

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;
- 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

F|P|A

Fire Protection Association

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 the fire risk assessment. 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?	<input type="checkbox"/>	<input type="checkbox"/>
• Are the premises kept clear of all kinds of refuse and process waste?	<input type="checkbox"/>	<input type="checkbox"/>
• 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?	<input type="checkbox"/>	<input type="checkbox"/>
• Is all waste removed from the building at the end of every working day or more frequently if necessary?	<input type="checkbox"/>	<input type="checkbox"/>
• Are cupboards, lift shafts, spaces under benches, gratings, conveyor belts and areas behind radiators kept free from rubbish and dust?	<input type="checkbox"/>	<input type="checkbox"/>
• Are areas in and around the building kept free from accumulated packing materials, such as cartons, wood shavings and paper?	<input type="checkbox"/>	<input type="checkbox"/>
• 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?	<input type="checkbox"/>	<input type="checkbox"/>

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.

• Are storage areas separate from other parts of the premises?	<input type="checkbox"/>	<input type="checkbox"/>
• Are storage places accessible to firefighters?	<input type="checkbox"/>	<input type="checkbox"/>
• Are there clear spaces around stacks of stored materials and adequate gangways between them?	<input type="checkbox"/>	<input type="checkbox"/>
• Are stocks of material arranged so that they do not obstruct sprinkler heads or automatic fire detectors?	<input type="checkbox"/>	<input type="checkbox"/>
• Are storage areas visited regularly and especially at the end of the working day?	<input type="checkbox"/>	<input type="checkbox"/>

Smoking

Smoking is a notorious fire risk.

	YES	NO
• Is it prohibited in all but specially designated areas?	<input type="checkbox"/>	<input type="checkbox"/>
• Where smoking is permitted is there an abundant supply of non-combustible receptacles for cigarette ends as distinct from containers for waste?	<input type="checkbox"/>	<input type="checkbox"/>

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?

• Do such inspections check:		
- that the machinery is kept clean?	<input type="checkbox"/>	<input type="checkbox"/>
- that bearings are properly lubricated?	<input type="checkbox"/>	<input type="checkbox"/>
- that driving belts are correctly tensioned?	<input type="checkbox"/>	<input type="checkbox"/>
• Is machinery so arranged as to prevent congestion among machines or among machines and materials?	<input type="checkbox"/>	<input type="checkbox"/>
• Are drip trays provided and have other steps been taken to prevent floors and walls becoming soaked with oil?	<input type="checkbox"/>	<input type="checkbox"/>

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.

• 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?	<input type="checkbox"/>	<input type="checkbox"/>
• Are flammable liquids carried about in safety containers and not in open tins, jam jars, buckets etc?	<input type="checkbox"/>	<input type="checkbox"/>
• Are flammable liquids handled only at a safe distance from possible sources of ignition?	<input type="checkbox"/>	<input type="checkbox"/>
• Are suitable reduced-sparking tools provided for use in places where flammable vapours may be present?	<input type="checkbox"/>	<input type="checkbox"/>
• Are all flammable liquids in use on the premises listed, with their localities?	<input type="checkbox"/>	<input type="checkbox"/>
• Is there adequate ventilation where flammable liquids are stored or used?	<input type="checkbox"/>	<input type="checkbox"/>
• Are only sufficient quantities of flammable liquids brought into the workplace for the day's requirements?	<input type="checkbox"/>	<input type="checkbox"/>
• Are all flammable liquids returned to store at the end of the working day?	<input type="checkbox"/>	<input type="checkbox"/>

LPG cylinders

	YES	NO
• Are liquefied petroleum gas (LPG) cylinders stored safely, preferably in a fenced compound outdoors at least 2m away from any boundary fences?	<input type="checkbox"/>	<input type="checkbox"/>
• Is the store used only for cylinder storage?	<input type="checkbox"/>	<input type="checkbox"/>
• Are empty cylinders treated in the same manner, but kept separate and labelled 'empty'?	<input type="checkbox"/>	<input type="checkbox"/>
• Are permanent warning notices prominently displayed prohibiting smoking and naked lights?	<input type="checkbox"/>	<input type="checkbox"/>
• Are cylinders stored with their valves uppermost?	<input type="checkbox"/>	<input type="checkbox"/>

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.

• Are heating appliances at a safe distance from woodwork and combustible building boards?	<input type="checkbox"/>	<input type="checkbox"/>
• Is care taken that nothing is placed or left on heaters?	<input type="checkbox"/>	<input type="checkbox"/>
• Are heating appliances fixed, not portable?	<input type="checkbox"/>	<input type="checkbox"/>
• If portable heaters have to be used are they securely guarded and placed or fixed so that they cannot be knocked over?	<input type="checkbox"/>	<input type="checkbox"/>
• 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?	<input type="checkbox"/>	<input type="checkbox"/>
• Are defects in electrical equipment reported and remedied at once?	<input type="checkbox"/>	<input type="checkbox"/>
• Are electrical installations periodically tested and inspected	<input type="checkbox"/>	<input type="checkbox"/>
• Are all portable electrical appliances regularly inspected and tested?	<input type="checkbox"/>	<input type="checkbox"/>
• Are the indicator warning lamps on appliances all working?	<input type="checkbox"/>	<input type="checkbox"/>
• Is the use of extension leads kept to a minimum and care taken not to overload those that are in use?	<input type="checkbox"/>	<input type="checkbox"/>
• Is the use of portable lead lamps kept to a minimum and are those used provided with strong wire guards?	<input type="checkbox"/>	<input type="checkbox"/>
• Are stored goods kept well clear of light bulbs?	<input type="checkbox"/>	<input type="checkbox"/>
• Are the main switches of all electrical circuits in the 'off' position when equipment is not in use?	<input type="checkbox"/>	<input type="checkbox"/>

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?	<input type="checkbox"/>	<input type="checkbox"/>
• After close down of operations are all doors, windows and gates checked and secure?	<input type="checkbox"/>	<input type="checkbox"/>
• Is the building regularly inspected for damage to windows, roof and walls?	<input type="checkbox"/>	<input type="checkbox"/>
• Are trees pruned and other measures taken to deny access to roofs?	<input type="checkbox"/>	<input type="checkbox"/>
• Are the grounds surrounding the premises kept free of combustible vegetation by regular grass cutting and scrub clearance?	<input type="checkbox"/>	<input type="checkbox"/>
• When building repairs or alterations are undertaken are proper fire precautions taken for operations involving blowlamps, soldering irons, cutting and welding equipment and the heating of bitumen?	<input type="checkbox"/>	<input type="checkbox"/>
• Whenever workmen are carrying out repairs or alterations, is there adequate supervision to ensure that any temporary arrangements they make for heating and lighting are completely safe and that safe receptacles are provided where smoking is permitted?	<input type="checkbox"/>	<input type="checkbox"/>
• Is the need for hot work always carefully assessed before it is undertaken?	<input type="checkbox"/>	<input type="checkbox"/>
• Is a hot work permit system in operation?	<input type="checkbox"/>	<input type="checkbox"/>
• Are areas where hot work has been undertaken inspected up to 60 minutes after completion of work?	<input type="checkbox"/>	<input type="checkbox"/>

Last thing at night

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

• 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?	<input type="checkbox"/>	<input type="checkbox"/>
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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.

• Is there a member of management staff with overall fire safety responsibility?	<input type="checkbox"/>	<input type="checkbox"/>
• Does every employee know exactly what to do if a fire should break out?	<input type="checkbox"/>	<input type="checkbox"/>
• Do you have a procedure for calling the fire brigade?	<input type="checkbox"/>	<input type="checkbox"/>
• Have you provided first-aid firefighting equipment and is it properly maintained?	<input type="checkbox"/>	<input type="checkbox"/>
• Are staff trained in the use of extinguishers/hose reels?	<input type="checkbox"/>	<input type="checkbox"/>
• Is there an automatic fire detection system?	<input type="checkbox"/>	<input type="checkbox"/>
• Is there an automatic sprinkler system?	<input type="checkbox"/>	<input type="checkbox"/>

	YES	NO
• If there is not an automatic fire detection or sprinkler system, are the premises patrolled when closed?	<input type="checkbox"/>	<input type="checkbox"/>
• Is the sprinkler installation only shut down during essential servicing and then with the full knowledge of your insurers?	<input type="checkbox"/>	<input type="checkbox"/>
• Are goods stored clear of the floor?	<input type="checkbox"/>	<input type="checkbox"/>
• Are floors impervious to water and are ramps or sills provided at all openings to prevent water flowing to other parts of the building?	<input type="checkbox"/>	<input type="checkbox"/>
• Are drains and scuppers provided and are they kept unobstructed?	<input type="checkbox"/>	<input type="checkbox"/>
• Are fire and smoke doors kept closed whenever possible and always after working hours?	<input type="checkbox"/>	<input type="checkbox"/>
• Are notices informing staff what to do in the event of fire prominently displayed?	<input type="checkbox"/>	<input type="checkbox"/>
• Are duplicate copies of important records kept in another building?	<input type="checkbox"/>	<input type="checkbox"/>
• Have contingency plans been drawn up to enable production to recommence with the minimum of delay in the event of a fire occurring?	<input type="checkbox"/>	<input type="checkbox"/>

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.

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.

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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