log book. A requirement of The Regulatory Reform Order.

A log book is to be kept for recording all events of the fire alarm system such as fire alarms, false alarms, faults & ongoing testing of the system.

This provides not only proof of testing & maintaining the system but also useful information for the user & Service Company with respect to investigating false alarms & faults with the system.

Note - an accurately completed log book can save you & your organization time & money. The following information should be completed:

- 1. Name of the responsible person
- 2. Brief details of maintenance arrangements
- 3. Dates & times of all fire alarm signals & which detector was operated this is for all signals e.g. drills, false alarms, genuine fires
- 4. Causes & circumstances surrounding any false alarm
- 5. Dates & times & types of all tests
- 6. Dates, times & types of all faults & defects
- 7. Dates & types of all maintenance (e.g. service visit or non-routine maintenance such as call outs etc.)

## Annex 5 – On going support and maintenance.

Ongoing maintenance of your fire alarm system (and all other fire safety /emergency systems) should be carried out by a competent approved (BAFE or equivalent) fire alarm / safety company. A contract should be signed by both parties to ensure everyone understands their responsibilities this will ensure that the fire alarm company is legally obliged to carry out the work.

The contract should state to what standard the work is carried out, how often the tests are completed and what's included (call out and/or parts).

Every contract should include a call out facility with a minimum response time (the standard is 8 hours) to ensure any emergency break downs are attended to in an efficient manner.

All fire systems should have a preventative maintenance visit where tests are carried out to ensure the system operates at an optimum and any failing parts are replaced before they cause a major malfunction (usually right when you need the system the most). These tests should be carried every 6 months as a minimum but some systems will need a visit every 3 months.

## Annex 6 – How do I choose the right company to install or maintain my system?

Selecting the right company to design, install and maintain your fire systems is an extremely important decision and one that should not be taken lightly.

Having a fire system fitted to your building can be a major task, due to extensive wiring, drilling and access required. If not carried out correctly this can cause a major inconvenience to your organisation.

Therefore, choosing the right fire alarm contractor can make the whole process go smoothly, efficiently and with the least amount of disruption to your business.

However, making the wrong choice could mean you waste thousands of pounds on the wrong system and/or end up with bad workmanship, delays and interruption of your business Worse still, you are at risk from fire and non-compliance while you are un-protected.

So, how do you decide on which company to appoint to install your fire system?

Here are some very important considerations you should make before deciding on your choice:

## Can they prove their competence?

It's a fact that proving competence is part of the law under the Regulatory Reform Fire Safety Law Act and just being a fire safety company doesn't prove competence. Anyone can say they are competent but the only way to ensure you are employing a competent company is by using someone who is part of a registered inspectorate scheme such as "British Approvals of Fire Equipment" or BAFE.

Can they provide testimonials of their work?

Any quality fire alarm company will have had great feedback from their clients and will be proud to have it in writing. Be very wary of any company who have not had this feedback or cannot be bothered to show how proud they are of their customer comments.

Do they provide Case Studies of work completed?

As with testimonials any fire alarm contractor worth their salt will have case studies of jobs where they have carried out prestigious and complex work or jobs they are proud to have installed to the customers satisfaction.

Do they employ all their own staff and are they trained?

Some companies are not what they seem. Sometimes it may just be the surveyor that works for the company and the work itself is sub-contracted.

It is essential to ensure the whole process is surveyed, installed and managed by the fire alarm contractor with their own staff. This will ensure you get the very best service and that it is not farmed out to the cheapest sub-contractor at that time. As the saying goes "he who pay least ends up paying the most "Ask if the surveyor and engineers are correctly trained in fire engineering. Many companies now profess to be an expert but can they prove this by being displaying their certificates of training.?

Do they carry the right level of insurance?

In the unfortunate event of an accident occurring during the installation process you want to ensure there are no repercussions for you as a business and that any accident, injury or damage will be covered by the appropriate insurance policy.

It is the fire alarm contractor's responsibility to ensure this is in place to cover you. As a minimum any responsible fire alarm company should have the following:

Employers liability - to ensure their staff are covered

Public liability – to ensure any damage/injury to clients and their property are covered Efficacy - failure of system to operate

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farmed out to the cheapest sub-contractor at that time. As the saying goes "he who pay least ends up paying the most "

Do they provide a warranty?

The single most important question to ask yourself is "what will happen if something goes wrong after my system has been fitted?"

Once your system has been fitted you want to ensure someone is there to guarantee its operation for at least the next 12 months if not more.

Any professional fire alarm company will guarantee their work for a minimum of 12 months so it is essential you ask this question and get it in writing.

A quality company who is fully transparent in their dealings with you will provide all details including contact numbers of the key people in that organisation.

You may never need to know all these people at the beginning of your relationship but it is essential to know you have a team of real people who are waiting there to help.

Can they support your system?

Imagine getting woken at 3 am in the morning because your alarm is going off and being unable to contact your alarm company. Who is going to fix your alarm to stop it from waking the neighbours and enable you to get back to bed?

Even worse the alarm evacuates the whole property during working hours and no one can do their work!!!!

Can you rely on your fire alarm company at all times 365/24/7, will they answer the phone when you need them the most?

The last thing you need is to wait hours on end for someone to attend to your needs (or not even turn up) right when you need them the most.

A lot of companies may want to fit your fire system but do they have the back up to provide support for your system and you when you need it at any time.

Ask your company if they provide this service and if they are willing to sign a contract to provide support services such as call out, technical support and preventative maintenance.

## Annex 7 - Corrective works – ongoing support and lifetime usage

It is important to have any faulty parts corrected straight away, just as you would do with an MOT for a car. It is wise to keep the fire system up to date and working at its optimum, as in the long term, this is more cost effective than having call outs and emergency repairs at a later date It also reduces the risk of a faulty part not operating right at the time when you need it the most......when there is a fire!!!

Your maintenance company should provide a quick turnaround written report of any equipment that fails the tests. This should state what has failed and the seriousness of the failure e.g. is it a non-compliance issue or is it just a recommendation. It is usually quite serious if anything fails as this is a life protection system and all failures should be corrected as soon as possible.

If there is a delay between the failure of the part/ system and the corrective works being carried out then a backup procedure should be put in place such as fire patrols or the use of air horns. On average your new fire alarm system should last around 10 - 15 years. During this time things will break down, get damaged have false alarms and building changes, legislation and standard changes etc. will happen but if you correct these as they happen then you can be certain of a reliable and cost effective fire system.

## **Annex 8 - Types of Detection.**

#### **Break Glass Units**

Used on all fire systems, these units raise the alarm manually when someone fractures the white glass or plastic. They are situated at exits, landings, corridors, fire escapes or near high risk areas (cookers, kitchens).

#### **Optical smoke detectors**

Commonly used in most areas where a fire may occur from combustible materials such as paper, wood and textiles.

Applications - most circulation areas such as corridors, hallways, escape routes, standard rooms in most buildings.

#### **Ionisation detectors**

Not as common as optical but still useful for clean burning fires such as mentholated spirits, petrol or paint thinners. These detectors are more sensitive to this type of fire than optical detectors. Applications - paint stores, chemical stores, cleaner's cupboards, surgical stores.

#### **Heat detectors - fixed temperature**

Used where a smoke detector cannot be used because of false alarm problems such as smoke, condensation or dust. This would be in areas like kitchens or boiler rooms which have fluctuations in temperatures.

#### Heat detectors - rate of rise

These detectors work by sensing a sharp rising change in temperature and are not to be used in a kitchen or boiler room where the temperature can rise and fall quite rapidly. The ideal place would be a garage where fumes restrict use of smoke detectors, or a dusty environment.

#### **Multi-sensors**

Are detectors with both smoke and heat elements and can be used with a number of different combinations. Either a mixture of smoke and heat is required to trigger the detectors or they may be timed to operate heat in the day and smoke at night. They are mainly used for bespoke applications where a particular fire risk or false alarm needs to be considered and therefore the appropriate setting applied.

#### Co<sub>2</sub> detectors

These detectors pick up the carbon monoxide given off from a fire at the smouldering or red ember stage of a fire. These detectors can be used where it's impractical to use a smoke detector but a heat detector is not appropriate They are best used to detect a fire at an early smouldering stage such as deep seated fires in sawdust or flour mills. However these detectors should not be confused with domestic type Co2 detectors used to pick up carbon monoxide poisoning. They also should not be used to replace smoke detectors as they are not as effective and should only be used as part of a fire safety solution.

#### **Beam detectors**

Usually used in buildings with high ceilings such as warehouses, rather than 1 point of detection spread throughout the protected areas as with smoke detectors, these detectors spread a beam from one end of the building to another (from 10 - 100metres). They will sense smoke at higher levels than a standard smoke detector and can save money on installation time. In large open areas for example where only 1 detector may be required for a large area. Applications - warehouses, atriums, areas where a smoke detector cannot be reached, high level ceilings

#### Air aspirating detectors

Works on a similar basis to optical smoke detectors but these detectors are highly sensitive and pick up very small amounts of smoke. The detection is delivered by way of a plastic tube running along the area to be protected. Air is sucked through small holes in parts of the tube and is then analysed back at the main detector - typical applications may be server rooms, voids, atriums, museums, art galleries and places with high value stock or high value equipment.

#### Flame detectors

Utilised in any area where a sudden flash of heat / flame may occur and the need to detect this immediately is of paramount importance. Applications - oil stores, aircraft hangers, fuel depots, filling stations, sugar, flour, cement factories or any industry with an explosive atmosphere.

#### **Linear heat detectors**

This is a special cable spanning the area to be protected. Once the ambient temperature rises above a certain level the wire's resistance value changes or short circuits and provides an alarm. Applications - car parks, plant and machinery such as conveyor belts, tunnels.

#### Video fire detection

By using standard CCTV video cameras the picture is analysed back at a main computer and certain patterns are monitored to detect the visual image of smoke and Infra-Red radiation from heat.

Applications - tunnels, airports, aircraft hangers, fuel depots, external areas which require monitoring such as airstrips or lorry parks.

## Annex 9 - Category types.

The fire risk assessment and quotation should mention which category standard the fire alarm system will be fitted to. Below is a brief description of the category types:

#### Category M systems are Manual.

Category "M" system "manual call points and therefore incorporate no automatic detection. Examples – Public Houses, Schools, warehouse.

#### Category L systems are for the protection of life

Category "L1" system "manual detection at defined positions & automatic detection in all areas of the protected premises".

Examples – Hospital / Hotel / Premises with sleeping accommodation / large or complex buildings / residential care homes.

Category "L2" system "manual detection at defined positions & automatic detection in all escape routes, rooms which open onto escape routes & high risk or fire hazard areas of the protected premises".

Examples – Hotels, workspaces with multiple floors

Category "L3" system "manual detection at defined positions & automatic detection in all escape routes & rooms which open onto escape routes of the protected premises".

Examples – Small residential care homes.

Category "L4" system "manual detection at defined positions & automatic detection in all escape routes of the protected premises".

Examples – Buildings in which fire could rapidly spread from unoccupied area and prejudice means of escape routes.

Category "L5" system "manual detection at defined positions & automatic detection in areas designed to satisfy a specific fire safety objective of the protected premises".

Examples - Building with inner rooms where escape would mean passing through another room to get to fire escape route.

Category P systems are for the protection of property.

Category "P1" – automatic fire detection fitted in all areas of the building.

Category "P2" - automatic fire detection fitted in defined areas of the building.

Examples – Unoccupied premises with high value – bonded warehouse/ attics / insurance requirements.

## Annex 10 - Warning – means of alert.

Sounders are installed on most systems. To comply with The Disability Discrimination Act it should be a consideration to fit visual warning devices and other devices such as vibrating pillows to alert people with hearing disabilities.

The sounders should achieve a decibel level of 65dbA or 5 dbA above any back ground noise. If the back ground noise is over 60dBA then visual warning should be considered this is usually by beacons.

Sounders generally should be fitted no further than 1 fire door away from each other and every 5 – 20 metres (depending on the type of building) but this is totally open to design consideration such as building size and material of the structure of building which will all affect the spacing of sounders.

For Hotels, Schools, multi-level buildings, hospitals and other complex or high occupancy buildings then phased evacuation or speech alarms may be considered.