

Fire safety risk assessments and new fire safety laws

The Regulatory Reform (Fire Safety) Order (RRO) 2005 comes into effect on 1 April 2006. It will apply across England and Wales and will affect all non-domestic premises and certain activities taking place outdoors. It rationalises and consolidates over 118 pieces of workplace fire legislation including repealing and revoking the Fire Precautions Act 1971 and the Fire Precautions (Workplace) Regulations 1997. The main change will be in emphasis towards risk reduction and fire prevention. Fire certificates will no longer be issued although fire and rescue authorities will continue to inspect premises.

The local fire and rescue authorities will continue to be the principle enforcing authority, exceptions being that HSE will cover RRO for the nuclear industry, construction sites and ship construction and repair; sports grounds will be covered by the local authority issuing the safety certificate; defence bases and Crown-owned property will have separate arrangements.

The responsible person

Responsibility for complying with the Fire Safety Order rests with the 'responsible person'. In a workplace, this is the employer and any other person who may have control of any part of the premises, for example, the occupier, including self-employed people, or owner. In all other premises the person or people in control of the premises will be responsible. If there is more than one responsible person in any type of premises, all must take all reasonable steps to work with each other.

Fire safety in domestic properties: the Housing Act 2004

This has a major impact on fire safety management in all residential property in England and Wales. From October 2005 certain houses in multiple occupation (HMOs) have to be licensed by the local authority: residential properties with three or more storeys and with five or more tenants. In addition the new Housing Health and Safety Rating System (HHSRS) applies to all rented property including HMOs. This means local authorities will have to carry out HHSRS, which in essence is a risk assessment, on licensed HMOs within five years and other non-licensed residential properties will also require HHSRS inspections. Property owners and landlords will be required to carry out remedial work to deal with any fire hazards identified.

Fire Risk Assessment

Under article 9 of RRO the responsible person must ensure a fire risk assessment is carried out to identify the general precautions required. The Order says the assessment must include consideration of any dangerous substance likely to be on the premises. The risk assessment and any significant findings must be recorded:

- ▲ if five or more people are employed
- ▲ if there is a licence in force
- ▲ if the premises are subject to an alteration notice. This is served by the enforcing authority when they believe a hazard may pose a risk if changes are made to premises or in the use to which they are put. The responsible person must inform the authorities but do not have to wait for approval before starting the work.

A fire risk assessment should identify risks that can be removed or reduced and specify the nature and extent of the general fire precautions needed

to protect people against the fire risks that remain. Fire certificates were not required in all workplaces, but where they were, they had to specify means of escape, means for ensuring the escape can be effectively used at all times, means for fighting fire. They usually said how often fire drills should be held. This basic information should now be included in the fire risk assessment.

A competent person, that is, someone who has had sufficient training or has good experience or knowledge of fire safety, should carry out assessments.

Key Guidance

Detailed Advice on carrying out a fire risk assessment is contained in the Home Office/Scottish Executive/Northern Ireland DoE/HSE publication: 'Fire Safety: An employer's guide'. This is a basic document that all safety representatives should look at to check their employer is complying with legislation and to help ensure that their employer has conducted a thorough fire risk assessment. It can be downloaded from: www.hse.gov.uk/fireandexplosion/ in the section workplace fire safety under new legislation.

Good comprehensive fire safety management systems – including consultation with safety representatives – are key to ensuring that fire safety is taken seriously.

Basic risk assessment is a five stage process outlined below. Producing a fire risk assessment should not be a theoretical exercise and should involve practical examination of the building under consideration.

Step 1: Identify the fire hazards

This involves consideration of the fire triangle and identifying the three requirements for a fire: sources of ignition, fuel and oxygen and the possibility of them coming together. The fire at Windsor Castle in 1992 was thought to have started when an electric lamp was placed too close to a curtain.

Examples are given below:

Sources of ignition

- ▲ Smokers materials naked flames.
- ▲ Hot surfaces e.g. lights and cooking equipment.
- ▲ Electrical or mechanical sparks.
- ▲ Static electricity.
- ▲ Arson.
- ▲ Hot processes such as welding.

Sources of Fuel

- ▲ Paints, varnishes, thinners, adhesives.
- ▲ Petrol, white spirit, parafin.
- ▲ Paper and packaging materials.
- ▲ Wood and textiles.
- ▲ Liquefied petroleum gas (LPG) and acetylene.

Sources of oxygen

- ▲ It is in the air and its flow is affected by the ventilation system.
- ▲ Oxidising materials. This property should be clearly marked.
- ▲ Oxygen cylinders eg for health care or welding.

Step 2: Identify people at risk

The assessment should pay attention to those at special risk, such as young people, the disabled and those with special needs. Signs and instructions should be translated into other languages when needed.

Step 3: Evaluating the risks

Some of the things that need to be considered are:

Prevention

- ▲ Reducing sources of ignition for example replacing naked flame and radiant heaters with central heating systems, having strict no smoking areas.
- ▲ Reducing easily accessible potential fuel, including good housekeeping measures to reduce accumulation of

waste. Changing industrial processes to limit the amount of flammable material; keeping material at a low temperature.

- ▲ Reducing or controlling the sources of oxygen, for example by permit-to-work systems for maintenance involving welding.

Fire Detection and Warning

The type of detector needs to be appropriate. In general smoke alarms are the first choice, but heat detectors are often used in kitchen areas when false signals are likely to be frequent. Sprinkler heads work by heat detection. Electrical systems, especially for large buildings and sites, must have a backup power system. Alarms must be able to be heard above any noise likely to be present and in areas where people will be able to respond (eg heard in a central operating area to cover warehouses, stores etc).

Means of Escape

Risk assess escape routes so that everyone who may be on the premises has a safe route to a place of safety. Emergency Doors must open in the direction of escape, not be locked or fastened; revolving or sliding doors must not be used for emergency exits. Emergency routes that require lighting must have emergency lighting.

Fire-fighting equipment

Article 13 of the Order requires the responsible person to ensure that premises are equipped with appropriate fire fighting equipment including fixed (sprinklers) and portable (extinguishers). And that non-automatic equipment is easily accessible, simple to use and indicated by signs. The equipment must be regularly maintained and tested. Fires should only be tackled, however, by trained Fire-fighters.

Step 3: Evaluating the risks, should also consider fire procedures (evacuation, drills, frequency of alarm testing), training (see below) and other practical measures (signage, keeping evacuation routes clear, fire safety audits) as explained in the guidance.

Step 4: Record your findings

The risk assessment should be recorded (irrespective of legal obligation) and be made available to safety representatives. There should be a written emergency plan and this is a requirement if five or more are employed. This should be kept in the workplace and should form the basis of training. Emergency plans should be practised and if necessary discussed with the local emergency services.

Step 5: Review and revise Arrangements in London

The London Fire Brigade advises people to contact their Local Borough Fire and Community Safety Centres if they have any query about fire safety and the addresses of the 33 London Centres, with phone numbers, are on their website: www.london-fire.gov.uk.

The London Fire Brigade provides the following basic training courses:

- ▲ Fire Awareness Course: a three-hour course aimed at all staff.
- ▲ Fire Awareness (with Extinguisher Training): a half-day course for all staff including practical use of fire extinguishers.
- ▲ Fire Warden Course: a one-day course for fire wardens.
- ▲ Fire Security Course: a one-day course for security staff.

References:

- 1 Lucinda Ponting, Health and Safety Bulletin December 2005.

Factsheets online www.lhc.org.uk London advice 020 7794 5999



Hampstead Town Hall Centre
213 Haverstock Hill, London NW3 4QP
Tel: 020 7794 5999 Fax: 020 7794 4702
Email: mail@lhc.org.uk Website: www.lhc.org.uk
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