



Ashdown Safety

Fire Hazards

Fire Hazards

Fire is a significant risk to any organisation. In order to have a fire you must have all three of the following conditions:

- **Oxygen:** a natural sources as well as artificial, oxidising materials or oxygen.
- **Fuel:** flammable liquid (e.g. white spirit, paints, varnish,) flammable substances (eg cleaning, photocopier chemicals), adhesives, solvents, cooking oils, packaging, paper, card, paper (particularly if shredded) or combustible parts of buildings such as insulating sandwich panels with combustible insulation or combustible cladding.
- **Heat: (or sources of ignition):** lights, smoking, naked flames, electrical, gas or oil fired heaters, hot works, faulty electrical equipment, hot surfaces, obstruction/lack of ventilation of electrical equipment, self heating and spontaneous combustion from materials such as oily rags, arson.

Without all three of these elements there can be no fire. Fire extinguishers take away one or more of these three elements, e.g water extinguishers take away the heat, carbon dioxide extinguishers use gas, which displaces the oxygen.

- Ensure that there is a clear written fire policy, including allocated responsibilities and appropriate employee training in fire prevention and the fire procedures.

Recommendations for employers:

- **Reduce or eliminate sources of ignition.** Reduce any unnecessary sources of heat, ensure that sources of heat do not arise from faulty or overloaded electrical equipment, control hot works, have correct storage and disposal for oily rags, prohibit smoking, reduce naked flame heat-ing by replacing with electrical heaters or central heating, ensure all equipment that could provide a source of ignition is left in a safe condition and electrical fuses and circuit breakers are of the correct rating, electrical installations are maintained and take precautions against the risk of arson.
- **Reduce the sources of oxygen.** Close doors and other sources of ventilation when not required, do not store oxidising materials near any heat source or flammable materials.
- **Minimise the potential of fuel for the fire.** Remove or reduce to a minimum the amount of flammable materials and substances. Replace flammable materials with non or less flammable materials, ensure flammable materials are handled, transported, stored and used properly, do not keep unnecessary quantities.

Fire Hazards

- Ensure a fire risk assessment is carried out by a competent person, follow through the actions and review this regularly, particularly where there is an alteration to the building.
- Where flammable materials are in use, ensure electrical equipment which could be exposed to flammable vapours, gases or dusts is of a suitable explosion protected rating for the risk and is maintained.
- Carry out weekly tests on your fire alarm using different call points in rotation, carry out six monthly fire drills and record them.
- Arrange for the fire extinguishers and associated equipment to be maintained annually by a competent person.
- Appoint fire marshals and ensure that they are trained and comfortable with their role.
- Ensure other fire safety related equipment and systems including fire doors and closers, emergency lighting, fire detection and suppression equipment, lightning protection, is subject to suitable maintenance and inspection by a competent contractor

Control methods or risk reduction techniques must be used to:

- provide a clear statement to workers that the risk posed by fire is taken seriously at all levels of the organisation
- provide information on policy including implementation and responsibilities
- properly understand what is involved in all areas of operation in order to implement appropriate and effective controls
- monitor the control measures put in place to prevent fires and review to ensure their ongoing effectiveness
- ensure all workers are aware of the hazards and the likely effects
- provide information on the legal framework surrounding fire prevention and the employer's/employees' duties under them.

Fire Hazards

Legal Duties

- The main areas of health and safety law relevant to fire safety are:
 - Dangerous Substances and Explosive Atmospheres Regulations 2002 (DSEAR)
 - Fire (Scotland) Act 2005, as amended, and the Fire Safety (Scotland) Regulations 2006
 - Health and Safety at Work etc Act 1974
 - Management of Health and Safety at Work Regulations 1999
 - Regulatory Reform (Fire Safety) Order 2005.

Please contact us using our contact form if you have any queries regarding our Health and Safety services, or if you would like to order.

Email us at: admin@ashdowncpd.com or call us at: 01342 545004

Ashdown Safety and Ashdown Human Resources are trading names of Ashdown (Holtye) CPD Ltd. Registered Company Address: 20-22 Wenlock Road, London, N1 7GU. Company number: 11086285

References:

1. Barbour (barbour.info)
2. www.hse.gov.uk