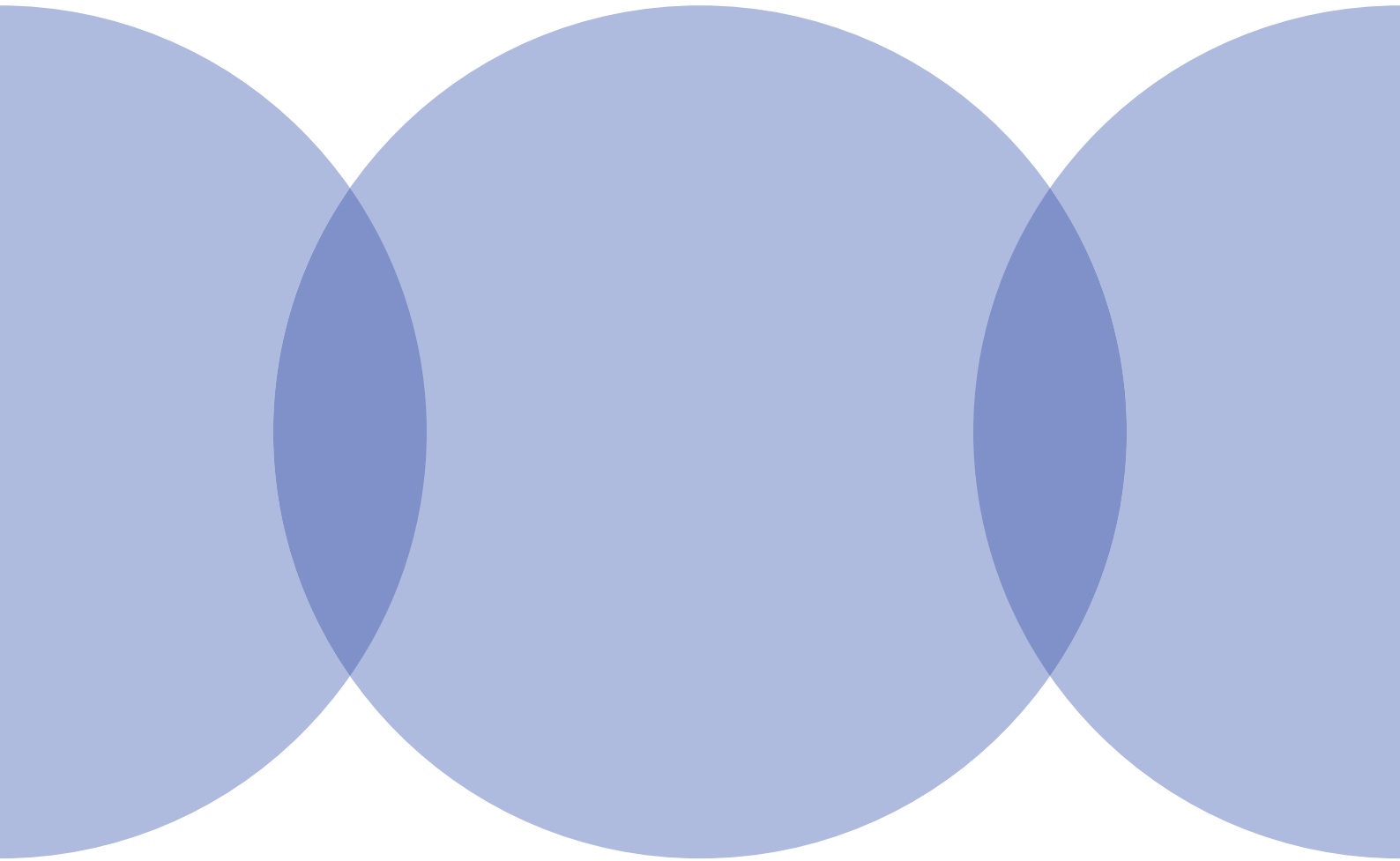




**ZURICH  
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# School fire and security guidance



# Introduction

This guide has been created by Zurich Municipal to help schools assess and manage their fire and security risks.

The guidance is principally aimed at state sector schools. However independent schools may also find the guidance relevant.

Guidance is provided on compliance with fire safety legislation and, where applicable, we have provided recommendations and solutions aimed at addressing specific issues.

Included in the guidance, we have provided reference to British Standards, Loss Prevention Council approved products and national supervisory bodies (such as the National Security Inspectorate – NSI), to ensure that best practice is followed where possible.

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# Fire risks

## Fire safety management framework

The Regulatory Reform (Fire Safety) Order 2005 became effective in October 2006.

It amends or replaces a multitude of fire safety legislation, the most prominent being the Fire Precautions Act 1971 and the Fire Precautions (Workplace) Regulations 1997. The latter was responsible for imposing the duty of fire risk assessment and the new Fire Safety Order continues to embrace this approach to fire management in the workplace.

The necessity therefore to complete a fire risk assessment continues to be a legal requirement and compliance with the new Order should help to address all potential fire risks in schools. In other words if the school does this well, then all the other points concerning fire safety management will fall neatly into place.

**The Regulatory Reform (Fire Safety) Order 2005** requires all workplaces (including schools) to:

- Complete a fire risk assessment of the school. The risk assessment must take into account all people who may be affected by a fire in the school and this can form part of the existing health and safety risk assessments. The assessment includes a requirement to consider people with disabilities and special needs.
- If there are five or more employees, the risk assessment must be recorded in writing.
- Provide adequate fire precautions to ensure that people who use the school are safe.
- Provide training and information to staff about the fire precautions in the school.
- The risk assessment and its findings are then used to establish what fire precautions you need to provide, to ensure a safe environment for the pupils and staff.

## The risk assessment process

The first thing to do is to find out if any form of fire safety licensing or building legislation covers any part of the school. These areas of the school may have had a fire risk assessment completed as part of this process. **However, even if a licence or fire certificate covers all, or part, of the school, you still need to complete the fire risk assessment.**

The risk assessment ensures fire safety is managed by the school and is used to establish how a fire could start, and if it did, how it would affect the staff and pupils.

The risk assessment will require a full walk through the school and should include the following points:

- Identification of all the fire hazards in the school.
- Establish who could be in danger if a fire occurs and ensure that people can escape safely.
- Establish if your existing fire precautions are adequate, or identify if more should be done to reduce or improve the risks.
- Record findings of the risk assessment and note what has been done to reduce or eliminate the risks.
- The results of the findings should be given to your staff.
- Constantly keep the risk assessment under review to ensure this up-to-date.

In conjunction with the Fire Order, the Department for Communities and Local Government have produced a series of guides for different types of premises and a specific guide has been made available for Education. Information on fire safety management is included within the guide, including a section on fire risk assessment. Guides can be downloaded free from [www.firesafetyguides.communities.gov.uk](http://www.firesafetyguides.communities.gov.uk) or apply to DCLG, PO Box 236, Wetherby, West Yorkshire, LS23 7NB, or telephone 0870 1226 236.

The assessment should be completed in a structured manner to ensure all areas of the school are assessed. It must include outdoor areas and the parts of the school that are only rarely used.

In larger schools it is recommended that the assessment is completed for separate buildings or departments, to make the task a little easier and clearer to understand.

If you have other organisations in your school, you will need to ensure the risk assessment is discussed with them. (Examples include leisure centres or other LEA or Council Departments.)

Previous experience shows that schools are potentially vulnerable to fires that are deliberately set. In view of this, the risk assessment will have to specifically include the risk of arson.

It is recommended that you start your risk assessment outside the school by assessing the potential arson risk and then work into the main school buildings.

The following points outline the areas that should be included in the risk assessment.

### External waste management

Due to the high risk of deliberately set fires, the grounds of the school should be clear of combustible storage and waste bins and skips should be located away from buildings, so if they are set on fire, the fire will not spread into the school.

The following points should be specifically assessed:

- All waste bins should be secured a minimum of 8m from the school buildings. This can be achieved by chaining the bins to a fixed point, or providing a secure compound area.
- All waste skips should be located a minimum of 8m from buildings. If possible, skips should have lids that are kept locked when not in use.
- Schools in conurbations may have difficulty in complying with the 8m recommendation. In such cases an assessment is needed to visualise the effect of a burning waste bin or skip that is closer to buildings. Factors that can reduce the risk of fire spread into buildings can include

siting waste containers against or facing masonry walls without windows and without combustible overhangs such as timber soffits. If this is not possible a metal roofing over the containers might help to deflect flames away from the wall and roof. Otherwise the case for having lockable lids for the waste containers is considerably strengthened.

- All external litter bins should be emptied at the end of each day.
- Litter bins should not be fixed to combustible wall claddings of school buildings or be located in covered or recessed areas.
- Any recycling receptacles (particularly those containing paper and textiles) should be located and secured a minimum of 8m from the school buildings.
- Loose combustible materials should not be stored against or close to the school buildings.

### Temporary buildings

Because of their combustible nature, these buildings could pose a risk to the school if they are deliberately set on fire. Where possible, all mobile classrooms or temporary buildings should be located a minimum of 10 metres from the main school buildings.

In addition, the following points should be considered:

- Particular attention should be given to protecting the underside of the mobile classrooms, to prevent this area being used for storage and to reduce the potential for rubbish to accumulate.
- If the school uses timber sheds, then these should not be located close to buildings. Again a minimum distance of 10m is recommended.
- It is important to ensure all mobile classrooms are maintained in good condition.

### Building fabric

#### Condition

Assess the general condition of the buildings. Check if they are in good condition and identify if there are areas where a fire could be easily started.

As part of the assessment, assess the condition of the doors and windows of the school buildings. If these are in poor condition, or badly maintained, then this could provide easy access into the school buildings for persons causing malicious damage or deliberate fires.

### **Construction**

The construction of the buildings will have a bearing on how quickly a fire will develop and spread throughout the school. In the main, these are inherent features that cannot be easily changed, however the construction must be considered as part of the assessment process.

It is important, therefore, to establish if there are any areas of combustible construction. In these areas, additional care should be taken to ensure that occupants can escape quickly and safely.

### **Internal features**

As part of the assessment, note the construction of the internal walls. Are they combustible construction?

Are there combustible linings, (such as pin boards or notice boards) that could help a fire spread quickly inside the building? If so, can these be eliminated, covered with glass or changed to boards of non-combustible materials?

Pay attention to potential voids at ceiling or roof level. These voids are notorious for allowing fire to spread quickly through school buildings. If possible, the ceiling void should be inspected to establish their extent. Specific guidance on this point can be obtained from the LEA staff responsible for building maintenance.

If the void exists, then it should be protected with fire resisting barriers in accordance with current building regulations. Specific advice can be provided on this point, if it is required. The key point, however, is identifying the risk so it can be addressed.

If the school has areas that are more than one storey in height, then floor openings, such as stairs and lifts, should be protected to a minimum of 30 minutes fire resistance. To help identification, in most cases this will comprise fire doors containing wired glass panels and smoke seals. Doors containing standard glazing or polycarbonate will not be fire separation doors.

## **Electrical hazards**

Electrical problems are a major cause of fire. However, in most cases, a good standard of maintenance can significantly reduce this risk.

The risk assessment should check the following:

### **Main fixed electrical installation**

To comply with Institute of Electrical Engineers (IEE) Regulations the main electrical installation should be tested every five years by a National Inspection Council of Electrical Installation Contractors (NICEIC) approved electrical contractor.

In addition to the installation inspection, electrical safety can be managed by the school by avoidance of the following:

- No temporary wiring should be used as the cables can become damaged and create a fire risk.
- Where possible avoid the use of multi-point adapters as these can overload sockets.
- The main electrical switch room should not be used as a storage area. It is particularly important to ensure that this area is not used for the storage of combustible items.

### **Portable electrical appliance testing (PAT)**

It is a statutory requirement that a competent person should test portable electrical appliances in accordance with the Electricity at Work Regulations 1989. The 'competent person' could be an electrical contractor, though premises staff can be trained and equipped for this work.

**Note that PAT applies to all portable electrical appliances, including those brought into the school by staff, pupils or parents.**

## **Heating**

Faulty heating systems can often cause fires.

As part of the risk assessment, establish what type of heating is used in the school.

Central heating systems are generally safe, but the following points should be in place:

- The boilers should be subject to an annual maintenance contract

- Automatic fuel cut-off devices should be installed.
- The boiler room should not be used for combustible storage
- Ideally a fire detector linked into the fire alarm system should protect the boiler room.
- There should be manual break glass points in the boiler room, linked into the fire alarm system.
- The room should be provided with a suitable fire extinguisher.
- If the heating system is a fuel oil system, the external oil tank should be fitted with a bund wall, to catch any leakage of oil. It also important to ensure that this bunded area is kept clear of any storage and any water accumulation is drained regularly.

Temporary heating appliances should be avoided wherever possible. If they must be used then they should be electrical convection heaters, which are inspected annually as part of the Portable Appliance Testing.

**Heaters using Liquefied Petroleum Gas (LPG), radiant bars or exposed naked flames must not be used.**

### Control of contractors

It is important to ensure that contractors are monitored and controlled when working on the school site as their presence and activity may well affect normal fire or security arrangements.

In particular, their attendance should be arranged beforehand and on arrival, they should report to a nominated individual where their presence and time of arrival are recorded.

Monitoring of activity is particularly important if the contractors are using any hot work process as part of their work. Hot work refers to any areas of construction or refurbishment, where the use of heat is required as part of the process. (This can include blowtorches for plumbing, roofing and painting work, welding, bitumen boilers for roofing work etc.)

In order to ensure a co-ordinated approach, a hot work permit scheme should be introduced. The permit scheme ensures that contractors are implementing procedures that will reduce the risk of a fire. A copy of a hot work permit can be supplied on request.

### School areas of higher fire risk

In general terms, the risk of a fire starting in a school is relatively low; however there are some areas where the risks are considered to be higher. Listed below are areas of potentially higher fire risk.

#### Design Technology

The following points should be assessed:

- A high standard of housekeeping should be enforced. Sawdust and combustible waste materials should be regularly cleared from areas around machinery or areas where heat is used (i.e. welding bays, forges etc.)
- All timber in the wood stores should be stacked neatly and the general standard of housekeeping should be high.
- Suitable fire extinguishers should be provided
- Highly flammable liquids and hazardous substances should be stored safely (in accordance with your COSHH assessment)
- All electrical equipment and machinery should be tested as part of the Portable Appliance Testing system.
- If large wood working machines are used, localised dust extraction systems should be provided.
- Emergency electrical and mains gas shut off switches should be provided.
- The need for oxygen and acetylene cylinders should be reviewed to ascertain whether they are required for teaching purposes. Any redundant or empty cylinders should be removed. If cylinders are required it is best to pipe in the gases from a secure well-ventilated location. If cylinders have to be kept internally then a small trolley-mounted set is preferable to a large industrial size set. All cylinders to be inspected regularly.

### **Art & Design**

The following points should be assessed:

- The immediate area around the kiln(s) should be kept clear of combustible storage.
- All electrical equipment (including the kiln, irons, cooking appliances) should be tested as part of the Portable Appliance Testing system.
- Highly flammable liquids should be stored safely (in accordance with your COSHH assessment). Particular attention should be given to printing inks. If these are flammable, can alternative water based inks be used? (This reduces the need for solvents and their associated hazards).
- A good standard of housekeeping should be maintained. Materials should be neatly stacked and stored in closed cupboards if possible. Poorly stored, loose materials will allow a fire to develop and spread very quickly.

### **Science Department**

The following points should be assessed:

- Highly flammable liquids and hazardous substances should be stored safely (in accordance with your COSHH assessment).
- Spillage kits (for dealing with small spillages of hazardous substances) should be provided in preparation rooms and chemical stores.
- Chemical stores should incorporate high and low level ventilation, spark proof lighting systems and the door should be clearly marked, indicating the contents.
- Fume cupboards should be tested on an annual basis.
- Accessible, remote gas shut-off valves should be provided. Gas supplies should be isolated at night. It is preferable for restarting of the supply to only be enabled by a key operation.
- Appropriate fire extinguishers should be provided.
- Fire blankets should be provided in all areas, as there is a risk of fire involving clothing.

### **Main Hall and Stage**

The following points should be assessed:

- Establish if the main hall has an Entertainment Licence. (This may be required if visitors are charged for performances.) The licence will cover the hall and surrounding area, but a risk assessment must still be completed.
- Never exceed recommended maximum numbers for performances and remember these limits are much reduced for seated performances, as means of escape can be inhibited.
- All electrical equipment should be tested as part of the Portable Appliance Testing system.
- Review storage under the stage. In addition, this storage area should be kept locked when not in use.
- Appropriate fire extinguishers should be provided.
- All fire exits must be clearly marked and kept clear of obstruction.

### **Kitchens**

In many cases, separate contractors may run the kitchen; however, the school is still required to complete a risk assessment in this area.

The following points should be assessed:

- Appropriate fire extinguishers and fire blankets should be provided. If the area uses deep fat fryers then a Class F fire extinguisher should be provided (see section on fire extinguishers)
- Accessible, remote gas shut-off valves should be provided.
- If there is an extraction system above the cooking area, the filters and hood should be cleaned regularly (ideally weekly) and the main extraction ductwork including any associated internal fans should be cleaned annually.

### **Food Technology**

The following points should be assessed:

- If applicable, accessible remote gas shut-off valves should be provided. Gas supplies should be isolated at night. It is preferable for restarting of the supply to only be enabled by a key operation.

- Appropriate fire extinguishers should be provided.
- Fire blankets should be provided in all areas, as there is a risk of fire involving clothing.
- All electrical equipment (including cookers, washing machines, tumble dryers, irons etc) should be tested as part of the Portable Appliance Testing system.
- Wall displays above cookers should be kept to a minimum as these can be set on fire during cooking and then spread the fire quickly.

In all the above areas it is important to ensure that storage is kept neat and tidy.

In particular, it is important to ensure all escape routes and fire exits doors are kept clear of combustible storage.

## Fire detection and warning

The risk assessment process must establish if there are adequate means to warn people of a fire in the school. This could take the form of an electronic fire alarm system in larger premises, or in small schools this could be hand bells, whistles or a manually operated fire alarm bell.

The key test is to ensure that the fire alarm system can be heard **throughout the entire school**.

You must also establish if there are fire warning devices for any disabled visitors/employees.

Suitable 'action to take in the event of fire' notices must be provided in all areas.

For fire alarm systems, the following points must be implemented:

- The fire alarm must be tested weekly and these tests should be recorded.
- Adequate fire alarm call points should be available around the school.
- Fire drills should be held at least once per term and these should be recorded.
- Suitable evacuation instructions should be provided for any visitors.

## Automatic fire alarm systems

If the school is protected by an automatic fire detection system, this should be noted as part of the risk assessment process. It is recommended that the following points are noted and considered:

- Note the installer and if the system was installed in accordance with BS 5839
- Provide details in your assessment of any maintenance agreement, details of links to an alarm monitoring centre (i.e. does the system automatically report activations to a manned central station?) and areas that are covered by the system.
- Note if high-risk areas are covered – i.e. kitchens, boiler room, DT, arts, science, food technology, storage areas etc. If not, can the system be extended to cover these areas?

## Fire evacuation

**Fire evacuation can be a very complicated issue to assess and address. If problems are noted, then advice should be sought from the local Fire Safety Officer of your local fire service.**

## Means of escape

A general risk assessment can help to identify any problems. **The main point to consider is that the time available for escape (i.e. how quickly an escape route could become dangerous in a fire) must be longer than the actual time needed to escape from the school.** It is important to ensure that once staff are aware of a fire, they should be able to leave the school buildings quickly and safely.

As part of the risk assessment process you will need to plan the evacuation of the school. You need to take into account all the staff, pupils and visitors. This will form an integral part of the school's emergency plan and must be included in training given to staff. It is recommended that a simultaneous evacuation should be used at all schools. This ensures all areas of the school are evacuated at the same time and this will help with roll calls of staff and pupils. Even in large sites with a number of buildings, this position should still be maintained as staff and pupils

regularly move between buildings during the school day.

Fire action notices must be on display throughout the school. These should include:

- What to do if you discover a fire
- What to do if the fire alarm sounds
- How to call the fire service

Fire escape routes must be clearly marked.

All fire escape signs should comply with the Health and Safety Signs and Signals Regulations 1996 and should be located in places that clearly indicate escape routes. The signs must be white on green and include a 'running man' pictogram. Simple "Fire Exit" signs are no longer acceptable.

### **Escape routes**

Ideally there should be an alternative means of escape from all parts of the school.

Routes providing a means of escape in only one direction should be avoided as this means that people may have to move towards a fire to escape.

The escape routes should be separate from each other and laid out so people can move away from the fire to escape.

Escape routes should always lead to a place of safety and be wide enough to cope with the number of people who may use it.

The escape routes must be kept clear of obstructions at all times and must not be used for storage.

All combustible linings should be removed from escape routes.

You may need to make special arrangements for staff and pupils with disabilities so this should be included in any risk assessment.

### **Stairways**

Stairways should be wide enough for the number of people who may need to use them in an emergency situation.

Fire resisting partitions and fire resisting, self-closing doors should enclose the stairs. Depending on the use of the building and the amount of people on the upper floors, an

alternative staircase may be needed to provide adequate means of escape.

**There are allowable exceptions, but specialist advice should be sought from the Fire Safety Officer, if the risk assessment raises concerns.**

It is important to ensure that escape stairways are not used for any form of storage as this may impede safe exit from the premises.

### **Exhibitions and displays**

Any exhibitions or displays, particularly those with large quantities of combustible materials such as paper and textiles, can help a fire to spread quickly. In view of this, the types of displays in potential escape routes should be carefully considered and kept to a minimum where possible.

Notice boards can also create issues that need to be addressed. They should be kept as small and as tidy as possible and away from heat sources, such as heating appliances.

### **Other items prohibited on escape routes**

The following items should be prohibited in escape routes:

- Portable heaters of any kind
- Any heaters with radiant bars
- Cooking appliances
- Upholstered furniture
- Coat racks
- Temporary storage (particularly combustible items)
- Gas boilers (unless permitted under building regulations and installed in accordance with the gas safety regulations)
- Vending machines

- All electrical equipment (other than normal lighting, escape lighting, fire alarm systems, intruder alarm systems).

## Fire doors

It is important to understand the difference between a fire door and a fire exit door. A fire door is designed and installed to prevent fire quickly spreading through a building. A fire exit door on the other hand is designed to let people out of a building.

The main points to consider are:

- In most cases fire doors should be labelled “fire door – keep shut” and be fitted with self-closing devices.
- Fire doors on cupboards, boiler rooms or other areas of higher fire risk do not need to have self-closing devices, but instead should be kept locked when not used and marked with “fire door keep locked” signs.
- Fire doors on corridors and stairwells should be kept closed when not used, unless they are held open by automatic release mechanisms, linked into the fire alarm system. These doors should be marked “automatic fire door – keep clear” and must be kept clear of obstructions to ensure they close effectively.

## Fire exit doors

The main points to consider are as follows:

- In most cases fire exit doors should open in the direction of travel. This is particularly important for doors that have to cope with a large amount of people (an example in schools would be doors from the main hall).
- The doors should be able to be opened from the inside, without the use of a key. Locking mechanisms such as panic devices and push bars are normally used to secure these doors.
- If the door needs to be secured for security reasons, alternative secure locking systems can be used. The important point here though is that there is a clearly understood procedure in place which will ensure that the additional out of hours locking devices are

disengaged when ever the door is required as a fire exit. Advice can be sought from the fire safety officer in these instances.

## Emergency lighting

As part of the fire risk assessment, you must also assess whether or not there is sufficient lighting available to ensure that occupants can escape safely, particularly in the hours of darkness or if power is cut as the result of a fire. Consider use of the school in the evenings for parent evenings, meetings, performances etc., and particularly in the winter months when in many parts of the UK it is dark in the late afternoon.

This assessment should be done with normal lights turned off. If the lighting levels are poor, emergency lighting will be required. The emergency lighting should operate if the normal lighting system fails for any reason, because this is possible in a fire situation.

The following areas should be given specific attention and provided with lighting if necessary:

- Escape routes – both internal and external if necessary. (External lighting may be needed if the route from the building is potentially hazardous)
- Final exit points from the school
- Locations directly above fire alarm points and fire extinguishers
- Highlighting hazards in escape routes – i.e. changes to floor level, staircases and changes of direction in escape routes.

In small schools, the risk assessment can recommend that battery powered or rechargeable torches would be adequate. This is an acceptable solution, provided that the situation is well managed and staff are trained in their use.

## Fire fighting equipment

The provision of appropriate fire fighting equipment is a requirement of the Regulatory Reform (Fire Safety) Order 2005 and if used correctly, can quickly put out a fire and prevent it developing into a serious incident.

Is important to ensure that the correct types of fire extinguisher are provided. In most cases, standard water extinguishers will be adequate, but there may be areas of higher risk where the use of water to put out a fire would not be appropriate. To help with the risk assessment process, British Standard EN 3 fire extinguishers are classified into the following categories. Examples are given to highlight the areas where each type of fire may occur in a school.

- **Class A** – fires involving solid materials, in which combustion takes place with the formation of glowing embers (**textiles, timber, paper etc – i.e. most classrooms, staff room, etc.**)
- **Class B** – fires involving liquids or liquefied solids (**highly flammable liquids – i.e. sciences, DT etc.**)

- **Class C** – Fires involving gases (**DT, kitchen, and science**)
- **Class D** – Fires involving metals (**DT, science**)
- **Class F** – Fires involving cooking oils/fats (**kitchen and food technology**)

Your risk assessment should help you to decide what type of fire extinguisher is required and further information can be obtained from your fire extinguisher supplier.

Fire extinguishers themselves are available in four main categories:

- Water
- Foam
- Dry Powder
- CO<sub>2</sub>

Some fire extinguishers can be used on more than one type of fire. The following table should help to identify which type of fire extinguisher should be provided.

Classification of fire risk	Water (red)	Foam/AFFF (cream)	CO <sub>2</sub> (black)	Dry Powder (blue)
<b>A</b> Paper, wood, textiles, fabrics	✓	✓		✓
<b>B</b> Flammable liquids		✓		✓
<b>C</b> Flammable gases			✓	✓
<b>D</b> Metals				✓
<b>F</b> Cooking Fat fires		✓		
– Electrical Fires			✓	✓

As a general rule, one 9 litre water fire extinguisher (or its equivalent) should be provided for each 200m<sup>2</sup> of floor space, with a minimum of one per floor.

In addition, areas of special risk, such as deep fat frying in kitchens, electrical equipment (such as photocopiers, computers etc.) will need a fire extinguisher suitable for that type of risk.

All fire extinguishers should conform to the British standard or BAFEE/LPC schemes.

Following introduction of BSEN 3 in 1997, all fire extinguishers are now coloured red, however, fire extinguishers should still be colour-coded to indicate their type. As a concession to the UK, up to 5% of the fire extinguisher is allowed to be coloured to identify the extinguisher type (see table above).

It is important to know that extinguishers do not need to be upgraded or changed to comply with the standard, unless they no longer work effectively.

### **Fire extinguisher locations**

Where possible, fire extinguishers should be located in areas where they are easily accessible. They should be hung on the wall and to avoid problems lifting them, the handle of the larger extinguishers should be approximately 1m above ground level. Smaller extinguishers can be located at a higher level if required.

Fire blankets should be provided in areas such as kitchens, where there is the risk of a deep fat fryer fire, or in DT and science where there is a risk of a fire involving clothing. The blankets should be wall mounted, in an accessible location and comply with the relevant British standard – BS 6575 – the specification for fire blankets.

### **Maintenance and testing**

It is important to ensure that all items of fire safety equipment are well maintained and located in the correct places, so if there is a fire, the equipment will work effectively.

In view of this, the fire risk assessment process must also incorporate maintenance and inspection programmes which form part of the day to day running of the school.

The inspection and maintenance programme should be a daily process for aspects that can be easily checked in-house, with maintenance contracts with specialist companies introduced for inspections of alarms, emergency lighting and fire extinguishers.

### **Modern buildings**

Modern schools incorporate architectural design features such as atria. Such building features can assist in vertical fire spread between floors. A fire strategy is often produced at a design stage to ensure that building features and protection methods allow for safe egress of occupants in the event of a fire. School management in such buildings should ensure that the assumptions and qualifications within the fire strategy continue to be upheld during the lifetime of the building. For example the strategy may assume that there is to be no significant storage of combustible materials at the base of an atrium.

### **Fire sprinklers**

Many new schools have the benefit of automatic fire sprinkler protection. Sprinklers provide a very reliable method of controlling, and in most cases extinguishing, a fire. Maintenance of sprinkler systems will need to be carried out on a regular basis by competent sprinkler engineers. The engineers will have given advice on the need for weekly tests, checking of any alarm links and the recording of test results.

School management during their regular inspections can also ensure that the protection will continue to be effective by reporting any leaks to the sprinkler engineers, not hanging any material from sprinkler pipe work, preventing storage of materials to within 0.5 metres of the height of heads and advising the engineers of any possible obstructions such as new suspended ceilings or partitions.

The following table outlines good practice for the testing and maintenance of fire safety equipment.

### Maintenance and testing of fire safety related equipment

Equipment	Period	Action
Fire-detection and fire-warning systems (including self contained smoke alarms and manually operated devices)	Weekly	<ul style="list-style-type: none"> <li>• Check all systems for state of repair and operation</li> <li>• Repair or replace defective units</li> <li>• Test operation of systems (a different call point should be tested each week in a rotation system)</li> </ul>
	Annually	<ul style="list-style-type: none"> <li>• Full check and test of system by a competent service engineer</li> <li>• Clean self-contained smoke alarms and change batteries</li> </ul>
Emergency lighting (including self contained units)	Weekly	<ul style="list-style-type: none"> <li>• Operate torches and replace batteries</li> <li>• Repair or replace defective units</li> </ul>
	Monthly	<ul style="list-style-type: none"> <li>• Check all systems, units and torches for state of repair and function</li> </ul>
	Annually	<ul style="list-style-type: none"> <li>• Full check and test of system by a competent service engineer</li> <li>• Replace torch batteries</li> </ul>
Fire fighting equipment (including hose reels)	Weekly	<ul style="list-style-type: none"> <li>• Check all extinguishers including hose reels for correct installation and apparent function</li> <li>• Check all safety pins are in place</li> </ul>
	Annually	<ul style="list-style-type: none"> <li>• Full check and test by a competent service engineer</li> </ul>

It is strongly recommended that you keep records of all maintenance and testing of equipment as this will be useful if you are asked by the fire authority to prove that you have effective systems in place.

## Completed assessment – what now?

Once you have completed your Risk Assessment, there may be areas in the school where improvements are required to reduce the risk of fire.

In order to ensure these are recorded and dealt with effectively, it is recommended that an action plan is produced. The action plan should list the recommendations and you should emphasise their importance by using a priority system as follows:

- Priority 1 Issues that require urgent attention within 2 weeks
- Priority 2 Issues that require prompt attention within 3 months
- Priority 3 Issues that require longer term consideration

You should then implement a planned programme to complete the recommendations as soon as possible. It will not be considered acceptable to simply complete the assessment and not implement the required fire safety improvements.

**Finally, the fire risk assessment should be continually reviewed and form part of the fire safety policy of the school.**

# Security risks

## Security management overview

This guide is intended to give best practice advice to secure and protect your school building and school site.

Money that is spent on repairing or replacing buildings and contents, or on repairing damage caused by vandalism and criminal damage and on replacing items of equipment due to theft may mean less resources being available to provide essential and extra items needed in all schools.

The most common crimes on school sites are vandalism/malicious damage, theft, and arson. Good security generally involves a combination of physical, electronic and procedural measures. However, no amount of physical or electronic security will totally eliminate the risk of criminal attack, but security improvements greatly decrease the risk of criminal damage by increasing the degree of difficulty for, and the risk of detection of, the criminals.

## Risk Management Groups

Establish a Risk Management Group at the school to monitor risk and to devise and implement security strategies. A Risk Management Group could be made up of site caretakers, teaching staff, pupils, governors, and parents. The size of the Group would depend upon the size and complexity of the school buildings and site.

The aims of the Group could include all or some of the following:

- To discuss different opinions and to decide upon actions to take
- To record any losses
- To carry out Risk Assessments
- Monitor the effectiveness of actions taken
- To acquire knowledge and expertise
- To be a point of contact for school departments and other staff
- To arrange training for staff and to try to improve levels of risk awareness amongst staff and pupils

Such a Group might be responsible for aspects of security or it might have a wider remit that includes Health & Safety, building maintenance etc.

## Security risk assessments

In order to identify immediate and potential problems, it is helpful to carry out security risk assessments. The different aspects that need to be considered include:

- The type and extent of actual and potential risks occurring, and that are likely to occur at the school site. This needs an accurate record of all previous incidents and how any changes at the school might impact on security
- The cost of any problems that are occurring e.g. costs of repairs and replacement items.
- The cost of any potential consequential losses e.g. caused by disruption and inconvenience.

However, all school sites are different and so not all solutions will be appropriate for all situations. Theft from, and malicious damage to, the school buildings generally take place outside of the normal working hours. However, there are also security problems occurring during the normal school day. Most of these problems can be improved or eliminated by procedural solutions.

## Daytime security procedures

Listed below are recommendations for points to consider as part of your assessment of daytime security.

### Visitors

- All visitors should be directed by means of prominent, unambiguous notices to a single entrance door and reception point. (Visitors also include contractors).
- Casual access to other parts of the school building should, as far as possible, be prevented e.g. by locked external doors, by fences used as barriers.
- Generally, visitors should be escorted to and from their destination within the building – this would not always be necessary for regular visitors.
- All visitors should sign in and out providing their name, organisation worked for, person being met and car registration (if applicable).
- All visitors should be asked to produce evidence of their identity – if appropriate.

- All visitors should be provided with a badge to wear whilst they remain on the school site.
- Members of staff should be instructed to challenge anyone encountered on the site whom they do not recognise and who is not wearing a badge.

### **Cash handling**

- Cash should never be handled in areas visible to visitors or members of staff at large. Always carry out cash counting in a separate room, or at least in a screened off area.
- All cash not required immediately should be routinely locked in a safe and the keys kept by an authorised member of staff. Cash should never be kept in a desk drawer or concealed in a filing cabinet.
- If large amounts of cash are regularly handled make sure the safe has an adequate 'cash limit' and is correctly installed e.g. bolted into the floor if a free standing model.
- If possible, try not to leave cash on the premises overnight.
- If cash is taken to the bank by a member of staff the risk of robbery should be minimised by banking at different times of day and, if possible, by varying the route. It is also advisable for two people to go to the bank.
- If large amounts of cash are regularly received at the school then a security, cash collection firm should be used.
- Safe keys or combination numbers must not be left on the premises outside normal working hours.

### **Safeguarding personal property**

- Staff should be encouraged to be vigilant in safeguarding their own property and not leave items such as handbags or personal equipment such as a laptop computer in an unsecured room.
- Offices should be kept locked during the day when they are unoccupied.
- Lockers should be provided or rooms where personal property such as coats can be left

should be capable of being locked. An access control system such as a digital lock could be used for such a room.

- Staff should be advised against leaving personal property on the school premises overnight – even in a secure area.

### **Key control**

A locked building, room, store or cupboard is only as secure as its key. If the key is lost, or copied then the security is compromised until the lock is changed. Good key control – especially for high risk areas – is, therefore, very important.

- Keys to external doors to the school building should only be issued to those members of staff with a need to enter the building outside the normal school day – or with a responsibility to open or lock the building, e.g. site caretaker, senior management. The number of staff with keys to external doors must be kept to a minimum.
- Keys to internal doors should only be issued to members of staff whose duties require them to have access throughout the building.
- Departmental keys should only be given to heads of departments, their deputies and, possibly, their authorised nominees.
- Individual keys for particular rooms, stores or cupboards should only be given to the main user of that area.
- An inventory of permanently issued keys should be prepared and kept up-to-date.
- A key log of temporarily issued keys should also be kept.
- Staff should be instructed not to make copies of keys.
- All duplicate keys should be locked in a safe
- Keys should be identified only by a number or a code with the list of these numbers kept in a separate secure location.
- Any lost keys must be reported as soon as possible. Depending upon the location of the lock affected it may be necessary to replace the lock.

- Cleaning staff should not normally hold keys to the school building. The site caretaker should provide access for them where possible. Also, where possible, they should lock themselves in the school whilst they are on the premises.
- Regular checks should be carried out to confirm the whereabouts of every school key (not a popular action with staff but important for security reasons).

## Physical security

### Routine surveillance

- Improve the level of informal surveillance of the site (i.e. from neighbours or passers-by) by cutting down any high and very dense shrubs or foliage – at least to below the level of the window-sills.
- Encourage neighbours to report anything suspicious or untoward going on at the school site – either to the school caretaker or the Police.
- Introduce a ‘School Watch’ scheme. This is similar to a ‘Neighbourhood Watch’ scheme.
- Consider the use of security patrols – either irregularly timed visits or permanently on site between specific hours – if incidents are high.
- Permanent security patrols are expensive but they may be worthwhile for limited periods when the pattern of criminal behaviour is particularly bad at the school site. If permanent security guards are used they should operate in accordance with British Standard 7499: Part 1: 1991 – Code of Practice for Static Guarding and Mobile Patrol Services. They should be contract security personnel provided by a BSIA (British Security Industry Association), IPSA (International Professional Security Association), or ISI (Inspectorate for the Security Industry) approved company and the individual guards should be licensed in accordance with the Security Industry Act 2001. The contractors operating base should be within 10 miles of the school site to ensure prompt response by management or mobile supervisors in an emergency. Remote supervision should be provided by routine telephone checks (approximately every 30 minutes) to and from the site.

### Gates and fences

Fencing is available in a variety of different materials, heights and quality. Perimeter fencing should not prevent surveillance of the school site. Fences over 2 metres in height may require planning permission, particularly if adjacent to a highway.

For effective security, fencing should be of security weldmesh, palisade or railings. The fencing should be to a height of 2.4 metres and installed according to British Standard 1722 Part 12, 1990 Section 7 – the Erection of Palisade Fences or Part 10, 1990 Section 5 – the Erection of Welded Mesh Fences.

Chain Link fencing is not recommended since this is easily distorted or removed, and quickly becomes unsightly. It is therefore not an effective barrier to intruders.

Similarly, timber fencing is not recommended. The timber is often stolen and some timber fences can impede surveillance of the site from the outside. Timber can also have high maintenance costs.

If it is not feasible because of costs to fence the entire school site, including all playing fields then the fencing line should be brought in closer to the school buildings. Consideration should also be given to fencing across the school site in order to reduce means of escape for the criminals and to provide secure playing areas during the school day. Additionally, it is advisable to fence or gate any hidden courtyard or recessed areas that exist around the school building.

Quick growing thorn hedges and other prickly shrubs can be effective barriers once the plants have thickened and matured. Additionally, maintenance costs are low. Care needs to be taken however to ensure they are not planted where children could accidentally injure themselves.

Gates within perimeter fences must be to the same quality and height as the fence. Gates should be securely locked outside of the normal school hours. Padlocks should be good quality, close-shackle types. (It is advisable, however, to check with both the local Fire Brigade and the local Police with regard to access to the site in the event of an emergency).

### **External doors**

External doors of school buildings are often of poor quality and fitted with poor quality locks e.g. timber panelled doors with large glazed areas fitted and secured only by a 2 or 3 lever mortice lock.

Wherever possible, external doors should be solid timber or steel and secured with good quality 5 lever mortice locks conforming to British Standard 3621.

It is important that all external doors and their frames are installed to a good standard. The frames should be securely fixed to the surrounding construction.

Where there is a letter box, a fireproof container should be fitted behind it, to reduce the risk of arson, or an external letter box could be used.

If the external doors are within recessed doorways the best way to protect these is by the use of a good quality, steel roller shutter. In some locations, the use of roller shutters may require planning permission. Alternative solutions to protect recessed doorways include fitting gates, or simply moving the external doors out to the line of the building eliminating the recess completely.

Many external doors are fire exit doors which whilst they cannot be locked during hours of occupation, they can be secured outside such times – provided there is a system in place to ensure that all fire exit doors are unlocked as soon as the school is re-opened. For example, fire exit doors can be chained and padlocked whilst the building is unoccupied but chains must be removed as soon as the premises are occupied. A simple method of ensuring that all exits are unlocked is to have a set of numbered hooks on which the chains and padlocks are hung whilst the building is occupied. Any hook without a chain/lock indicates the possibility of a door still being secured.

External doors to individual classrooms can be made more secure by removing the key operated lock and substituting internal bolts, or by removing the external handle so that the door can only be opened from the inside.

### **Internal doors**

It is recommended that internal doors of the school building are left closed but unlocked at the end of the school day – except where they are security doors protecting high risk areas such as IT Suites, offices, science laboratories etc.

### **Windows**

Windows are the most vulnerable targets for vandalism. They are also the most common point of entry for intruders. Where possible, laminated glazing should be used as this provides a higher standard of security.

Louvered windows are particularly easy to break and remove and these should be replaced wherever possible with conventional windows.

Windows that are accessible from the ground, single storey flat roofs, external fire escape stairs etc should be fitted with key operated window locks, wherever possible, and procedures should be in place to ensure that the locks are locked at the end of the school day and the keys removed.

Windows can be protected by a variety of fixed bars or grilles, steel roller shutters or internal collapsible grilles that can be opened up during the school day.

Where windows are regularly maliciously broken by acts of vandalism, consideration could be given to replacing the glass panes with polycarbonate. However, whilst the polycarbonate is virtually unbreakable, it is more expensive and flammable, unless specially treated and can be easily scratched. Also, since it is a flexible material it can be easily sprung from its fittings unless suitable fixings are used.

Georgian-wired glass is not security glass and it should only be used where required by the Fire Officer to prevent fire spread.

It is recommended that windows should be fitted with limiting devices that restrict the amount they can be opened – enough to allow for adequate ventilation, but not enough to allow a computer or television to be passed through!

### **Accessible roof areas**

It is important to take all possible steps to prevent access onto school roofs. Unfortunately, there are many school buildings that are single storey with flat roofs. Examples of preventative actions that could be taken include:

- Remove climbing aids such as low walls, railings, bins – wherever practicable
- Replace round rainwater down pipes with square, plastic down pipes that fit flush to the wall
- Consider enclosing the down pipes to prevent them being climbed
- Use anti-climb paint – however, only at heights above 2.4 metres and there should be clear signs in place to warn that the paint has been used – in order to prevent the soiling of clothes through innocent contact
- If problems persist consider using anti-scaling devices. Sometimes referred to as CACTI these comprise spikes that spin around on a horizontal bar. It is also possible to use strands of barbed wire. However, anti-scaling devices must only be used at heights and in locations where there is no risk of accidental injury to persons – whether trespassers or not.
- Skylights should have their fixings strengthened by the use of non-return screws and metal grilles can usually be fitted internally.

### **Secure storage areas**

Secure storage areas include equipment storerooms, offices, computer rooms, caretaker's stores, cleaner's stores. The walls of secure areas should, preferably be of masonry construction. For rooms that do not require ventilation or natural light it is recommended that windows should be eliminated by being bricked up – otherwise, fixed bars or collapsible grilles could be used. Doors should be secured with at least one, but preferably two, 5-lever mortice deadlocks and doors should be locked when the rooms are not in use.

Access controls such as mechanical locks or swipe card locks can be useful for areas such as offices, and science preparation rooms where access is required constantly but security is also a high priority.

All secure storage areas should be intruder alarm protected, or should only be accessible from alarm protected areas.

### **Security marking of equipment**

Over the past few years the amount of valuable and attractive equipment used in schools has increased tremendously, particularly in terms of I.T. equipment. Whilst it has become impossible to move all equipment to secure storerooms at night all attractive items of equipment should be in areas that are intruder alarm protected – and all items of equipment should be security marked with the name and postcode of the school.

It is important to ensure that any method of security marking is indelible and cannot be easily removed. The preferred methods of security marking are engraving, (using an electric or hand held tool), chemical etching, (using a stencil and coloured paste) or heat branding. It is important that the mark is made in a prominent position as the purpose is to deter the thief from taking what will be obviously stolen property.

Security marking should not be by UV pen or indelible ink pen only – this form of marking wears off over time and can be removed with the correct solvents.

It is recommended that systems complying with LPS 1225 "Specification for testing and classifying asset marking systems" are used.

As an alternative, Smartwater or Indsol Tracer can also be used to mark equipment. However, because Smartwater is invisible to the naked eye, there is not an immediate visual deterrent to a thief. Whenever Smartwater is used it is very important to ensure that warning notices are prominently displayed.

In all instances advisory signs informing that all property has been security marked should be prominently displayed around the building.

## Protection of computer and electronic equipment

As mentioned above, recent years have seen a huge increase in both the quantity and quality of I.T. equipment present in many schools and whilst this has been of tremendous benefit to pupils, it has also provided rich pickings for the thief.

Where there are concentrations of values – purpose built computer suites for example, these should be located as high up the building as possible – simply making them less accessible. Where this is not an option, then ideally, location should be in an internal part of the building, without external walls, doors or windows.

The room or area should be protected with a secure envelope – with solid or reinforced walls and secure doors and windows, possibly protected with security grilles bars or shutters. Often omitted is the protection to internal doors to such areas when other points of entry have been well secured. The room itself and internal areas outside the room should have the benefit of intruder alarm cover.

Quite apart from the areas of greatest concentration of valuable equipment, many other parts of the school will contain attractive I.T. items and ceiling mounted **multi-media projectors**, which are perhaps the most sought after by intruders. In addition to ensuring that all rooms containing such equipment are covered by the intruder alarm system, it may be necessary to provide increased physical security by way of steel cages, always ensuring of course that the projector arms are securely attached to a fixed structural member, which often is located within the ceiling void.

Whilst increased physical security to projectors may be considered the best option, (and protection products conforming to the Loss Prevention Standard 1214 should be sought), there are projectors available which simply will not work if disconnected from the electricity supply and therefore would be useless to the thief. The school would possess a small component which when inserted into the projector restores its abilities.

Consideration could also be given to securing individual items to worktops – by using steel box enclosures. These again should conform to Loss Prevention Standard 1214 and carry the Loss Prevention Council approved mark. Lower grade security can be provided by security cables – these are useful to prevent ‘walk in/walk out’ opportunist theft.

Where possible ensure that all portable electronic equipment, i.e. laptop computers, data projectors etc. are kept in locked, secure areas when not in use.

With regard to those schools which use **laptops** extensively in the curriculum, then out of hours, there is a definite theft target when the machines are gathered together for charging. It is vital to identify whether any charging cabinet used, is simply that, or if it offers much in the way of physical protection. Again, conformance with Loss Prevention Standard 1214 is a good guide. Failing this, the cabinet should be kept in a secure storeroom.

If staff are issued with laptop computers, encourage them to take them home from school, rather than leave them on the premises outside normal working hours. This reduces the risk of several laptops being stolen in a single incident.

## Electronic security

### Intruder alarm systems

Most schools these days have an intruder alarm system. These can vary considerably in sophistication and effectiveness. However, no matter how sophisticated, all intruder alarm systems are the subject of false alarms and most false alarms are due to human error in one way or another. It is important, therefore, to restrict the number of staff allowed to operate the alarm system to a minimum, and to ensure that everyone who uses the system receives adequate training and that they fully understand the system.

The following are some basic information points about intruder alarm systems.

1. All intruder alarm systems should be installed and maintained by a NSI (National Security Inspectorate) or SSAIB (Security Systems & Alarms Inspectorate Board) approved company.

2. You should have a written Specification from the alarm-company describing exactly what makes up the parts of the system. For example, where the detectors are located, what type of detector they are, which doors are contacted, where the personal attack buttons are located and what type of signalling there is to the remote alarm-receiving centre.
3. It is recommended that not only corridors and entrance foyers should be alarm protected, but also all rooms containing substantial amounts of attractive equipment such as computers (even if the rooms are located above ground floor level).
4. Detectors located in areas used by members of the public should be the 'anti-masking' variety since it is increasingly common that detectors are tampered with or deliberately covered prior to a break-in.
5. It is advisable to carry out frequent 'walk tests' to ensure that the detectors have not been tampered with in any way. Additionally, it is important to check that no obstructions such as tall cupboards or boxes have been inadvertently placed in front of the detectors.
6. Control panels must be located in secure areas that are themselves intruder alarm protected or the approach to them is intruder alarm protected. (This is a requirement of the British Standard).
7. It is advisable that there is signalling to a remote alarm-receiving centre so that the key holders and the Police can be informed of an activation as quickly as possible.
8. These days it is recommended that signalling should be via BT RedCARE which operates via a standard BT telephone line. In the past, the most common method of signalling was via an incoming calls barred line using a digital communicator. The problem with this method is that if the telephone line is cut or if there is a line fault the communicator cannot signal out.
9. As from 1st April 2006, an amendment to the ACPO (Association of Chief Police Officers) Policy with regard to Police response to intruder alarm systems has been introduced. The effect of this is to leave only two levels of response:
  - a) Full response, subject to operational requirements and resource availability
  - b) No response
    - Withdrawal of Police response will take place after 3 false alarms (in a 12-month rolling period).
    - Any existing system that has false alarms leading to the withdrawal of Police response will be required to convert to or be replaced with a verifiable or confirmed system in order to regain Police response.
    - Any new installations will need to be the verifiable type if they are to receive Police response. Only confirmed activities from such systems are to be passed to the Police.
10. Verifiable or confirmed intruder alarm systems are those which include audio, visual or sequential verification. In practice, the method of confirmation usually found is that of sequential signalling.

It should be stressed that the above is a summary of the national position as determined by ACPO and though by and large, local Police Services adopt this stance, some may vary it. For instance, from the above date, Nottinghamshire Police will not provide any automatic response unless the alarm signal is confirmed.

All three verifiable systems are monitored at an alarm-receiving centre. The analysts at the centre are able to determine by either looking at pictures, listening in via microphones or by noting that more than one detector is being activated, that there is an intruder on the premises.

The system would thus revert back to a 'bells only' system and the alarm-receiving centre would be unaware that the signal had been lost.

Sonitrol is an audio detection and verification system – linked to an alarm-receiving centre. There are microphones situated around the school building and the alarm is triggered by noise. When this happens the analysts at the receiving-centre can listen to what is happening on the site and inform the Police accordingly – whilst still continuing to listen in.

11. The safety of intruder alarm key holders is of paramount importance. It normally falls to the school caretakers to be the first line key holders. The ABI (Association of British Insurers) Guidelines for key holders are as follows:

- Whenever possible, it is advisable for two key holders to respond rather than one person alone.
- Key holders should not enter the school buildings, if they can observe signs of anything suspicious, without the Police being in attendance.
- Key holders should always carry some means of communication such as a mobile telephone.
- If it is necessary to remain at the premises whilst waiting for an alarm engineer to reset the system then there should be two key holders present.
- The school premises must not be left unattended unless the alarm system has been reset in its entirety.

Consideration can always be given to contracting a key holding service from a security company. In such circumstances, the first key holder would be the contractor who would attend the school, only calling out the caretaker or site manager if this appears necessary. It is important that any key holding service so contracted be registered with the National Security Inspectorate, (NSI) and the individuals be licensed according to the Security Industry Act 2001.

12. It is recommended that the intruder alarm system should have a remote reset facility. So that, in the event of a false alarm the alarm-

receiving centre can supply a reset code to the key holder and there is no need for an engineer to be called out to set the system.

13. Zoning of the system should be considered.

This arrangement enables part(s) of the system to be set whilst other areas are unset so permitting use of parts of the premises whilst the remainder is protected. In addition to providing maximum alarm cover when, for instance, a letting is taking place in one bit of the school, such an arrangement will also ensure, particularly on a large, multi-block site, that alarm cover is applied at the earliest possible time each day following cleaning.

### **Security lighting**

Security lighting can often play a part in deterring criminal damage. However, each school location needs to be assessed on its own merits.

For example, good lighting is particularly effective in areas of the school site which are easily visible from nearby housing or roadways. To install lighting into areas of the school site which are not overlooked can sometimes have the detrimental effect of attracting wrongdoers to gather.

Security lighting is only effective if it is working properly and switched on at appropriate times. An automatic form of control is usually the best option. Automatic controls include:

- Time switches, that switch lights on/off at predetermined times
- Time switches in conjunction with photo-electric cells to ensure optimum effectiveness
- Passive infra-red movement detectors that switch on the light for a timed period when anyone enters the range of the detector
- Connections to existing intruder alarm systems

The route between the school building and the staff car park should always be well lit – for safety and security.

If a lighting system is to be used in conjunction with CCTV, additional factors have to be considered and it is recommended that a qualified engineer be consulted for advice.

### **Closed Circuit Television (CCTV) Systems**

CCTV systems have had a mixed success rate at school sites – for a variety of reasons. These relate to the type of problems being experienced, the nature of the site and the nature and quality of the installation.

In many cases, site trespass problems have been successfully addressed by a relatively low cost system, with cameras in just certain key places and having a recording system with relatively low quality playback. In such a case, the mere presence of the cameras has proved sufficient deterrent to reduce or eliminate the problem issues. In other examples, this type of system has had little or no effect on the trespass or damage incidents and either the conclusion is reached that CCTV doesn't work, or possibly expensive upgrades have been required.

Prior to the installation of any system, careful consideration should be given to exactly what is expected of the installation e.g. deterrent, identification, school management tool, safety of persons, recording, monitoring (on site/off site).

Expert advice should always be sought and installation should be by a NSI approved company.

### **Computer based monitored CCTV**

Although it has been possible to monitor the images provided by cameras at an off site monitoring centre for many years, the pictures provided when sent over a telephone line, had considerable time lapse and did not present a good, continuous moving image. In addition, each time the external movement detectors activated a camera and the images were transmitted, telephone line charges were invoked and these could be a costly on-going expense to the school.

With the introduction of internet technology and the development of certain computer software, monitored CCTV is now of better quality and far cheaper than previously. As all schools now have Broadband, there is the real opportunity of making CCTV a preventative security tool, rather than one which produces hazy images of camouflaged thieves available the day after all the school's computers have been stolen.

Further sophistication is available in the provision of loudspeaker facility for the monitoring centre to audibly warn off intruders or trespassers and for any authorised person to be able to receive warnings of a site intrusion through say, a pager and be able to access the camera images on any PC. This could be particularly useful to a key holder who would attend site following an alert. By being able to see what is going on beforehand enables the key holder to make informed and safer choices regarding any action to be taken.

All CCTV systems with recording facilities must be registered with the Information Commissioner. The nominated Data Controller for a local authority will normally do this on behalf of the LEA schools.

### **Additional notes on CCTV systems**

Warning notices must be displayed if pictures are recorded since members of the public have a right to know that they may be recorded. Additionally, they have a right to view any such recordings of themselves.

Warning notices must give a reason for the scheme, and a contact name and contact point. For example:

*"Images are being monitored and may be recorded for the purposes of crime prevention and public safety.*

*This scheme is controlled by xxxxxxxx.  
For further information contact xxxxxxxx."*

The Information Commission can be contacted at:

Wycliffe House  
Water Lane  
Wilmslow  
Cheshire  
SK9 5AF

Tel: 01625 545745  
e-mail: [mail@dataprotection.gov.uk](mailto:mail@dataprotection.gov.uk)  
website: [www.dataprotection.gov.uk](http://www.dataprotection.gov.uk)  
Switchboard: 01625 545700

### **BS 8418: 2003 – Installation and remote monitoring of detector activated CCTV systems – Code of Practice**

BS 8418 is a code of practice and covers detector activated remotely monitored CCTV systems. It sets out specific guidelines for the correct design and installation of systems, thereby allowing credible, stable and reliable solutions to be offered. The fact that there is a visual confirmation by an operator regarding the cause of activations minimises false alarms and, crucially, enables the fastest possible appropriate action.

Following the issue of BS 8418 the Police service reacted by updating the ACPO Security Systems Policy to allow BS 8418-compatible systems to receive a URN – provided other criteria laid down in the policy were also met. In view of this, systems of this type can be very effective on school sites that can be remotely monitored.

#### **Access control**

There are a variety of access control systems available, such as, digital keypads with PIN numbers, magnetic cards, or proximity devices. Many systems can be linked to computers to provide full transaction recording, showing who went where, when and for how long.

Access control systems can greatly improve the day time security at schools – particularly primary schools – by restricting unauthorised entry into the school building.

#### **School reception office security**

The school reception office should be alongside, or near the main entrance door. It is recommended that the reception should incorporate a secure lobby that would restrict entry into the school building until allowed by a member of staff.

A secure reception hatch should overlook this lobby from the office but there should not be a door leading from the lobby directly into the office.

If the reception office is sited away from the main entrance it is recommended that an intercom or phone entry system should be used, coupled with an electronic release on the entrance door. In this situation it is very important that the reception office staff should be able to view the visitor. This can be achieved by using a video phone entry system or by a camera system with a monitor located in the reception office.

#### **Interview rooms**

It is strongly recommended that consideration should be given to the design and layout of any offices or rooms used by staff to speak alone with visitors and parents. The safety of the member of staff needs to be borne in mind at all times. Points that may need to be considered include:

- Arrange any informal seating such that the member of staff is nearest the door to allow for a quick exit if required
- A fixed personal attack alarm should be fitted in a discreet but easily accessible location. This can either be linked to the main intruder alarm system to get a police response or can be a local alarm sounding in a nearby room or office.
- If the personal attack alarm signals a local warning only then staff who respond should have received training on how they should respond

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