

# Fire Blog



Fire kills more than 1000 people every year and injures thousands more.

Fire in the workplace has the potential to cause injury, property damage and even death. Being aware of the possible fire hazards ensures that fire safety measures can be effective. Fire hazards within the workplace may be obvious for example conducting hot works in close proximity of flammable materials or liquids, poor housekeeping – creating build up of combustible waste materials, use of portable heaters for drying rags or clothing, etc. to less obvious for example electrical appliances, plant and equipment especially when they appear to be functioning correctly.

Fire safety measures are precautions that are implemented to ensure the safety of persons in the event of fire and to prevent or reduce the risk of fire occurring. Familiarise yourself with company fire prevention, detection and warning procedures, especially be aware of emergency escape location of fire fighting equipment (ensure that you are trained and competent to use), and evacuation procedures.

## The Fire Triangle



### Oxygen

This is approximately 20% of the atmosphere. If a fire has started then smothering the flames will deprive the fire of oxygen and will put the fire out.







### Heat/Ignition

There has to be an initial source to spark the heat/ignition. Fire can be prevented by controlling possible ignition sources, for example, by ensuring smoking bans are implemented in the workplace or not using open flames.

### Fuel

Such as paper or wood and flammable substances. Fire can be prevented by removing or storing safely fuel from workplace and by making sure that it is not kept close to heat or ignition sources.

## Fire types and methods of extinguishing them

Class A	Fires involving wood, paper, textiles	
Class B	Fires involving flammable liquids, petrol, oil, alcohol and organic solvents	
Class C	Fires involving flammable gases, methane, propane, hydrogen, acetylene, butane	
Class D	Fires involving metals	
Class F	Fires involving cooking oils such as deep fat fryers	
Electrical	Fires involving electrical equipment	
Note: If there are class C or D risks in your premises seek advice from a competent person		

## Fire Extinguishers

### Water Extinguishers

- Label colour will be **RED** suitable for Class A Fires only.
- Direct the jet at the base of the fire and keep moving it across the area of the fire.
- Seek out any hot spots after the main fire is extinguished
- A fire spreading vertically should be attacked at its lowest point and followed upwards.



### Foam Extinguishers

- Label Colour will be **CREAM** suitable for Class A and B fires.
- Suitable for most fires involving flammable liquids and solids.
- If the liquid on fires is in a container, direct the jet at the inside edge of the container or adjoining vertical surface above the level of the burning liquid to allow the foam to flow across the surface of the liquid.



### Dry Extinguishers

- Label colour will be **BLUE** suitable for Class A, B, C and Electrical fires.
- For liquid fires in containers or spills, discharge towards the near edge of the fire.
- Use a rapid sweeping motion to drive the fire towards the far edge.
- For electrical fires, switch off the current and direct the jet directly at the fire.
- NOTE: Dry powder extinguishers should be installed or used indoors.



### CO2 Extinguishers

- Label colour will be **BLACK** suitable for Class B and Electrical.
- The discharge horn should be directed at the base of the flames.
- Keep the jet moving across the area of the fire.
- Do not hold the horn: it gets very cold.



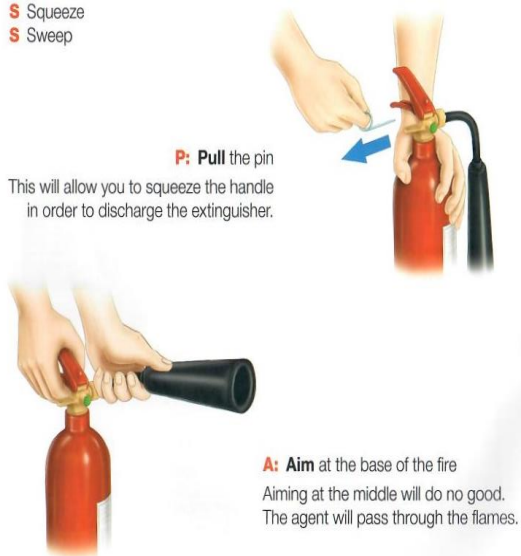
- NOTE: CO2 is an asphyxiant. If discharged in a confined area, withdraw to fresh air immediately.

### Operation of Fire Extinguishers

- Take up a position where access to the fire is unrestricted
- Ensure a quick and safe retreat is possible
- Ensure you are always on the side of the fire nearest the exit or if outside to windward of the fire
- Crouch to help you keep clear of the smoke, avoid heat and allow a closer approach to the fire
- If the fire is not extinguished by one extinguisher or if you are exposed to smoke, abandon the attempt and withdraw immediately. The fire brigade will deal with it

#### EXTINGUISHER USE

- P** Pull
- A** Aim
- S** Squeeze
- S** Sweep



Check out our Toolbox Talk on Fire

Fire TBT & Record Sheet

