

# Carrying Out and Recording a Fire Risk Assessment

This document provides information which appropriate persons (or those carrying out a fire risk assessment on their behalf) may find helpful when completing and recording their risk assessment.

The Fire and Rescue Services (NI) Order 2006 and the Fire Safety Regulations (NI) 2010 replace previous fire safety legislation. The legislation places responsibilities on employers and any other person(s) with control of premises to assess the risk of harm from fire and to put in place suitable fire safety measures.

The outcome of each assessment will be different and there may be a variety of equally acceptable solutions depending on the individual premises. It is important to remember that fire risk assessment is a process aimed at ensuring people and premises are safe from fire - it is not just a paper exercise or a computer record. However, in certain circumstances, the appropriate person **must** record the significant findings of their fire risk assessment (including fire safety measures that have been, or will be, taken to ensure the safety of persons from fire) and any persons identified as being especially at risk from fire on the premises.

Although a written record is not required in all cases, it is a useful aid for the appropriate person (it assists with demonstrating that there is compliance with the law) and for enforcers (it gives a useful insight into the thoroughness of the process and the assumptions and decisions made). NIFRS consider that it is best practice to complete and retain a written fire risk assessment in **all** cases.

When carrying out a fire risk assessment, sector-specific premises guidance documents are available to download free from the Guidance Documents section of fireSAFE at [www.nifrs.org](http://www.nifrs.org). These documents are referred to in the specimen blank risk assessment record sheets (which are also available on the NIFRS website).

## KNOWLEDGE AND EXPERIENCE REQUIRED

Each appropriate person must consider his or her own circumstances and capabilities in respect of the risk assessment process. Nobody knows as much about the business/activities as the owner/occupier but if they are not confident in their own ability to complete the fire risk assessment, then they can arrange for a suitably qualified or experienced person to complete the assessment on their behalf.

## HAZARDS AND RISKS

For the purpose of fire risk assessment, a **hazard** is a situation that can give rise to a fire. **Risk** has two components: the likelihood that a fire may occur; and the potential for a fire to cause death or injury, ie, consequence. Both of these components should be considered in any fire risk assessment.

### The aims of a fire risk assessment are:

- To identify hazards and to reduce the risk of those hazards causing harm to as low as is reasonably practicable; and
- To determine what fire safety measures and management policies are necessary to ensure the safety of people in the building should fire occur.

### There are five steps in the assessment process

- Step 1** Identify fire hazards.
- Step 2** Identify people at risk.
- Step 3** Evaluate the risk and decide if existing fire safety measures are adequate.
- Step 4** Record fire safety risk assessment information.
- Step 5** Review of fire safety risk assessment.

## RECORDING

The amount of information recorded is likely to be influenced by the life risk in the premises; the complexity of the premises; the activities undertaken; and the existing fire safety measures. For example, the records required for premises such as a Care Home providing sleeping accommodation for vulnerable persons should be much greater than that required for a small office.

Specimen blank risk assessment record sheets and examples of completed fire risk assessment records designed to assist the appropriate person are available on the NIFRS website. They are not intended to be models of best practice: they are intended to show examples of the level of detail that may be recorded.

## GETTING STARTED

Walk around your premises. Look at them from a fire risk point of view.

### Step 1

Identify hazards and how people could be harmed, eg, by being overcome or trapped by fire or smoke, burned, unable to escape due to locked fire exit doors, etc.

### Step 2

Who could be harmed? Consider the risk to people, particularly any vulnerable groups such as young persons, the elderly or visitors unfamiliar with the premises.

### Step 3

What existing fire safety measures are provided? Compare existing fire safety measures against standards contained in the sector-specific premises guidance documents, available on the NIFRS website, and decide whether your existing fire safety measures for the premises are adequate or are additional measures necessary?

### Step 4

Record the significant findings of your fire risk assessment. Prepare an action plan, prioritise actions and allocate deadlines and responsibilities for implementation.

### Step 5

Make arrangements for regular review of the fire risk assessment.

The following information may assist you in the completion and recording of your fire risk assessment and action plan.

## STEP 1 Identification of fire hazards

Look carefully at how people could be harmed. When you work in a place every day it is easy to overlook some hazards. The following are typical examples of fire hazards you may identify. Remember **ignition sources** are sources of heat that can become hot enough to ignite material found in the premises. Anything that burns is a **source of fuel** for a fire. This applies to contents, fixtures and fittings, building structure and to wall and ceiling linings. How **ignition sources, sources of fuel and sources of oxygen** (usually present in the air around us) contribute to the spread of fire should be identified.

The following questions may be helpful in identifying fire hazards in your premises but it should be noted that the list is not intended to be exhaustive.

Sources of ignition	YES	NO
Do any work activities involve hot work such as incinerators, welding, flame cutting, cooking, the use of industrial ovens, heating appliances?		
Are radiant bar or open flame fires/heaters used?		
Are other heat sources such as light bulbs or lamps situated close to combustible materials?		
Are multi-point adaptors or trailing socket extension leads used in conjunction with electrical sockets and appliances?		
Are there any known faults in electrical circuits, fittings or appliances?		
Is there any evidence of smoking in the premises?		
Are candles or other naked flame sources used in the premises?		
Is there any evidence of 'near misses' such as burn/discolouration/scorch marks on walls or fittings such as electrical sockets/plugs?		
Is deliberate fire setting a potential problem?		
Are there any other potential ignition sources other than those identified above?		

If you have answered **yes** to any of the above and any sources of ignition have been identified, decide what measures are necessary to reduce or eliminate the fire risk and **record details at Step1 on your Fire Risk Assessment Form.**

## Points for consideration

The actions listed below could be considered to reduce the fire risk. The list is not comprehensive but is intended to give guidance. You may identify other measures to reduce the risk.

Eliminate or replace hot work processes with processes that do not use heat/flame.

If hot work processes cannot be changed consider a hot work permit system.

Use replacement forms of heating, not reliant on naked flames, etc.

Ensure no heat source comes into direct contact with stored goods, curtains, etc.

Consider the effect of radiated heat and proximity of heat sources to combustible materials.

Install additional electrical sockets and protective devices such as residual circuit devices.

Investigate electrical faults and initiate repair works.

Prevent smoking on the premises.

Provide suitable external facilities for use by smokers.

Prohibit naked flame sources, eg, candles.

Investigate 'near misses' and implement suitable preventative measures.

Deliberate fire setting - consider issues such as access to premises/site for all persons, positioning of waste skips, other external storage and proximity of vehicle parking to buildings.

Ensure that any electrical and mechanical equipment installed is used, maintained and protected in accordance with manufacturer's instructions.

If any additional sources of ignition are identified implement adequate measures to control or eliminate them.

**Record any action to be taken at Step 4 on your Fire Risk Assessment Form.**

The following questions may be helpful in identifying sources of fuel and oxygen in your premises but it should be noted that the list is not intended to be exhaustive.

Sources of fuel and oxygen	YES	NO
Are combustible materials such as clothing, paper, plastics, textiles, foam materials, upholstered furniture or other soft furnishing materials stored or used in the premises?		
Does upholstered furniture within the premises comply with the Furniture and Furnishing (Fire Safety) Regulations 1988?		
Is any upholstered furniture damaged with internal filling exposed?		
Are there excessive amounts of loose papers or similar materials on notice boards or walls of escape routes?		
Are combustible materials stored in escape routes?		
With the exception of normal decorative wallpapers are walls or ceilings, particularly on escape routes, covered with combustible materials such as carpet or polystyrene tiles, hardboard, chipboard, plastic sheet materials?		
Are any flammables such as white spirit, turpentine, methylated spirit, paraffin, petrol, adhesives, disposable cigarette lighters, cooking oils, chemical cleaners, plastics, video/film tape, etc, stored or used on the premises?		
Are compressed gas cylinders, eg, oxygen, air, acetylene, stored or used in the premises?		
Are liquefied petroleum gas (LPG) cylinders, eg, butane, propane, stored or used in the premises?		
Are there excessive quantities of waste materials from work processes particularly when finely divided such as shredded paper, wood shavings, off cuts and dust?		
Do the premises have any form of air conditioning, air handling or ventilation system that could provide additional air/oxygen to a fire?		
Other than normal openings are there other means to allow air/oxygen to enter the building such as holes in walls creating draughts?		
Are there any other potential ignition sources other than those identified above?		
<p>If you have answered <b>yes</b> to any of the above and <b>sources of fuel and oxygen</b> have been identified, decide what measures are necessary to reduce or eliminate the fire risk and <b>record details at Step1 on your Fire Risk Assessment Form.</b></p>		

## Points for consideration

The actions listed below could be considered to reduce the fire risk. The list is not comprehensive but is intended to give guidance. You may identify other measures to reduce the risk.

If possible use non-combustible materials for work processes.

Store combustible materials well away from ignition sources or in fire resisting stores.

Ensure good housekeeping measures are maintained.

Replace non-compliant furniture with compliant furniture.

Repair or replace damaged furniture.

Remove notice boards with excessive quantities of paper or other similar materials from escape routes.

Prohibit storage in escape routes.

Remove and replace combustible wall linings and replace with non-combustible alternatives, eg, plasterboard or hard plaster finish.

Where possible replace flammable liquids with non-flammable alternatives.

Use and dispose of flammable liquids and gases in accordance with manufacturer's and Health and Safety Executive guidance.

Minimum quantities of flammable materials required for work in hand to be used at any time.

Infill all potential sources of air/oxygen, eg, holes/openings in walls.

Ensure that air conditioning, ventilation and air-handling systems are shut down following discovery of a fire.

Provide efficient waste disposal arrangements.

If other sources of fuel and oxygen, other than those identified, exist implement relevant precautionary measures.

**Record any action to be taken at Step 4 on your Fire Risk Assessment Form.**

## STEP 2 Identify people at risk

For each hazard you identify, you must consider who might be harmed; it will help you identify the best way of managing the risk. The type of persons at risk can vary greatly from premises to premises. In some premises, such as a factory, the workforce may be predominantly physically fit. In other premises such as in a shop or public office, there may be a very different range of people at risk such as infants, other young children, elderly or disabled people.

The following questions may be helpful in identifying people at risk in your premises but it should be noted that the list is not intended to be exhaustive.

Identification of people at risk	YES	NO
Is sleeping accommodation provided on the premises:		
Are childminding or crèche type facilities provided in the premises?		
Are people employed on the premises?		
Can members of the public access the premises e.g. customers in shops?		
Do disabled people work in, or visit the premises?		
Do employees from other organisations visit the premises e.g. maintenance contractors?		
Are the premises multi-occupied?		
Do any persons under the age of 18 work in, or regularly frequent, the premises?		
Are people who visit the premises likely to be unfamiliar with escape routes?		
Does anyone including employees and contractors work alone in remote areas within the premises/building or work 'out of hours'?		
Does anyone work in a high fire risk area?		
Is there any other category of person not listed above who should be considered?		

If you have answered **yes** to any of the above and people are at risk, **record details at Step2 on your Fire Risk Assessment Form.**

## STEP 3 Evaluation of risk and assessment of adequacy of existing fire safety measures

The chances of fire starting will be low if there are few ignition sources and if combustible materials are kept away from them. In general, fire is likely to start in one of three ways:

- **Accidentally**, such as when smoking materials are not properly extinguished.
- **By act or omission**, such as when electrical equipment is not properly maintained or when waste is allowed to accumulate near to a heat source.
- **Deliberately**, such as intentional setting fire to external storage or rubbish bins.

Premises should be critically examined to identify any potential accidents, any acts or omissions that might allow a fire to start and to evaluate risk. This should include situations that may present an opportunity for deliberate ignition. Having also considered the people likely to be at risk and the likelihood of fire occurring, it is important to make an **assessment of the adequacy of existing fire safety measures** and the need for additional measures.

The following questions may be helpful in evaluating risk in your premises but it should be noted that the list is not intended to be exhaustive.

Evaluation of risk	YES	NO
Could employees or others cause a fire due to a lack of fire safety knowledge?		
Could combustible materials be knocked or fall over or be pushed against an ignition source?		
Could any vehicle on fire, parked too close to buildings, cause a fire to spread to the building?		
Could a fire start due to lack of maintenance of electrical equipment, or because poor housekeeping allows a build up of waste near to an ignition/heat source?		
Could a fire start because of a failure to extinguish smoking materials?		
Could a fire be started deliberately in rubbish lying against an external wall or in a waste skip placed too close to any building?		
In a multi-occupied or multi-owned building could the actions of other occupants or owners jeopardise the fire safety of persons?		
Could persons be unaware of the outbreak of any fire?		
Could a fire on a lower floor affect people on upper floors?		
Could fires develop in unoccupied areas?		
Could fire and smoke spread into escape routes due to poor building design or construction?		
Could fire and smoke spread due to a lack of self-closing devices on doors or by self-closing doors being wedged open?		

If you have answered **yes** to any of the above, decide what measures are necessary to reduce or eliminate the fire risk and **record details at Step 3 on your Fire Risk Assessment Form.**

## Points for consideration

The actions listed below could be considered to reduce the fire risk. The list is not comprehensive but is intended to give guidance. You may identify other measures to reduce the risk.

Ensure employees and others such as external contractors and visitors are fully aware of management's fire safety policy, work processes and procedures.

Enforce a no smoking policy in the premises.

Provide smoking facilities and disposal facilities external to the building for employees etc.

Prohibit vehicles parking close to any building or externally stored combustible materials.

Prohibit the storage of waste materials or combustible stored goods directly against buildings.

Prohibit the positioning of waste skips within three metres of buildings.

Implement a maintenance programme for all machinery and electrical equipment used on the premises.

Make sure no combustible materials can accidentally come into contact with ignition sources.

Ensure good housekeeping and storage arrangements.

Implement a cleaning programme for all areas and also an efficient waste removal and disposal system.

Provide relevant safety information/training to employees and any other relevant persons such as external contractors involved in hot work.

Do not allow unrestricted access to the premises.

Consider security issues and the ease with which someone could deliberately start a fire.

Liaise with all other occupants/owners/persons with control in the building to ensure co-operation and co-ordination of activities in relation to fire safety.

Provide automatic fire detectors in unoccupied areas.

Prohibit the use of wedges in fire doors.

Enclose staircases with fire resisting materials.

Provide self-closing devices on fire doors.

Infill any openings that would allow the spread of fire into escape routes.

Provide a means of giving warning of fire.

**Record any action to be taken at Step 4 on your Fire Risk Assessment Form.**

The following questions may be helpful in assessing the adequacy of fire safety measures in your premises but it should be noted that the list is not intended to be exhaustive.

<b>Assessment of adequacy of existing fire safety measures</b>	<b>YES</b>	<b>NO</b>
Could a fire on a lower floor affect the escape routes for people on upper floors especially where only one escape route is provided?		
Are there any doors across escape routes that cannot be easily opened without the use of a key or similar device?		
Could fire/smoke generally spread easily through holes, ventilators, service ducts, vertical shafts or other openings in the building as a whole?		
Could fire/smoke spread into escape routes such as enclosed fire escape staircases via doors not fitted with self-closing devices, damaged doors, self-closing fire doors wedged in the open position or sticking on floor coverings etc?		
Do any exits lead to an enclosed yard with no means of exit from the yard?		
Are fire exit routes used for or blocked by storage materials?		
Are any fire exit doors kept locked?		
Does any room or storey capable of holding 60 persons or more have only one fire exit?		
Do any doors from a room or storey capable of holding 60 persons or more open inwards against the direction of escape?		
Are some persons unable to reach a safe place in the open air outside the building or a door to a protected route, such as an enclosed fire escape staircase, within their travel distance limits?		
Do any escape routes require illumination if mains power to normal lighting failed and insufficient borrowed light from other sources (such as streetlights) is unavailable?		
Is there a need to provide escape route signs, including some with directional arrows, to clearly identify escape routes and final exit doors?		
Could a fire develop unnoticed in any part of the premises with the possibility that any category of person sleeping, working or visiting the premises would be unaware of such a fire?		
Are persons within the premises expected to tackle a small fire if it is safe to do so? If so, have they still to be trained?		
Have you still to prepare an emergency fire action plan to ensure the safe evacuation of persons from the premises?		
Have you still to arrange tests of fire safety related equipment/systems such as fire alarm, emergency lighting, fire extinguishers, fire drills staff training at suitable intervals?		
Is the building within which the premises are located multi-occupied or multi-owned?		
Have evacuation procedures for 'out of hour' workers or those in isolated areas e.g. cleaners and external contractors, still to be considered?		

If you have answered yes to any of the above, decide what measures are necessary to reduce or eliminate the fire risk and **record details at Step 3 on your Fire Risk Assessment Form.**

## Points for consideration

The actions listed below could be considered to reduce the fire risk. The list is not comprehensive but is intended to give guidance. You may identify other measures to reduce the risk.

Enclose fire escape routes including staircases with fire resisting construction including self-closing fire resisting doors.

Ensure all doors across escape routes can be easily opened without the need for the use of a key or similar device.

Implement appropriate measures to reduce fire spread.

Ensure escape routes and their structural protection are adequately maintained, eg, self-closing fire doors should not be wedged open.

Make sure no escape routes lead into enclosed yards unless there is a suitable exit from the yard.

Don't allow storage in escape routes.

Ensure fire exit doors are capable of being immediately opened at any time during an emergency. They must not be obstructed or locked at any time people are on the premises.

Provide a second escape route from rooms with more than 60 persons; alternatively limit numbers to less than 60.

Doors across escape routes from any room or storey with a capacity of 60 persons or more should open in the direction of escape.

Provide additional escape routes or other means to reduce travel distance to appropriate levels.

Provide emergency lighting on escape routes, including externally, eg, an external unlit passageway or yard area through which persons have to pass to make their escape.

Provide sufficient escape route signs, including some with directional arrows if required, to clearly identify the route along which persons at every level in the building must travel to make their way to a final exit.

Unless premises comprise a single room in open view to all, when a shouted warning of fire might be sufficient, consideration must be given to the provision of a suitable fire alarm system. The system might incorporate automatic smoke/fire detection and warning suitable for the type of risk present, eg, there is a greater risk present in premises providing sleeping accommodation. It may be necessary to interlink the fire alarm with those of other occupants in a multi-occupied/owned building.

Provide and site suitable fire extinguishers throughout the premises. Fire extinguishers should generally be grouped together at fire points located adjacent to storey exits.

Provide suitable training for all persons expected to use fire extinguishers.

Prepare a suitable emergency fire action plan for the premises.

Carry out periodic fire drills appropriate to prevailing circumstances and provide regular training on fire safety issues for employees.

Provide suitable fire action notices in sleeping accommodation, on notice boards and other areas where employees and others may congregate.

Ensure that records of the testing and maintenance of relevant equipment and of fire drills and training are maintained. Records should be kept available on the premises for inspection by any authorised persons.

Liaise with all other occupants/owners to ensure that fire safety compliance issues, such as interlinking individual fire warning systems, protection of common escape routes, etc, are adequately dealt with.

For employees under the age of 18, ensure that the fire safety risk assessment specifically takes account of any additional risks due to their immaturity and potential lack of awareness of danger.

Ensure arrangements are in place to make employees of other organisations such as maintenance personnel aware of fire dangers and safety procedures.

If employees need to implement an emergency procedure, ensure it is provided in writing and they are aware of their responsibilities and have been trained.

Ensure a sufficient number of people are available to implement any emergency procedure.

Ensure evacuation arrangements are made for unstaffed overnight periods, eg, provide occupants with verbal and/or written information about fire warning and evacuation arrangements.

**Record any action to be taken at Step 4 on your Fire Risk Assessment Form.**

## STEP 4 Record Fire Risk Assessment Information

Having carried out a fire risk assessment for the premises, the findings **must**, in some circumstances be recorded, including any action taken or action still to be taken. Fire safety legislation requires information to be recorded where five or more employees are employed (whether they are on site or not) or the premises are subject to licensing or registration or an 'Alterations Notice' has been issued requiring this.

The assessment record should be retained and made available, on request, to the enforcing authority. Further information regarding recording is available in the sector specific, premises fire safety guides available on the NIFRS website.

NIFRS consider that it is best practice to complete and retain a written fire risk assessment in **all** cases.

## STEP 5 Review of Fire Risk Assessment

Your fire risk assessment should be reviewed regularly. If the findings of the assessment are considered to be no longer valid or there has been a significant change to the premises, or the organisation of the work undertaken has affected the fire risk or the fire safety measures, the assessment should be reviewed.

Situations which might prompt a review include:

A change in the number of people present or the characteristics of the occupants including the presence of people with some form of disability;

Changes to work procedures, including the introduction of new equipment;

Alterations to the building, including the internal layout;

Significant changes to furniture and fixings;

Significant changes to displays or quantities of stock;

The introduction or increase in the storage of hazardous substances; or

Becoming aware of shortcomings in fire safety measures or potential improvements.