Insurers' guidance on fire safety at work

Fires at work have three main causes:

- they are started deliberately;
- they occur because people are not alert to fire hazards; and
- they occur because people are careless of fire hazards.

This booklet contains a number of checklists covering vital fire prevention topics and will help prevent fires starting in the workplace





Fire Protection Association

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1. CHECKLISTS FOR WORKPLACE FIRE SAFETY

All staff have their part to play in preventing fire in the workplace. The checklists in this booklet identify key questions about fire safety and will assist in identifying many of the issues that need to be considered as part of a fire risk assessment, which is a legal requirement for virtually all workplaces under the Regulatory Reform (Fire Safety) Order introduced in 2006.

If the answer to any question is 'No', action should be taken to put matters right.

Bear in mind that fire occurs when a source of ignition comes into contact with combustible material. Control all sources of ignition and you will greatly reduce the danger of fire.

Good housekeeping: keep it clean

Waste and rubbish is a breeding ground for fire. Process waste and general refuse should not be allowed to accumulate. Oily rags are easily ignited and may even ignite spontaneously. Most packing materials when loose can be ignited easily and a fire will spread through them very rapidly.

	Yes	No
Are the staff encouraged to tidy their personal work places?		
Are the premises kept clear of all kinds of refuse and process waste?		
Are metal receptacles with fitting lids available for waste materials such as floor sweepings, with separate receptacles for specially dangerous materials such as flammable liquids and oily rags?		
Is all waste removed from the building at the end of every working day or more frequently if necessary?		
Are cupboards, lift shafts, spaces under benches, gratings, conveyor belts and areas behind radiators kept free from rubbish and dust?		
Are areas in and around the building kept free from accumulated packing materials, such as cartons, wood shavings and paper?		
When not in use, are workers' clothes and overalls kept in special places provided for the purpose away from combustible material and sources of heat?		

Watch that store

More big fires start in storage areas than in production areas. Badly stored goods may help to spread fire, prevent firefighters gaining access to the source of a fire or render useless the operation of sprinkler heads. Goods tidily stacked with wide gangways may help to check the growth of fire.

	Yes	No
Are storage areas separate from		
other parts of the premises?		
Are the premises kept clear of all		
kinds of refuse and process waste?		
Are there clear spaces around		
stacks of stored materials and		
adequate gangways between		
them?		
Are stocks of material arranged so		
that they do not obstruct sprinkler		
heads or automatic fire detectors?		
Are storage areas visited regularly		
and especially at the end of the		
working day?		

Smoking

Smoking is a notorious fire risk and prohibited in the workplace. However, suitable control measures are still required.

	Yes	No
Are specially designated		
areas areas at least 10m from		
buildings, stores or combustible		
materials/ waste provided?		
In these locations, is there		
an abundant supply of non-		
combustible receptacles for		
cigarette ends as distinct from		
containers for waste?		

It won't run for ever

Inadequately maintained machines are liable to cause fire. The overheating of bearings, due to insufficient lubrication or to the presence of dust, and heat caused by friction are common causes of fire. Frequent inspection and regular maintenance are the remedy. Good layout of machinery will lessen the risk and make the general tidiness of the premises easier to maintain.

Is all machinery and equipment regularly and frequently inspected and maintained?

	Yes	No
Do such inspections check:		
• that the machinery is kept clean?		
 that bearings are properly lubricated? 		
• that driving belts are correctly		
tensioned?		
Is machinery so arranged as		
to prevent congestion among		
machines or among machines and		
materials?		
Are drip trays provided and have		
other steps been taken to prevent		
floors and walls becoming soaked		
with oil?		

Flammable liquids - beware

Dangerous chemicals and explosives present problems of their own but stocks of paint, lacquer, flammable solvents and thinners, a common feature of all industrial premises, are a less obvious hazard. Negligence in handling small quantities of flammable liquids is a frequent cause of fires and injuries.

	Yes	No
Are stocks of paint, lacquer,		
flammable solvents, thinners and		
other flammable liquids stored in		
detached single-storey buildings		
of non-combustible construction		
which are used for no other		
purpose?		
Are flammable liquids carried about		
in safety containers and not in open		
tins, jam jars, buckets etc?		
Are flammable liquids handled only		
at a safe distance from possible		
sources of ignition?		

	Yes	No
Are suitable reduced-sparking tools provided for use in places where flammable vapours may be present?		
Are all flammable liquids in use on the premises listed, with their localities?		
Is there adequate ventilation where flammable liquids are stored or used?		
Are only sufficient quantities of flammable liquids brought into the workplace for the day's requirements?		
Are all flammable liquids returned to store at the end of the working day?		

LPG cylinders

	Yes	No
Are cylinders stored safely, preferably in a fenced compound outdoors at least 2m away from any boundary fences?		
Is the store used only for cylinder storage?		
Are empty cylinders treated in the same manner, but kept separate and labelled 'empty'?		
Are permanent warning notices prominently displayed prohibiting smoking and naked lights?		
Are cylinders stored with their valves uppermost?		

Heating and lighting dangers

Heating and lighting systems that are inefficiently maintained or inadequately safeguarded present risks. Many fires result from electrical faults or misuse.

	Yes	No
Are heating appliances at a safe		
distance from woodwork and		
combustible building boards?		
Is care taken that nothing is placed		
or left on heaters?		
Are heating appliances fixed, not		
portable?		

	Yes	No	
If portable heaters have to be used are they securely guarded and placed or fixed so that they cannot			Are trees pruned and other measures taken to deny access to roofs?
Are glue kettles, crucibles, pressing irons, soldering irons and all similar appliances provided with stands and guards keeping them clear of benches, tables and surrounding materials?			Are the grounds surrounding the premises kept free of combustible vegetation by regular grass cutting and scrub clearance? When building repairs or alterations are undertaken are proper fire precautions taken for operations
Are defects in electrical equipment reported and remedied at once?			involving blowlamps, soldering irons, cutting and welding equipment and the heating of bitumen?
periodically tested and inspected			Whenever workmen are carrying
Are all portable electrical appliances regularly inspected and tested?			adequate supervision to ensure
Are the indicator warning lamps on appliances all working?			that any temporary arrangements they make for heating and lighting
Is the use of extension leads kept to a minimum and care taken not to overload those that are in use?			are completely safe and that safe receptacles are provided where smoking is permitted?
Is the use of portable lead lamps kept to a minimum and are those used provided with strong wire			Is the need for hot work always carefully assessed before it is undertaken?
guards'? Are stored goods kept well clear of light bulbs?			operation? Are areas where hot work has been
Are the main switches of all electrical circuits in the 'off' position when equipment is not in use?			undertaken inspected up to 60 minutes after completion of work?
			•

Maintenance and security

The maintenance of buildings is an essential part of fire protection. Walls and fences needing repair and gates and windows that will not fasten properly give admission to children and other intruders. It is advisable to operate a permit to work system if contractors are on the premises and a hot work permit system for operations such as welding which employ flames or heat.

	Yes	No
Is every point of entry really secure		
against intruders?		
After close down of operations	_	_
are all doors, windows and gates		
checked and secure?		
Is the building regularly inspected		
for damage to windows, roof and		
walls?		

Last thing at night

Most big fires break out at night when everyone has gone home. But often they originate during working hours.

Yes

No

	Yes	No
Do you have a system of checks		
last thing at night to ensure that		
equipment is safely shut down, no		
cigarettes are left smouldering, fire		
doors are closed etc?		

Planning for emergency

However good your fire prevention some fires are bound to break out. Make sure they are effectively controlled and that employees know the right action to take. Unnecessary damage is often caused in a fire as a result of water used for firefighting.

	Yes	No
Is there a member of management staff with overall fire safety responsibility?		
Does every employee know exactly what to do if a fire should break out?		
Do you have a procedure for calling the fire brigade?		
Have you provided first-aid firefighting equipment and is it properly maintained?		
Are staff trained in the use of extinguishers/hose reels?		
Is there an automatic fire detection system?		
ls there an automatic sprinkler system?		
If there is not an automatic fire detection or sprinkler system, are the premises patrolled when closed?		
Is the sprinkler installation only shut down during essential servicing and then with the full knowledge of your insurers?		
Are goods stored clear of the floor?		
Are floors impervious to water and are ramps or sills provided at all openings to prevent water flowing to other parts of the building?		
Are drains and scuppers provided and are they kept unobstructed?		
Are fire and smoke doors kept closed whenever possible and always after working hours?		
Are notices informing staff what to do in the event of fire prominently displayed?		
Are duplicate copies of important		
Have contingency plans been drawn up to enable production to recommence with the minimum of delay in the event of a fire occurring?		

> 2. ARSON

Arson is a serious threat to homes, shops, offices, storage buildings, factories, hotels, hospitals, churches and schools. All buildings are at risk. Much of the arson is associated with vandalism and burglaries. If small fires have been started on your own or neighbouring premises they could be a warning of worse to come - inform the police and the fire brigade.

Security

- Keep the number of entry points to the minimum compatible with safe means of escape in case of fire;
- perimeter fences, walls and gates need to be strong and high enough to keep out intruders;
- doors and windows must be in good repair and locked when not in use;
- locks and padlocks must be of good quality;
- keys must be distributed only to a restricted number of people;
- gaps under doors must be kept small;
- letter boxes should have metal containers fitted on the inside;
- stored material of any kind should be kept away from perimeter walls or fences where it could be set alight.

Employees

- Warn staff about the threat from arson;
- they should challenge anyone who should not be on the premises and report any suspicious activities;
- vet new employees;
- keep an eye on contractors.

Visitors

• Control the access and movement of visitors.

Fire protection

• Fixed and portable firefighting equipment must be regularly maintained and protected against sabotage attempts.

End-of-day checks

Ensure that:

- the building is secured by a named individual at the end of each working day;
- doors and windows are secure;
- no combustible material is left lying around;

- no unauthorised people are on the premises;
- alarms are switched on;
- external lighting is switched on;
- flammable liquids are locked in the proper store.

> 3. IN THE EVENT OF FIRE AT WORK

If fire breaks out at work:

- operate the nearest fire alarm;
- ensure the fire brigade is called;
- attack the fire with a suitable extinguisher if it is safe to do so;
- evacuate the building;
- report to the assembly point;
- do not re-enter the building until informed it is safe to do so.

Instructions should be given to maintenance staff, setting out the action they should take in the event of fire. The instructions should include bringing all lifts to ground level and stopping them, and shutting down all services not essential to the escape of occupants or likely to be required by the fire brigade. Lighting should be left on.

> 4. FIRE DRILLS

To ensure that all employees know how to leave the premises in the event of fire, repeated practice is desirable. Fire drills should be held at regular intervals and preferably twice a year. Employees should be trained:

- to recognise the fire alarm when it sounds;
- to act in accordance with the evacuation plan;
- to leave the premises quickly by the nearest possible route;
- to go to the designated assembly point;
- to assemble for roll call.

Departmental managers (or their equivalent) should make sure that their departments are completely evacuated.

Management should evaluate performances during fire drills and in particular should investigate the causes of any delays in evacuation and take steps to make sure delays are eliminated.

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