FIRE SAFETY

NEU Guidance for Members, Reps and Local Officers

This briefing sets out NEU advice on the requirements of the fire legislation covering schools and on fire safety precautions to be followed in schools. It takes account of the Regulatory Reform (Fire Safety) Order 2005.

Fire safety requirements in schools

The legal requirements governing fire safety procedures in schools are set out in the Regulatory Reform (Fire Safety) Order 2005. This legislation consolidates previous legal requirements on fire safety, introduced under the Fire Precautions (Workplace) Regulations 1997 and the Fire Precautions Act 1971, into one set of regulations, applying to virtually all premises in England and Wales, apart from private homes.

Until 1 October 2006, the 1997 regulations operated alongside the Fire Precautions Act 1971. This Act required certain workplaces, excluding schools, to hold fire certificates. These are no longer required. Instead, all employers and other 'responsible persons' must comply with the requirement to undertake fire risk assessments.

NEU safety representatives are advised to use this briefing to check that proper fire safety precautions are in place in their schools. The briefing covers the legal requirements on fire safety, together with NEU advice on steps which should be taken in schools to meet these requirements and to reduce the risk of fires breaking out. In 2000 the Department for Education (DfE) produced detailed guidance for schools on fire safety; however this document is no longer in publication. Most local authorities and other employers have published fire safety policies which should in all cases be followed by schools. The Department for Communities and Local Government (DCLG) has published guidance for education premises in relation to fire risk assessments, which is available at: gov.uk/government/publications/fire-safety-risk-assessment-educational-premises

Finally, the DfE's Building Bulletin 100 explains how to comply with building regulations for fire safety design in new school buildings and describes the DfE's policy on sprinklers in schools. This can be viewed at:

gov.uk/government/uploads/system/uploads/attachment_data/file/276389/buildingbulletin100_onlineversion.pdf

Enforcement: the role of local fire authorities

The local fire and rescue authority enforces the 2005 Order in schools. It has the power to inspect premises to check that the Order is being complied with. If the enforcing authority is dissatisfied, an enforcement notice may be issued, requiring improvements to be made. In extreme cases, a prohibition notice may be issued that restricts the use of all or part of the premises until improvements are made.

Fire officers will visit schools when invited in order to advise on fire precautions and check the adequacy of extinguisher provision and other fire prevention equipment. Additional advice from specialist fire prevention services may in some cases be appropriate, even if this imposes a cost on the employer.

The NEU is aware that some fire authorities are now operating or trialling 'attend on confirmation' policies whereby the fire brigade will not attend to signals from automatic fire alarms until a staff member on the premises has first checked and confirmed the authenticity of the call-out. While it is true that a number of call-outs made due to automatic fire alarm signals turn out to be false, the NEU and Fire Brigades Union (FBU) have concerns over such policies and believe that it is always safest for the fire brigade to attend when a signal is first received. The NEU will continue to monitor the application and usage of such policies in schools.

Checklist of employers' legal responsibilities

The Order places primary responsibility for fire safety on 'responsible persons'. These are the employer and others in control of workplaces. In schools this includes governing bodies. It is the role of responsible persons to determine and provide the measures which are needed to meet the risk from fire. The NEU's view is that where the local authority is the employer, it retains strategic responsibility for fire safety in school. Governing bodies, however, must satisfy themselves that local authority procedures and advice are followed. In stand-alone academies and free schools, governing bodies have strategic responsibility for fire safety, and in academies which are part of a chain this responsibility resides with the academy trust.

The key requirement for compliance with the Order is that every employer must carry out a 'suitable and sufficient' risk assessment relating to fire safety and take appropriate steps to remove or reduce the risk of injury due to fire. The risk assessment must pay particular attention to the needs of disabled adults and children and those with special needs.

The Order requires employers to:

- identify any fire hazards in the workplace
- identify people at risk, including everyone who uses the premises, with particular attention paid to disabled people, people with language difficulties, employees who work in isolated areas, and people in neighbouring properties
- evaluate the risk of fire occurring, whether by accident or deliberately
- record significant findings and action taken; prepare an emergency plan; inform and instruct relevant people and provide training
- keep the assessment under review and revise where necessary.

Employers are required to remove or reduce the risk of fire occurring. This could include requiring that gas and electrical installations are worked on by qualified staff only; the use of fire resistant materials; the installation of fire detection systems; and other precautionary measures.

Employers are obliged to consult safety representatives about arrangements for nominating fire wardens to implement the measures for firefighting. The Safety Representatives and Safety Committees Regulations 1977 include these provisions.

The remainder of this briefing sets out the general requirements of the Order and the NEU's views on the specific practical steps needed in schools to meet them.

The six key aspects of fire safety

1. Fire risk assessment

Fire risk assessment is the key requirement upon employers. Good management of fire safety is essential to avoid the likelihood of fire and to provide for the speedy containment of fire where it occurs. A fire risk assessment helps employers check that fire safety procedures and precautions are in place and working properly.

The 2005 Order requires the responsible person to carry out a 'suitable and sufficient' assessment of the risks to the health and safety of all relevant persons in the event of fire; and to take appropriate preventative and protective measures. Particular attention must be paid to those who may be particularly vulnerable, as described above.

The fire risk assessment should consider, for example, the following:

- structural features and the way in which they may promote the spread of fire and smoke
- work processes and materials, particularly combustible materials and the way in which they are used and stored
- sources of ignition which may cause fire, such as heating equipment and electrical equipment
- people who may be particularly at risk due to their location or the nature of their work.

The findings of the risk assessment must be recorded and the report made available to safety representatives if they ask for it.

Set out below are the principal requirements of the Order with which 'responsible persons' must comply. This is followed by more detailed advice on how to meet these requirements.

Responsible persons must:

- appoint one or more competent persons, depending on the size and use of the premises, to carry out any of the preventive and protective measures required by the Order. A competent person is someone with enough training and experience or knowledge and other qualities to be able to implement these measures properly
- provide employees with clear and relevant information on the risks to them identified by the fire risk assessment, about the measures that have been taken to prevent fires, and how these measures will protect them if a fire breaks out
- consult their employees, or their elected representatives, about nominating people to carry out particular roles in connection with fire safety and about proposals for improving the fire precautions

- inform non-employees, such as pupils and temporary or contract workers, of the relevant risks to them, and provide them with information about the nominated competent persons, and about the fire safety procedures for the premises
- provide the employer of any persons from an outside organisation who is working in their premises, for example an agency providing temporary staff, with clear and relevant information on the risks to those employees and the preventative and protective measures taken; they must also provide those employees with appropriate instructions and relevant information about the risks to them
- consider the presence of any dangerous substances and the risk this presents to relevant persons from fire
- establish a suitable means of contacting the emergency services and provide them with any relevant information about dangerous substances
- provide appropriate information, instruction and training to their employees, during their normal working hours, about the fire precautions in the workplace, when they start working and from time to time throughout the period they remain in employment
- ensure that the premises and any equipment provided in connection with firefighting, fire detection and warning, or emergency routes and exits are covered by a suitable system of maintenance, and are maintained by a competent person in an efficient state and in good repair.

Employees must co-operate with the employer to help keep the workplace safe from fire and its effects, and must not do anything that will place themselves or other people at risk. This duty on employees is contained within the Health and Safety at Work Act 1974.

Where an employer requests that a staff register be kept for use in the event of premises being evacuated, employees are required to comply so long as the register is used only for the purposes of fire safety. Advice for safety representatives on this matter is included under the action points at the end of this document.

2. Fire detection and warning systems

The 2005 Order requires employers to ensure that there are adequate means of detection and that people in the premises will be warned quickly. Factors to be taken into account when deciding what is necessary include the equipment contained in the workplace, the size and dimensions of the workplace, and the maximum number of people who may be present.

- Schools must have appropriate fire detection and fire alarm systems which will ensure that fire can be detected quickly, fire alarms activated easily and people on the premises warned quickly. The more complex the premises, the more sophisticated the form of warning needs to be.
- There needs to be a sufficient number of fire alarm activation points, available in prominent positions, preferably on escape routes, marked with operating instructions and within 30 metres walking distance of all points in the school. In particular, they should be provided in, or close to, every kitchen, laboratory, workshop, craft room and assembly hall.
- The fire alarm must provide a fast alert to occupants so that evacuation of the premises can take place without delay.
- It is vital that the fire alarm warning sound is distinguishable from any other school bell system including the usual class change bell. Fire authorities will

require there to be a separate and distinct fire alarm bell. It must be audible in all buildings on the site when the school is in normal occupation. Temporary or additional buildings should be linked to the main alarm system so that it is heard immediately throughout the school. In the majority of circumstances, hand bells are not adequate as they create delays in informing and evacuating staff and pupils.

- The DfE and the DCLG have advised that fire alarm systems should be tested once a week when the school is in occupation. The system should be tested using all of the different activation points – a rota system can be employed. If 'break glass' type activation points are used, it should be possible to test them without breaking the glass. Test results should be recorded and any faults rectified immediately. The fire alarm system should also be regularly inspected and maintained by qualified maintenance engineers.
- The NEU believes that all fire alarm warnings should be taken seriously and that the emergency services should respond accordingly. Problems are sometimes encountered in schools with a history of false alarms. In such cases, the matter should be discussed with the local fire authority to ensure continuing support from the emergency services. In some schools there are so many false alarms that the evacuation procedure is suspended until the alarm is confirmed as genuine. This practice is dangerous and unacceptable.
- If, for any reason, the alarm system fails, it is of the utmost importance that people on the premises can be warned and make a safe escape. Temporary arrangements, such as gongs, whistles or air horns, together with suitably trained staff placed in key positions (to ensure full coverage of the premises) may be acceptable for a short period while awaiting repairs to the system. However, such an arrangement would not be appropriate for longer periods. Again, to determine the most acceptable approach in such cases, advice should be sought from the fire authority.

3. Firefighting

The 2005 Order requires appropriate measures to be taken for firefighting, taking into account the nature of the workplace, the activity carried on and the presence of any persons other than employees, and requires employers to nominate and train employees to implement these measures.

- Although the DfE and the DCLG advise that it is helpful for school staff to be trained in the use of firefighting equipment, the NEU emphasises that the fundamental purpose of schools' fire precautions is to safeguard the lives of pupils, staff and visitors. In cases of fire, the first priority for teachers should be to raise the alarm and ensure that children, teachers and visitors are safely evacuated. People with no training should certainly not be expected to attempt to extinguish a fire. Staff in science, engineering or workshop areas may, however, be trained to use specialist extinguishers.
- The advice given in this section on firefighting equipment should be read in this context. Fire extinguishers are for dealing with small fires only and if teachers are in any doubt about a situation, they should concentrate on evacuation rather than firefighting.
- Fire extinguishers which are provided should be suitable to address the risks identified in the risk assessment.

- Water extinguishers are not to be used on fires involving flammable liquids or live electrical apparatus.
- Water extinguishers are suitable for most other fires, for example, those involving wood, paper or textiles.
- Carbon dioxide and dry powder extinguishers are suitable for fires involving flammable liquids or electrical apparatus.
- Foam extinguishers are suitable for most fires involving flammable liquids, particularly fires in container tanks. They must not be used on electrical or metal fires.
- All fire extinguishers are red. The contents are indicated by a zone of colour on the red body.
- Halon extinguishers are no longer permitted.
- All firefighting equipment should be regularly checked, at least once a year. Extinguishers should be regularly tested and maintained according to manufacturers' instructions and British Standard Specifications by competent trained persons.
- All firefighting equipment should be easily accessible and simple to use. Its location should be known and, if necessary, indicated by signs. It should never be kept locked away but it should be situated away from heat producing radiators and direct sunlight.
- Fire blankets used in schools should be made of fibreglass. Asbestos fire blankets must not be used.
- There should be adequate access to the building for fire engines and access to adequate supplies of water for firefighters.
- There is a requirement in Wales (and Scotland) for all new schools to be built with sprinkler systems. Unfortunately this is not a requirement in England. The NEU is strongly in favour of new, and ultimately all, schools being fitted with sprinkler systems. More information on sprinklers is contained in Appendix 3.

4. Emergency evacuation and exits

Escape routes should be designed so that everyone on the premises is able to escape to a place of safety without the help of the fire and rescue service. The 2005 Order requires that routes to emergency exits and the exits themselves should be kept clear at all times and should lead as directly as possible to the open air or a safe area. The number and placement of emergency routes and exits should be based on the maximum number of persons who may be present at any one time. The routes must be indicated by appropriate signs and, if illumination is required, it should be provided with emergency lighting of adequate intensity.

- In the event of danger, it must be possible for all rooms and workstations to be evacuated quickly. Escape routes and fire exits should be clearly signposted so that people are directed to safety. Regular occupants should know their escape routes in any case as a result of training and fire drills. It is important that an alternative means of escape is available in case fire blocks one particular route.
- Emergency exit doors must open in the direction of flow, must not be sliding or revolving, and must not be locked or fastened in such a way that they could not be opened in an emergency. All doors on escape routes must be easily opened while the premises are occupied. They should be openable by one action and not, for example, by Yale keys and handles which would require two actions.
- Fire retardant doors should not be propped open.

- Where determined necessary by the risk assessment, signs must be used to help identify escape routes. Signs must comply with the provisions of the Health and Safety (Safety Signs and Signals) Regulations 1996 and must be in pictogram form.
- The safety of firefighters must be taken into account when planning emergency routes.
- Fire evacuations at night while on residential visits present particular problems. There have been cases of children being overlooked during evacuations. Staff need to have a clear evacuation plan and to be aware that pupils may be difficult to rouse, despite loud and persistent alarms. Smaller pupils may also slip down under the bed clothes and may not be noticed. It is therefore important to be methodical in ensuring that all children are evacuated, moving bedding to ensure no child remains hidden. Roll calls should be taken immediately at the assembly point, with confirmation then given to centre/hotel staff.

5. Emergency evacuation of disabled pupils or staff

The means of escape provided must be suitable for the evacuation of everyone likely to be in the premises, including those with impaired mobility. This may require additional planning and allocation of staff roles. Staff may be asked to assist with evacuating disabled pupils and/or adults, but the NEU advises that this should be entirely voluntary, and only after appropriate training has been received. Volunteers offering such assistance should not be put at risk of injury to themselves.

Provisions for the emergency evacuation of disabled persons may include:

- stairways
- evacuation lifts
- firefighting lifts
- horizontal evacuation
- refuges
- ramps.

Use of such facilities will need to be linked to effective management arrangements as part of your emergency plan.

Personal Emergency Evacuation Plans (PEEPs) for employees and regular visitors should be provided in the form of a plan tailored to individual needs and made available via human resources (HR) staff or buildings manager. It should give detailed information on their movements during an escape. Some building adaptation may be necessary to facilitate their escape which may also reduce the need for personal assistance.
Evacuation plans for occasional visitors should also be made available to ensure their safe evacuation in case of fire. Such guidance might include some standard elements but should also be capable of adaptation where necessary.
A standard plan is used where there are visitors to the building who may be present infrequently or on only one occasion. Standard PEEPs should take account of the following:

- the disabled person’s movements within the building
- the operational procedures within the building
- the types of escape available

- the building systems, eg the fire alarm
- the egress plan.

Detailed guidance on evacuation plans for disabled people can be found in Fire safety risk assessment: means of escape for disabled people. This very comprehensive document is available at:
gov.uk/government/publications/fire-safety-risk-assessment-means-of-escape-for-disabled-people

The DCLG guidance Fire safety risk assessment : educational premises [1] recommends that when considering escape routes for those with impaired mobility the following points should be taken into account:

- A refuge is a place of reasonable safety in which disabled people can wait either for an evacuation lift or for assistance up or down stairs. Disabled people should not be left alone in a refuge area while waiting for assistance to evacuate the building. A refuge could be a lobby, corridor, part of a public area or stairway, or an open space such as a balcony or similar place which is sufficiently protected (or remote) from any fire risk and provided with its own means of escape.
- Where refuges are provided, they should be enclosed in a fire-resisting structure which creates a protected escape route leading directly to a place of total safety and should only be used in conjunction with effective management rescue arrangements. The fire safety strategy should not rely on the fire and rescue service rescuing people in these refuges.
- If firefighting lifts (provided in high buildings as firefighting access) are to be used for evacuation, this should be co-ordinated with the fire and rescue service as part of the pre-planned evacuation procedures.
- Normal lifts may be considered suitable for fire evacuation purposes, subject to an adequate fire risk assessment and development of a suitable fire safety strategy by a competent person.
- Since evacuation lifts can fail, a disabled person having reached a refuge should also be able to gain access to a stairway (should conditions in the refuge become untenable). An evacuation lift with its associated refuge should therefore be located adjacent to a protected stairway.
- Sufficient escape routes should always be available for use by disabled people. This does not mean that every exit will need to be adapted. Staff should be aware of routes suitable for disabled people so that they can direct and help people accordingly.
- Stairways used for the emergency evacuation of disabled people should comply with the requirements for internal stairs in the building regulations. Specialist evacuation chairs or other equipment may be necessary to negotiate stairs.
- Plans should allow for the careful carrying of disabled people down stairs without their wheelchairs, should the wheelchair be too large or heavy. Health and safety manual handling procedures must be taken into account in addition to the dignity and confidence of the disabled person.
- Stairlifts should not be used for emergency evacuation. Where installed in a stairway used for emergency evacuation, no parts of the lift, such as its carriage rail, should be allowed to reduce the effective width of the stairway or any other part of an emergency evacuation route.

[1] Available at: gov.uk/government/uploads/system/uploads/attachment_data/file/14887/fsra-educational-premises.pdf

- Where ramps are necessary for the emergency evacuation of people in wheelchairs they should be as gentle as possible.
- Some educational premises will have a high proportion of pupils/students who will be highly dependent on others to ensure their safe escape. It will be necessary to consider special arrangements for these types of premises.

6. Planning for emergencies

The purpose of an emergency plan is to ensure that people on the premises have full information about what to do if there is a fire. Details of the plan, based on the outcome of the risk assessment, must be recorded. It must be made available to employees, their representatives and the fire authority.

- Schools' emergency instructions on action to be taken on discovering a fire should reflect the individual circumstances and layout of the school and be drawn up in consultation with local fire officers.
- These instructions should be posted in prominent positions throughout the building. Staff and pupils should be made aware of the fire procedures, in particular about raising the alarm, escape routes and assembly points. Staff should also be aware of procedures for contacting the fire service.
- Specific arrangements will need to be made within these procedures for alerting and evacuating any disabled pupils or staff.
- The effectiveness of the procedures should be tested by means of regular fire drills. The NEU recommends that fire drills be held at least once a term and as soon as possible after the start of each school year for new staff and pupils. Procedures are tested most effectively if no advance notice is given of the fire drill.
- The timing of the fire drill is an important factor in testing the effectiveness of procedures. Fire drills at lunchtime or around 3pm will test how procedures work when the school is more likely to be crowded with parents and some exits blocked by pushchairs. Occasionally, one exit or staircase should be restricted in order to make occupants aware of other escape routes available.
- Each school should keep a fire log in which tests to the alarm system, fire drills and checks to equipment can be recorded.
- Contacts should be established with the emergency services in order that there can be swift and proper communication with them in actual incidents of fire. Any particular risk factors or high-risk areas can then be made known to the emergency services.
- There is a specific legal requirement in the Control of Asbestos Regulations 2012 for the duty-holder to inform the emergency services of the location and condition of any asbestos or suspected asbestos in the building. During a fire asbestos is likely to be disturbed; therefore it is important that the emergency services are aware of its presence so they can take suitable precautions for themselves and everyone else on site.
- As part of its emergency plan, each school should set out contingency arrangements for when pupils are evacuated from school and cannot return. This is particularly important for younger pupils and also for academies/free schools, which may not be able to call upon local authority (LA) assistance to find a temporary shelter pending the arrival of parents.

7. Maintenance

The 2005 Order requires that employers must maintain all fire detectors and fire alarms, firefighting equipment and fire exits in good order and rectify any faults as soon as possible. In particular, any equipment provided for use by, or the protection of, firefighters must be maintained in good working order. This is an explicit requirement introduced by the Order, although it was implicit in the 1997 Regulations. This may include:

- access roads
- firefighting lifts
- sprinklers [2]
- smoke control systems [3]
- firefighters switches provided to cut off electrical power.

The maintenance of fire detection equipment, firefighting equipment and emergency exits is of the greatest importance.

Reducing the risk of fire

When the fire risk assessment has been carried out, steps must then be taken to remove or reduce the risks of fire identified in that assessment. The steps to be taken in reducing risk are as follows:

1. Remove the risk altogether by removing the hazards or discontinuing the hazardous process.
2. Where this is not practicable or possible, reduce the risk by modifications to the hazardous process.
3. Where neither of the first two priorities can be achieved, institute appropriate protective measures.

The chances of a fire starting are low if there are few ignition sources and combustible materials are kept away from them.

In general, fires start in one of three ways:

- accidentally, such as when smoking materials – for example, illegal smoking materials – are not properly extinguished, or when lighting displays are knocked over. Areas such as science, design technology and food technology classrooms, for example, are areas at particular risk of fire.
- by act or omission, such as when electrical office equipment is not properly maintained, or when waste is allowed to accumulate near to a heat source
- deliberately, such as an arson attack involving setting fire to external rubbish bins placed too close to the building.

Employers need to look critically at their premises and try to identify any accidents waiting to happen and any acts or omissions which might allow a fire to start.

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[2] and [3] Further information on sprinklers and smoke control systems is given in Appendix 3 and Appendix 4 respectively

Preventative measures to remove or reduce the risk of fire are at least as important as measures for fire detection and firefighting. They should always be the first priority.

The following points set out some elementary ways of reducing the risk of fire in schools.

- Consideration could be given to the installation of a sprinkler system which combines the fire detection and firefighting function. Although there are installation costs, their maintenance costs are low and they may lead to considerably lower insurance premiums, particularly for schools with a record of previous fire damage or arson.
- Smoke control systems can restrict the spread of fire and smoke by venting the heat and smoke through the roof or via other routes to the outside. In this way they can prolong the length of time that internal areas remain safe for occupants awaiting rescue.
- Particularly strict precautions against fire will be necessary in science laboratories and other practical subject classrooms, in particular with regard to the use and storage of inflammable materials. Further information on this is provided in the NEU health and safety briefing Safety in Practical Lessons.
- Construction and alteration work should be carried out with a view to maintaining the effectiveness of fire safety precautions. Electrical work should be carried out only by competent electricians.
- Heating appliances should be regularly maintained and operated by competent people. Particular precautions apply to portable gas heaters used as a temporary measure. Any remaining open fires should have appropriate fireguards.
- Quantities of flammable materials, liquids and gases should be kept to a minimum, and stored safely and separately.
- Electrical equipment should be regularly maintained by competent people.
- Machines should not be allowed to overheat. Care should be taken not to cover machines while they are switched on as this is particularly likely to cause overheating. Trailing cables should be regularly checked for damage. Loose or poor connections in traditional electrical accessories and switchgear can cause heat to develop that is capable of starting a fire. This problem is known as high resistance connection (HRC) and safety devices such as fuses and residual circuit devices (RCDs) are unable to disconnect the electrical supply because they cannot sense HRC. Consideration should be given to the installation of a preventative system designed to stop electrical connections and accessories from reaching a temperature which would result in a fire. Such a device operates by effectively closing a switch at a pre-set temperature to prevent ignition, smoke or burning odour.
- Fire retardant materials should be used wherever possible in the construction of the school and for curtains, furnishings, and education and display materials. Where curtains are not made of fire retardant material, they should be treated with fire retardant chemicals. Upholstered furnishings which are not made of fire retardant materials should be discarded.
- Flimsy materials of the type used in costumes or decorations may cause a fire risk and should, therefore, be sited away from heat sources including light fittings. Particular risks arise if such materials are used in rooms with portable heaters which are not guarded properly. Plastic and other materials which give off dangerous fumes as they burn should be avoided where possible.
- Rubbish should be removed daily. Rubbish and other material should not be allowed to accumulate on escape routes. Furniture and display material should not be positioned so as to hamper means of escape. Stationery stores, filing

rooms and store rooms containing combustible and flammable materials should be kept locked.

- Unfortunately, vandalism and arson attacks on school premises are common. Figures from 2013-14 show that there were more than 1,000 fires in schools and educational settings in Britain in this year alone, equating to more than two a day. Nearly 180 of these fires were deliberate. Most deliberate fire-setting is initiated by pupils or ex-pupils. To help reduce the risk of arson, all combustible materials should be stored securely and safely and disposed of after use. Precautions should be taken to prevent easy access to external rubbish storage areas. Steps should be taken to remove rubbish regularly. Sources of ignition, such as portable radiant heaters, should be locked up and properly controlled outside school hours. Checks should be made to ensure all doors, particularly fire doors and windows, are closed when the premises are not in use. Outside areas should be well lit at night. Flammable liquids should be secured so that intruders cannot use them.
- Additional precautions may be required when school premises are used by members of the public outside school hours. Those responsible for organising events should be well briefed particularly about closing windows and internal doors and securing the premises when finished. All legal requirements applicable to public use of school premises will need to be met and the advice of the local fire officer sought.

Further guidance

DCLG
In 2006 the Department for Communities and Local Government (DCLG) published a very useful guidance document entitled Fire safety risk assessment: educational premises. This can be downloaded free of charge from the DCLG website at: gov.uk/government/publications/fire-safety-risk-assessment-educational-premises

DfE
Building Bulletin 100 explains how to comply with building regulations for fire safety design in new school buildings and describes the DfE's policy on sprinklers in schools. Head teachers, governors, safety representatives, teaching staff, facilities and maintenance staff will also find it of interest to underpin their role as fire safety managers.

Go to:

gov.uk/government/uploads/system/uploads/attachment_data/file/276389/buildingbulletin100_onlineversion.pdf

Action points for safety representatives

Make sure that:

1. a fire risk assessment has been carried out for your school, as required by the 2005 Order, in line with the above guidance and in consultation with the local authority and the fire authority
2. proper precautions against the risk of fire are in place in your school
3. fire emergency procedures are established, are known to all staff and pupils and are clearly displayed in prominent positions in the school

4. fire hoses should NOT be used
5. fire drills are held at least every term in the school
6. fire precautions checks form a major part of your regular termly safety inspections
7. contingency plans are in place for the temporary housing of pupils if they are evacuated from school and cannot return.

Staff registers

If staff are required to sign a daily register so that management know who is on the premises in the event of a fire, there may be concerns about the information being used for purposes other than fire safety. To protect against this, safety reps are advised to seek a written undertaking that:

- lists will be destroyed at the end of each day, on the basis that it would be a breach of the fifth data protection principle to retain such lists once they have outlived their usefulness/purpose (ie personal data processed for any purpose or purposes shall not be kept for longer than is necessary for that purpose or those purposes)
- staff attendance will be recorded each day on A4 paper and not in a bound book/register to ensure the easy disposal of such records once they have served their purpose.

Appendices

Appendix 1 is a checklist to assist NEU health and safety representatives who have concerns about the re-opening of schools which have been temporarily closed following fires or floods.
Appendix 2 is a summary of fire risk assessment requirements of the 2005 Order.
Appendix 3 gives further information about fire sprinklers.
Appendix 4 provides details about smoke and heat exhaust ventilation systems (SHEVS) in schools.
Appendix 5 details the role of fire marshals.
Appendix 6 is the 2013 update on school fire statistics.

September 2018

Appendix 1

Re-occupancy of premises: checklist for NEU safety representatives
The checklist set out below is intended to assist NEU health and safety representatives in schools which have been temporarily closed because of fire or flood. It sets out some of the issues which need to be addressed before staff and pupils can return to school.
Employers should in all cases carry out a risk assessment by reference to the issues identified below. As with other risk assessments, the outcomes should be recorded in writing and should be available to NEU health and safety representatives before the areas are reoccupied.

1. In the case of arson attacks, has re-occupancy been discussed with the police, since the building will be a crime scene?
2. Are there any parts of the building which need to be made structurally sound? Competent assistance would be required from a surveyor or structural engineer. Unsafe areas should be completely isolated from occupied areas of the school.
3. Is the site secure enough from intruders to ensure the safety of pupils and staff?
4. Have all mains water, electricity and gas supplies to the school been checked by a competent person?
5. In the case of fire, have air quality tests been carried out?
6. Have the premises been thoroughly cleaned and debris and odours moved?
7. Is there any asbestos present which may have been disturbed? If so, has a competent person checked this? If disturbed, has it been sealed as an interim measure, prior to removal? If not, the affected area of the school would need to be sealed off and air sampling tests may need to be undertaken. More detailed information on air tests and asbestos removal is contained in the NEU briefing Asbestos in Schools, available from the NEU website at: https://neu.org.uk/advice/asbestos-schools
8. In the case of fire, are the alarms and smoke detectors in working order? Have the fire extinguishers been checked and replaced if necessary?
9. Is the central heating and hot water system working satisfactorily?
10. Is the available furniture and equipment suitable and safe for use by staff and pupils?
11. If certain classrooms will have to remain out of use for some time, has suitable temporary accommodation been found either in the school or in other premises? If in other premises, has transport been arranged? 4
12. Have all books been professionally cleaned?
13. Are there adequate numbers of toilets/washrooms?
14, Are there adequate escape routes in the event of another fire?
15. Has the evacuation procedure been revised?
16. Is a staff room available?
17. Are there adequate arrangements in place for provision of meals and eating facilities for staff and pupils?

[4] Finding suitable alternative accommodation may present particular problems especially for academies. It may be worth pursuing this matter with the local authority to see if it is possible to come to a reciprocal arrangement regarding spare capacity which could come into use in such situations. Academies will also need to ensure they have adequate fire insurance cover.

1. **Appendix 2**

Fire safety risk assessment	
1	Identify fire hazards Identify: sources of ignition sources of fuel sources of oxygen
2	Identify people at risk Identify: people in and around the premises people especially at risk
3	Evaluate, remove, reduce and protect from risk Evaluate the risk of a fire occurring Evaluate the risk to people from fire Remove or reduce fire hazards Remove or reduce the risks to people. Consider: • detection and warning • firefighting • escape routes • lighting • signs and notices • maintenance
4	Record, plan, inform, instruct and train Record significant findings and action taken Prepare an emergency plan Inform and instruct relevant people: co-ordinate with others Provide training
5	Review Keep assessment under review Revise where necessary

Appendix 3

Sprinkler systems in schools

Figures released in 2015 by the DCLG show that in 2013-14 there were more than two fires a day across schools and educational establishments in Britain. This should serve as a stark reminder as to why sprinklers need to be installed in educational buildings.

Alongside the FBU and others, the NEU has long argued that schools face an unacceptable threat from arson attacks. Around 20 schools each week in the UK are damaged or destroyed by fires, which are often malicious, threatening the lives of children, teachers and firefighters, and resulting in huge distress and disruption.

The London Fire Brigade has published guidance encouraging builders and developers to install sprinklers in schools, as well as care homes, social housing and commercial premises. The booklet, entitled Think Sprinkler, can be downloaded from: london-fire.gov.uk/sprinklers.asp

In 2007 the DfE, under the Labour Government, announced a new policy for schools in England on sprinklers and their value as a measure against arson. The DfE took the view that all except a few low-risk new schools should have fire sprinklers installed. However, no new funds were made available to cover the costs of sprinkler installation.

In the years 2007-10, the majority (70 per cent) of all new schools were built with sprinkler systems. However, since 2010, the proportion of new schools in England with sprinklers has halved to only 35 per cent. In both Scotland and Wales it is now a requirement for all new schools to be built with sprinkler systems, yet the Government have refused to make this a requirement in England.

The Government's position is that "the additional spending would significantly outweigh any relatively modest savings from damage to school buildings". However, the Government's suggestion that sprinklers increase the costs of new schools by up to six per cent have been widely disputed. The Local Government Association (LGA) estimates that sprinklers only increase construction costs by around one to two per cent. Government research commissioned in 2006 found that the typical sprinkler system cost around the same price as carpets. Carpets become worn and need replacing, whereas sprinklers last for the lifetime of the building. The LGA also found that the costs of sprinkler systems are recouped in around five years as schools benefit from significantly reduced insurance premiums if they have sprinkler systems.

The Government also perpetuates other myths around sprinklers in schools and in October 2015 claimed that sprinklers are "less useful in protecting the occupants of buildings than the buildings themselves". This is despite the fact that no-one is known to have died in a building where there was a functioning sprinkler system.

The main benefit of having sprinklers in schools is their impact on life safety. However, there are a number of other benefits for schools in having sprinkler systems:

- Rebuild costs are lower: sprinkler systems reduce fire damage by around 80 per cent. Therefore, the costs to schools for rebuilding are significantly lower.
- Rebuild times are reduced: when schools are destroyed by fires, they can remain closed for years, and some never re-open. However, sprinkler systems can

contain the damage to a certain area, and schools can re-open as normal very shortly after a fire.

- Less disruption to pupils and teachers: fires can destroy coursework, resources, teaching notes etc. Moving to temporary accommodation can cause massive upheaval for pupils and teachers. By restricting fire damage, sprinkler systems also limit the disruption to the school community.
- Asbestos contamination is reduced: the majority of schools contain asbestos, and fibres can be released when a fire breaks out, causing asbestos contamination within the school. Sprinklers reduce asbestos contamination because they immediately release water to suppress the fire.

NEU policy on sprinklers

The NEU is campaigning for a requirement for all new schools – and ultimately all schools regardless of age - to be fitted with sprinkler systems.

There is no evidence to back up the myths around sprinklers; instead evidence clearly demonstrates how sprinklers save lives and significantly reduce damage and disruption to schools.

Appendix 4

Smoke and heat exhaust ventilation systems (SHEVS) in schools

Systems designed to control smoke and heat in the event of fire can:

• restrict the spread of fire and smoke through a building
• improve occupant safety
• improve the environment for fire and rescue personnel.

SHEVS typically restrict the spread of fire and smoke by venting the heat and smoke through the roof or via other routes to the outside. In this way they can prolong the length of time that internal areas remain safe for occupants awaiting rescue.

SHEVS may incorporate a reservoir which will contain the smoke and hot gases at roof level, while vents allow the smoke to escape. Clearly it is important that any vents included in such systems are kept free from obstructions – smoke must be able to flow easily into the reservoirs and not be hindered by, for example, display materials.

Managers should note that they have a legal duty to maintain such equipment in good order (see point 6 on pages 8-9). The system should be maintained by a competent person who is familiar with the fire engineering performance specifications of that specific system.

Building regulations require SHEVS in the case of basement areas. Elsewhere, smoke ventilation systems may be a requirement of the fire risk assessment or the building design specifications.

In any school building, whether new or existing, the ventilation system is likely to involve some ductwork/louvres. Where these cross a compartment wall which has a designed fire resistance, that fire resistance must not be compromised.

Finally, a ventilation system that has been designed to clear any smoke from a fire will need a suitable detection system to trigger it.

Where smoke control systems such as SHEVs are installed in addition to a sprinkler system, then the design and installation of each system should not act detrimentally on one another.

NEU view

The NEU believes that smoke control systems should, like sprinklers, be installed in school buildings wherever possible, with those vulnerable to arson being prioritised. The union also believes there is no justification in fitting smoke control at the expense of sprinkler systems or vice versa. Both have distinct and important roles to play in saving lives and minimising the adverse outcomes of school fires.

Appendix 5

Fire marshals

All school fire safety risk assessments must describe the measures in place to ensure that fire evacuation procedures are properly supervised, and that those carrying out this supervision have had sufficient – and recent – training in order to adequately fulfil this task.

Most staff will already have some level of supervisory duties in fire evacuation procedures. In a secondary schools, for example, heads of department might co-ordinate supervision of evacuation in specific areas of the school, while senior managers might fill in any gaps and ensure the school's fire evacuation procedures are being correctly followed. Classroom teachers will have supervisory responsibility for individual classes.

Current legislation requires that there must be a sufficient number of competent persons trained as fire marshals to ensure that the fire procedure is followed correctly and that the evacuation of premises is undertaken quickly and safely. The procedures implemented must protect relevant persons from serious and imminent danger resulting from fire in all circumstances.

The duties of fire marshals might include:

- helping those on the premises to leave
- checking the premises to ensure that everyone has left
- using firefighting equipment if safe to do so
- liaising with the fire and rescue service on arrival
- shutting down dangerous equipment or services
- performing a supervisory/managing role throughout.

Fire marshals can free up other staff to look after the welfare of their classes, safe in the knowledge that they are part of a well-ordered fire evacuation system co-ordinated by trained personnel.

In a school, the natural candidates to become fire wardens would be site supervisors and administrative staff, who would not have classes or individual pupils to look after. Those in the leadership group could be called upon too, given their seniority and their reduced teaching load. Classroom teachers would be the least suitable candidates to undertake the role, as they will always have a direct responsibility for the class in their care.

Normally, managers request volunteers to carry out the role of fire marshal, and anecdotal evidence would suggest that there is usually a sufficient response to meet the need which has been identified in the fire safety risk assessment.

Where this is not the case, it might be necessary to ask individual members of staff to take on these duties instead. In such circumstances, acceptance of the role is likely to be expected unless there is good reason, such as a medical condition or disability. The employer must comply with the law, and employees must co-operate with the employer as regards the duties and requirements placed on the employer by law (section 7, Health and Safety at Work etc Act 1974).

The process of appointing fire marshals should not, however, be high-handed and autocratic. The 2005 Order places a specific responsibility on employers to consult employees, or their elected representatives, about nominating people to carry out particular roles in connection with fire safety.

Moreover, employers are obliged to consult safety representatives about arrangements for nominating fire wardens to implement the measures for firefighting. The Safety Representatives and Safety Committees Regulations 1977 include these provisions.

More information on fire marshals and fire evacuation procedures can be found in the DCLG guidance Fire safety risk assessment – educational premises. See Further Guidance section above.

Appendix 6

Update on school fire statistics 2013

The costs of a fire to a school

- It is estimated that school fires disrupt the education of up to 90,000 children per year.
- Loss of facilities, equipment, teaching aids and resources; pupils' work (including coursework which has to be re-done); and personal items of staff and pupils.
- Lowering of staff morale and the postponement of pupils' tests and exams.
- Increased stress for staff and pupils alike, but particularly for staff teaching in unfamiliar/unsuitable rooms and for senior managers coping with new challenges.
- Loss of facilities for the community, eg for youth groups, sports, evening classes, etc.

Data on school fires

Government figures suggest that there are more than 1,000 school fires per year large enough to be attended by fire and rescue services. This works out at about 20 school

fires per week, the majority of which are due to arson. The odds on any one school experiencing such a fire are about one in 20.

Schools are top of the list of building types vulnerable to an arson attack and are targeted either deliberately or because they offer easy access.

Most fires are likely to be started by pupils, ex-pupils or those with insider knowledge, with the majority of fires being started in classrooms, cloakrooms or toilets.

In the past most deliberate fires occurred when the school was unoccupied but now more than 50 per cent of all fires are started between 10am and 3pm.

Typically, however, the larger fires still occur out of hours when the school is closed.

Sprinklers – the facts

Sprinklers reduce the risk to life and significantly reduce the degree of property damage caused by a fire. Sprinklers will detect a fire, extinguish or control the fire, raise the alarm locally, immediately protect life and property, and do so 24 hours a day, 365 days a year.

One benefit of them is the cost savings arising from trade-offs through their provision. These can be substantial, amounting to one per cent of the total construction cost which can, therefore, cover a substantial part of the cost of sprinklers in their own right.

Research from the Local Government Association suggests that the costs of sprinkler systems can usually be recouped in around five years, due to the significantly reduced insurance premiums paid by schools with sprinklers.

The cost of maintaining sprinklers is very low, typically between £350 and £1,000 per year, as are their whole life costs as they have a service life of at least 30 years.

Following a spate of school fires in the US in the late 1950s, most schools were required to fit sprinklers. Now, the annual cost of US school fires is about £50 million. In the UK it is £58m – despite the fact that the US has five times as many schools.

No-one has ever died in a building fully protected by sprinklers. When fires occur in buildings with sprinklers, the vast majority are controlled by the activation of up to four sprinkler heads, using around six to ten times less water than conventional firefighting, but significantly limiting the spread of smoke and fire.

There have been no reports of sprinklers being activated as a result of vandalism over a ten-year period.

A school fitted with sprinklers can be back in action within 24 hours after a fire.

Controlling the spread of fire and smoke

This can be achieved using simple containment measures, eg shutting doors and windows.
Smoke and heat exhaust ventilation systems (SHEVS) can be installed as they are designed to vent heat and smoke through the roof or via other routes to the outside.