



19.0 Fire Precautions



The safety advisor shall carry out a risk assessment to determine the risk of a fire occurring, the risk to people in the event of fire and the level of fire precautions required at the office, including;

- Means of detection and giving warning in case of fire.
- Means of escape.
- Means of fighting fire, e.g. portable fire extinguishers, hose reels, fire blankets.
- Training of employees in fire safety.

In deciding what measures are appropriate consideration should be given to the size and nature of the workplace, the activities carried out, equipment and substances used, the number of persons at each workplace and the proximity of external emergency services.

19.1 Fire Risk Assessments

The five steps to a fire risk assessment are;

1. Identify the fire hazards.
2. Identify the persons who may be at risk.
3. Assess the risks.
4. Eliminate the risks or introduce control measures.
5. Monitor and review the assessments.

19.2 Fire Hazards

- Sources of ignition.
- Sources of fuel.
- Sources of oxygen.



- Work processes.
- Location of people at significant risk in case of fire.
- Environmental pollution from smoke and run off water.

19.3 The Fire Triangle

Three things are needed for a fire to start;

- Fuel, e.g. paper or cardboard.
- Source of ignition, e.g. heat or spark.
- Oxygen, always present in the air.



If any one of these is missing, a fire cannot start, therefore taking steps to avoid the three coming together should reduce the chances of a fire occurring.

19.4 Evaluate Control Measures

- Means of detection and giving warning in case of fire.
- Means of escape.
- Means of fighting fire, e.g. portable fire extinguishers, hose reels, fire blankets.
- Consideration of dangerous substances.
- Taking into account any young persons.
- Training of employees in fire safety.

The Senior team shall ensure that improvements are made if the control measures are not deemed to be adequate.

19.5 Inspections And Testing

The safety Advisor shall ensure that portable fire extinguishers and hose reels are inspected and serviced annually by a competent person in accordance with the relevant national standards, e.g. BS 5306.

Fire blankets should be inspected in accordance with the manufacturer's instructions.



The call points and the operation of the system, including the sounders and any automatic door releases units shall be tested weekly using a different call point in rotation for each successive test. The safety Advisor shall ensure that an annual inspection and test of the whole system, including any automatic fire detection and automatic door release units is carried out in accordance with the relevant national standard, e.g. BS 5839.

The emergency lighting system should be tested monthly including a simulated failure of the power supply to the lighting circuits to check that all bulbs and changeover equipment are in working order.

The safety Advisor shall ensure that emergency escape routes are kept clear of obstructions at all times including an inspection of all fire doors and fire exits to ensure that they fulfil their function in case of fire and shall ensure that the fire precautions logbook is completed and records are up to date.

19.6 Review

The Fire risk assessment shall be reviewed at least annually unless there are significant changes that would necessitate an earlier review and are revised where necessary.

19.7 Control Measures

Suitable control measures shall be implemented, including;

- Ensuring combustible materials are not allowed to accumulate in the workplace.
- Eliminating sources of ignition or reducing them to as low a level as practicable.
- Providing sufficient means of escape from the building.
- Providing a means of detection and giving warning in the event of a fire.
- Testing arrangements for fire alarms and smoke detection equipment.
- Providing a means of fighting the fire.
- Inspection of portable fire extinguishers and other fire fighting equipment.
- Employees allocated duties to assist in the implementation of the procedures.
- Emergency evacuation drills and fire safety training provided.

19.8 Fire Fighting Equipment

Fire fighting equipment shall be located at suitable points throughout the building and shall be kept clear of obstructions at all times. The equipment shall be identified by a fire safety sign above it comprising of white pictograms and text on a red background or photo-luminescent signs. The equipment shall be checked at regular intervals and serviced annually by a competent engineer. Records of the inspection dates shall be kept in the fire precautions logbook.

19.9 Portable Fire Extinguishers

Portable fire extinguishers enable suitably trained people to tackle a fire in its early stages, if they can do so without putting themselves in danger.



All workplaces shall be provided with means of fighting fire for use by people in the premises. When deciding on the types of extinguisher to provide the nature of the materials likely to be found in the workplace should be taken into consideration.

19.10 Fire Classification

Fires are classified as follows:

Class A

Fires involving solid materials, usually of organic matter such as wood, paper etc.

Dealt with using water, foam or multi-purpose powder extinguishers, with water and foam considered the most suitable. The risk assessment should identify how many are needed.

Class B

Fires involving liquids or liquefiable solids such as paints, oils or fats.

It would be appropriate to provide extinguishers of foam, including multi-purpose aqueous film-forming foam (AFFF), carbon dioxide or dry powder types. Carbon dioxide extinguishers are also suitable for a fire involving electrical equipment. Halon extinguishers were banned in December 2003 and have been removed from use.

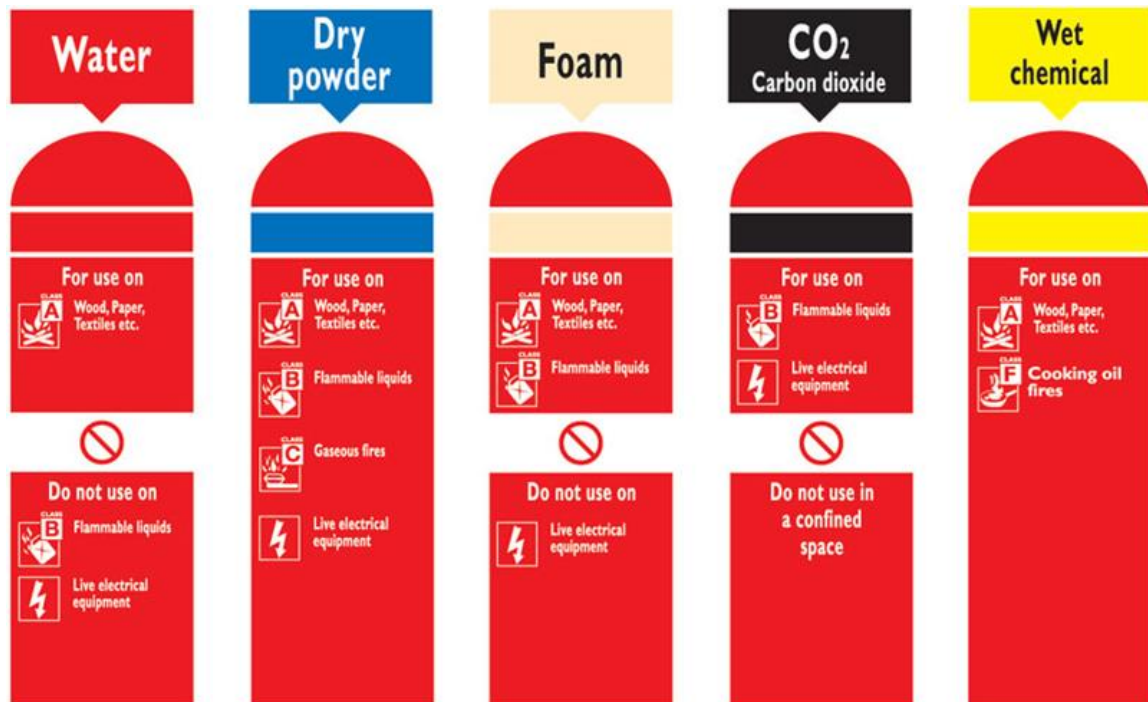
Class C

Fires involving burning gases.

Dry powder extinguishers may be used however the circumstances for their use must be considered and combined with action such as stopping the leak, to remove the risk of a subsequent explosion from the build-up of unburnt gas.

19.11 Fire Extinguishers

One water extinguisher should be provided for each 200 square metres of floor space with a minimum of two extinguishers per floor. Fire points should be sited so that it is not necessary to travel more than 30 metres from the seat of the fire to the fire extinguisher. Fire points should be sited near to the emergency exits from the building and will generally consist of a water extinguisher (or hydro spray extinguisher) and a CO2 extinguisher.



Fire fighting equipment shall also be sited in accordance with a specific class of fire risk, i.e. CO₂ extinguisher next to electrical equipment, dry powder extinguisher near to gas appliances, etc.

19.12 Emergency Lighting

The company shall ensure that emergency lighting is installed where necessary to provide illumination to escape routes, fire exits and fire fighting equipment at all premises where a sudden loss of power would present a risk.

19.13 Emergency Exits

The safety advisor and senior team shall ensure that emergency escape routes and exits are kept free of obstructions at all times to allow people to evacuate the premises quickly and safely. All escape routes should lead directly to a place of safety and have appropriate safety signs comprising of white pictograms and text on a green background. Final exit doors should open in the direction of escape.

19.14 Door Locks

While any person is in the building or part of the building for the purpose of employment, the doors of the building or part and of any room and any doors which afford a means of exit for persons in the building shall not be locked or fastened in such a manner that they cannot easily and immediately be opened from the inside.