



In association with



for the protection of empty buildings: fire safety and security



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INTRODUCTION

Buildings need appropriate protection at all stages of their life, from construction through to eventual demolition. Although empty buildings are always at risk from various forms of criminal activity and deterioration, the risks increase if the building is left empty for any length of time.

Buildings become empty for many reasons, for example during and following construction/refurbishment, awaiting letting, or pending sale or demolition. Sensible precautions taken at the time a building becomes empty and subsequent follow-up action will minimise the risk of loss or damage.

SCOPE

This document provides guidance to those responsible for any empty premises. It is aimed at buildings which are temporarily empty and are still seen by the owners as having a viable future. It also provides guidance that may be applied to buildings whose future is less certain.

Section 12 of this document contains a general checklist of actions for owners of empty buildings, parts of which are extracted and commented upon within the main document.

Appendix A contains specific advice about empty buildings of architectural or historical significance, where special considerations may apply. In such cases, consultation with the appropriate authorities is recommended.

By way of clarification, and to avoid unnecessary repetition/qualification within the body of this document, the following terms are considered to mean:

- *owners* – those responsible for the empty building. According to the circumstances of the building, this could be those who own the building, leaseholders, tenants, or managing agents and their staff;
- *building(s)* – land and any structure/property built upon it, plus any contents within; and
- *empty building(s)* – buildings that, to all intents and purposes, are not being used as a workplace, store or as accommodation.

SYNOPSIS

Although it is not possible to address every type of situation in detail in this document, the guidance presented, if adopted sensibly by owners, will reduce losses from empty buildings, whether due to theft, vandalism or deliberate fire raising (arson).

SECTION 1

THE EXTENT OF THE PROBLEM

The surveillance and care exercised through the normal occupation of a building contributes to its security and fire safety, but in the case of an empty building this protection will not be available. Although detailed records of all fires in unoccupied buildings within the UK are not available, many insurers report very significant fire and theft losses from such buildings on an annual basis. In addition to insured loss must be added the non-insured costs incurred by owners, and also society generally in respect of the attendance of the emergency services and the environmental impact of fire water run-off and contamination.

Intruders in empty buildings may have a number of motives:

- to steal any contents;
- to strip the buildings of any metal, eg roofing materials, flashings, electrical wiring or equipment (switchgear/transformers, etc) or plumbing (pipework, radiators, boilers, etc);
- to strip the buildings of any architectural fixtures and fittings, eg fireplaces, doors;

- to vandalise or burn down the buildings;
- to squat on a permanent or semi-permanent basis;
- to use the buildings for illicit drinking, drug supply, dealing or use, storage of stolen property or other illegal activities; and
- to use the buildings for their own purposes, eg trading (so-called 'fly tenants') or parties ('raves').

The potential danger posed by the building to any intruders must be taken into account (see Section 11). In particular, the attractiveness to younger persons of empty buildings as a potential playground should be considered, especially as children are able to gain access through very small gaps such as fanlight windows or minor holes in walls.

The safety and security of all empty buildings is a management responsibility subject to the same disciplines as all other aspects of management.

SECTION 2

MANAGING THE SHUTDOWN

When a building becomes empty and occupancy is not imminent, it is necessary to manage the shutdown in an orderly and structured fashion. Where a managing agent, builder or specialist firm is taking over responsibility for an empty building, a formal handover should take place, which should include an accompanied inspection prior to handover.

When a building is vacated, even on a temporary basis, the insurer of the property should be informed.

A risk assessment must be undertaken in compliance with the Regulatory Reform (Fire Safety) Order 2005 (or equivalent legislation in Scotland and Northern Ireland) (refs. 1 - 4), either by the owner or agent, with appropriate measures taken to reduce the risk of fire and/or intrusion. Where the assessment indicates that there is a high risk of intrusion or malicious damage, steps should be taken to improve the levels of both security and protection.

Items of value should be removed immediately and if the building is likely to remain empty for more than a few weeks, action should be taken to remove all waste, surplus furniture and other items not forming part of the fittings. This should include floor coverings where possible, if these are likely to be combustible.

Action should then be taken to 'put the building to sleep'. This should include arranging redirection of post, providing physical protection to the exterior elevations and possibly upgrading the level of perimeter security. The necessary disconnection/isolation of selected services and checking of protective installations such as fire detection and alarm systems and sprinkler systems should also be undertaken at this stage.

Liaison with the local planning authority may help ensure that any proposed external security alterations do not create planning problems.

SECTION 3

FIRE AND EMPTY BUILDINGS

There is no doubt that graffiti and damage to an empty building, however caused, leads to further damage, and that damaged buildings encourage arsonists.

Arson fires usually follow a pattern, beginning with the setting of small fires causing limited damage. If the building is not regularly inspected and, as required, re-secured and repaired promptly, an escalation in the frequency and size of incidents can be expected, often resulting in the total destruction of the building. Preventing or reacting to 'small' incidents can therefore prevent a major loss happening.

Fire needs combustible materials in order to grow and it is therefore important to clear empty buildings of all combustible contents wherever practical, and to prevent an accumulation of waste paper/post etc that may be delivered or maliciously dumped.

Fires in empty buildings present problems to firefighters that do not normally occur in occupied premises. For example, weakening of the structure may occur due to vandalism, damage caused when stripping out fittings, or the starting of small fires.

Potential hazards include:

- holes in flooring and staircases;
- missing balustrades, stair rails and banisters etc;
- debris/junk blocking internal access routes;

- missing manhole or drainage covers;
- weakened flooring beneath heavy fixtures such as water tanks, leading to potential collapse;
- large numbers of jagged edges and surfaces such as broken glass, exposed nails and rough metal surfaces;
- exposed and damaged electrical wiring and live gas services; and
- fire compartmentation that has been compromised by other actions.

All of these hazards can have serious consequences for firefighters attempting to safely access the building, potentially resulting in severe or even fatal injuries. Where the fire and rescue service considers that there is an undue risk of harm involved in entering an empty building, a decision may be taken to fight a fire from outside only, with the consequence that the damage to the building by fire, smoke and water is likely to be significantly increased. The risks to firefighters and the building itself are likely to be greatly reduced if, after careful consideration and consultation, it is determined in the fire risk assessment for the premises that any fire detection and/or suppression system(s) should and can safely remain operational (see Section 7).

SECTION 4

INFORMATION FOR THE FIRE SERVICE

Prior to the shutdown of a building, useful information which the building owners should pass to the fire safety department at their local fire brigade headquarters includes:

- the state of the water supplies to the site, particularly where fire water supplies or sprinklers have been disconnected;
- occasions when the building is to be brought into temporary or occasional use, particularly where this may result in a significantly higher fire load within the building;
- the ease or otherwise of access to the building, including the availability of roads, the presence of high security fencing and the availability of keyholders;
- any predetermined arrangements for re-securing the building; and
- unusual or unexpected hazards which may be encountered.

SECTION 5

TEMPORARY USE OF EMPTY BUILDINGS

An empty building is an unused asset and an owner will normally be anxious to sell or re-let the building as soon as possible. However, where buildings look likely to remain empty for lengthy periods, it can be useful to grant a temporary licence for a short-term let, particularly as use of a building is one of the best precautions against the problems that can beset empty buildings. Nevertheless, short-term lets can also introduce new dangers and the following factors need to be recognised and considered before any agreement is signed:

- some changes in the use of a building may require planning approval or building regulations approval;
- temporary occupants may have less regard for the long-term protection and security of the building than the owner;
- lack of familiarity with the building can result in bad practices, such as the blocking of fire exits and the obstruction or removal of firefighting equipment;
- the temporary nature of the usage can also be used as an excuse for poor storage practices, the use of hazardous portable heaters, and unsafe working practices such as 'casual' extensions of the electrical installation;
- general fire safety arrangements and means of escape must be adequate for the use to which the building will be put, whether this is temporary or occasional use. The local fire service should be contacted for advice;
- temporary occupants may have illicit use of the building in mind, such as manufacture or growth of drugs such as cannabis, storage/distribution of illegal materials, or possibly even terrorist activities;
- any criminally-minded temporary occupants may use their knowledge of the building to attack it at a later date;
- special care needs to be taken when allowing film or TV companies to use vacant premises as, unless carefully drafted conditions of use are agreed, the building may be used to stage hazardous stunts that could cause damage or destruction; and
- notification of temporary use should be provided to insurers immediately prior to the intended occupation, with full particulars of the proposed use and the period of the short-term lease/licence. Such co-operation between property owners and insurers can ensure that any additional risk is properly

controlled at the outset. [Note: Change of use would be a material alteration of the risk and failure to disclose such information to insurers could invalidate insurance cover.]

In recent years, a new commercial service has emerged whereby, for a fee, a property management company will undertake to supply residential occupants for an otherwise empty commercial/industrial building. Such schemes aim to provide low-cost accommodation to persons who might be unable to afford prevailing rental costs in the neighbourhood, and claim to offer a measure of protection (for example against squatters and vandals) to the premises through the presence of the residents, albeit on a temporary basis.

In most cases, the residential occupants will be gainfully employed (for example public sector key workers) and there will be no expectation that the premises will be occupied 24/7. The company providing the service will expect the residents to exercise normal levels of care in terms of housekeeping, safety and security, but there will be no guarding or attendance responsibilities. When the service is provided for an empty building, the company will typically lightly convert part of it (eg one floor) for living accommodation, and provide normal domestic facilities and utilities.

Owners considering employing such services should ensure that their insurers are consulted prior to entering into any agreements, in addition to addressing each of the considerations mentioned above. Before agreeing to the changes in occupation and use, the insurers will wish to examine the service contract and generally satisfy themselves that any consequent changes in risk are acceptable.

Whatever arrangement for temporary occupation is selected, it is important that the activities of temporary occupants are monitored throughout their occupation to ensure that illegal, unsafe or hazardous practices are not introduced. Owners should therefore carry out routine visits to ensure that basic fire safety and security precautions are being followed and any tenancy agreements are being adhered to.

It is equally important to check the building at the cessation of its temporary use. The process set out in Section 2 of this document needs to be implemented in terms of building shut down. Insurers will again need to be informed and regular site inspections and other previously agreed precautions/procedures should be reintroduced.

SECTION 6

ADJACENT PROPERTY

It is in the interest of persons responsible for any building which is close to an empty building to recognise the potential danger to their own building from criminals attracted to the empty one. Accordingly, owners of buildings close to an empty building should seek the co-operation of neighbours or security officers employed in neighbouring buildings, requesting that

they be alerted to incidents that are identified by them occurring in and around the empty one.

Where there are means of escape from or via adjacent buildings, the means for maintaining access to these routes must be discussed with the local fire service at the earliest opportunity.

SECTION 7

GENERAL PRECAUTIONS

The problems that can typically beset empty buildings can vary according to their general type:

Empty dwellings

- Wherever empty dwellings are located, they are often the target for squatting, vandalism, graffiti, theft of fittings and other crimes. Apart from the loss of rental income and the cost of repairs, the presence of a vandalised building detracts from the value of the neighbourhood, often leading to further vacancies, with a resulting spiral of decay. The solution to the problem is immediate action by the owners to clear and secure buildings as soon as they become vacant, and boarding up where various risk factors, such as the nature and location of the building, suggest it is prudent to do so.

Empty shops/offices/commercial buildings

- These can be vulnerable to problems similar to those faced by dwellings but, due to their likely prominent location, they can also be vulnerable to fly posting and an accumulation of junk mail, as well as the hazards identified in Section 1. The best solution to these problems is to maintain signs of continued occupation and care of the premises.

Empty industrial buildings

- These are often located on factory estates. Outside normal working hours, such areas tend to be quiet and secluded, and buildings in such locations are especially vulnerable to the general problems of arson, vandalism and theft of fixtures and fittings. There are also the added problems of the building being used for 'rave parties', fly tipping, and illegal occupation by itinerant travellers or others.

All these problems, if left unchecked, can create an air of dereliction in the locality and can be very expensive to rectify. To reduce the risk of attack on any empty building, the following measures should be considered:

- removing sources of ignition;

- minimising the amount of combustible materials present, both inside and outside the building;
- minimising the attractiveness of the building or site to vandals or thieves by carefully removing, as far as possible, any contents, fixtures or fittings which may be of value or architectural interest;
- optimising levels of physical security by fitting, for example, five-lever mortice locks to entrance doors;
- maintaining the efficiency of (or upgrading) protective installations such as fire/intruder alarm systems and sprinkler systems;
- ensuring that any postal or other deliveries are stopped. Letter plate apertures should be sealed, but failing this, all unwanted deliveries should be removed on a regular basis;
- removing graffiti and carrying out repairs to broken windows etc on a regular and prompt basis;
- retaining internal and external lighting;
- removing unused or derelict vehicles and skips; and
- posting notices advising of security precautions, eg stating that all valuable contents have been removed, intruder alarms operate, etc.

The following additional actions may also be considered:

- offering the building on short-term loan to responsible voluntary organisations or a local authority (see Section 5);
- making full use of any living accommodation attached to the premises; and
- installing temporary intruder and fire alarm systems – further guidance can be found in the IPCRes document *The selection and use of electronic security systems in empty buildings* (ref. 5).

Automatic fire detection and alarm systems and sprinkler systems can provide vital protection against fires, whether accidental or deliberate. Where currently fitted, the option to leave such systems fully operational should be

discussed with insurers, the fire service and other interested parties. Care should be taken to minimise false or unwanted alarms from fire detection systems maintained within the premises, especially if there is the potential for the transmission of unwanted fire signals to the fire and rescue service from systems connected to a remote monitoring system. RC47 *Recommendations for the management of fire detection and alarm systems in the workplace* contains further detailed advice and information (see ref. 6).

If portable fire extinguishers and/or fire hoses are in place, their continued availability on the premises should also be

discussed with insurers. They will wish to consider factors such as the future occupation and use of the building and the risk of vandalism before offering advice. Should the decision be taken that, on balance, the building and visitors are safer if these appliances are not removed, then it is vital that they continue to be regularly maintained.

Information regarding local planning policy for empty buildings should be sought from the local planning authority and insurers should be consulted. Good liaison with the police, particularly the local Crime Prevention Department, is desirable (see Section 10).

SECTION 8

SECURITY PRECAUTIONS

Defence against crime or illegal intrusion should start at the perimeter of the site on which the building is located. However, many buildings abut directly onto a public area and no outer barrier can be created. In such cases the exposure of features such as accessible doors and windows needs close attention.

If the premises contains landscaped areas, trees and foliage should be properly trimmed to maintain natural surveillance for the public/occupiers of adjacent sites and also to give the appearance of site occupation/maintenance. This may be the responsibility of the owners or others, for example a local authority.

8.1 Perimeter protection

Where buildings have an open boundary, consideration should be given to improving the perimeter protection. New fencing or perimeter security posts may be used, fencing hired or earth mounds constructed.

It should be noted that any temporary structure such as a hoarding, wall or scaffolding may require a licence from the local authority planning department, from whom appropriate advice should be sought. A disadvantage of a hoarding for this purpose is that, as well as acting as a deterrent, it can also screen persons who have breached the perimeter security.

Where possible, access should be denied to vehicles to prevent outside areas being used as unofficial car parks or for fly tipping.

8.2 Lighting

Good lighting can deter intruders. Where practical, consider external illumination of the entire site, and/or concentrate on higher lighting levels for particularly vulnerable areas, eg rear loading bays or recessed doorways. Luminaires (lighting units) should be installed as high as possible and, where vulnerable, be protected from physical damage by stones and other missiles. Where the insurer has agreed that the electricity supply to the internal lighting may remain connected (see Section 9),

consideration should be given to the benefits of having selected lights connected to sensors or timing devices.

Care should be taken to ensure that seasonal foliage does not reduce the effectiveness of any lighting.

8.3 Physical security measures

The most effective way of preventing unauthorised entry is to maintain a high level of physical security. This is best accomplished by retaining existing security features and supplementing these as necessary.

If owners are in any doubt about what protection is feasible/most suitable, they should seek professional advice, such as the services of a competent locksmith – for example, a member of the Master Locksmiths Association (MLA) – or a contractor experienced in dealing with securing empty buildings.

As a general guide, the following matters should be considered.

Doors

The many types of door likely to be encountered prevents detailed security advice being offered here, but, in general, check that all external doors, or those leading to adjoining buildings:

- are maintained in good condition;
- have frames adequately anchored to the surrounding masonry or structural framework;
- are securely locked (locking and/or bolting from the inside is recommended for all but those doors required to gain external access to a building); and
- are compliant with any insurer-specified/agreed requirements for door security.

Windows

Glazing is often very vulnerable to breakage and therefore often constitutes the first entry point for intruders. It can be difficult to protect glazing adequately without some

external or internal secondary barrier being present, such as shutters, bars or grilles. However, unless such secondary measures are already fitted, boarding up will often present the most cost-effective option.

In general, check that all external windows, or those leading to adjoining buildings are:

- maintained in good condition;
- have frames adequately anchored to the surrounding masonry or structural framework;
- if opening types, securely locked or internally screwed shut; and
- compliant with any insurer-specified/agreed requirements for window security.

Boarding up

In certain areas where there is effective supervision of empty buildings, for example in a shopping mall /precinct, or an area with good residential use or manned guarding, it may be acceptable to leave glazing unprotected. Such an approach maintains the appearance of the location (an important factor in the case of buildings for sale or lease). 'Dummy' or local club/charity displays can also help to maintain an appearance of occupancy. Otherwise it is generally good practice to arrange for the 'boarding up' of most buildings which become empty, particularly if future use/occupation is not imminent. In the case of industrial buildings or buildings in high-risk /isolated areas, boarding up should be considered essential.

'Boarding up' is a phrase often loosely used – it usually means securing openings by means of timber boarding, but it may also describe use of other permanent or removable robust barrier materials, such as steel sheets/grilles, for this purpose.

Timber boarding should be substantial, exterior-grade plywood of adequate strength to resist attack – at least 18mm thick. (Chipboard, with its lower resistance to attack, is not recommended.) Alternatives to plywood are the use of substantial close-gauge wire mesh, shutters, or proprietary hired-in 'boarding' security systems.

All boarding should be suitably secured to the fabric of the building, either on the inside or outside – having regard to what it is intended to do, eg prevent external glass breakage and/or prevent entry. The precise fixing method may need adapting to suit the intended future use of the building; for example, will 'permanent' fixing to doors/windows inflict unacceptable damage?

Particular care should be taken when considering the boarding up of listed/historic buildings – see Appendix A.

There are ways in which the visual impact of boarding up can be softened. For example, it can be decorated with a mural (possibly undertaken by a local artist or school), or painted in a colour that allows it to blend in with the rest of the streetscape.

More robust methods of protection may be appropriate in areas where there is a greater threat to empty buildings. In such areas, some doors and windows at an

accessible level may be bricked up, but this will inevitably involve more cost and will of course prove difficult to reverse if the building is reoccupied. A more attractive and acceptable alternative in such situations may be to use the services of one of a number of companies which hire out proprietary systems of tailor-made security screens for windows and doors, normally at 24-hours' notice. These screens are very robust, can be fixed in place and removed with minimal damage to the building, and readily allow for authorised access for maintenance and inspection.

Whatever method of protection is used, it is important to ensure that all letter plate apertures, gaps around doors or windows and any orifices through which waste or flammable liquids could be poured, are protected by being suitably sealed.

8.4 Electronic security systems

Electronic security can be provided by an intruder alarm system or a closed circuit television (CCTV) system. Additional guidance on electronic security systems for empty buildings is available in a separate IPCRes publication, *The selection and use of electronic security systems in empty buildings*.

Intruder alarms

A properly designed, installed and maintained intruder alarm system can provide an effective deterrent to unauthorised entry or otherwise detect intruders and bring about a suitable response. In this context, two types of alarm system exist:

- *Conventional alarm systems.* Many buildings in normal use are fitted with conventional, permanently installed intruder alarm systems. These are usually installed by companies that have been third-party certificated by an organisation such as the National Security Inspectorate (NSI) or the Security Systems and Alarms Inspection Board (SSAIB). Such systems often incorporate monitored signalling by a NSI/SSAIB-certificated alarm receiving centre and may be eligible for a routine police response to qualifying activations.

Installing such an alarm system in an empty building can involve considerable expense and delay so, whenever possible, as a building becomes empty, any existing intruder alarm system should be formally taken over by the new owner, and then maintained or upgraded as appropriate to provide ongoing intruder detection. Any monitoring centre will need to be notified of changes in the keyholders for the building, as it is essential to ensure that an appropriate response will be made to any alarm activations.

- *Temporary alarm systems.* Where an empty building has no existing intruder alarm system, or it proves impractical to take over and use an existing system, it is often possible to install a temporary alarm system. Temporary alarm systems or units are

relatively inexpensive, can be installed quickly and operate even when no services are connected to the building. Some such systems also permit the connection of temporary fire detection devices. For details of temporary alarm systems please see the IPCRes publication, *The selection and use of electronic security systems in empty buildings*.

Closed circuit television (CCTV)

In some situations, CCTV systems may be appropriate to monitor empty buildings, either operating independently of, or in conjunction with, an intruder alarm system. CCTV takes many forms but, to be effective, a system does need to be monitored remotely so that unauthorised persons approaching or entering a building may be challenged and/or a keyholder or response service dispatched to attend. In this context two types of CCTV system exist:

- *Conventional CCTV systems.* The cost of installing a new, permanent, conventional, monitored CCTV system to protect empty buildings, particularly for a short-term period, will usually be prohibitive. However, in some cases it may prove possible to adapt an existing site CCTV system or make arrangements for other CCTV surveillance already in operation close by (for example a town or shopping centre system) to keep watch over the premises.
- *Temporary CCTV systems.* The security industry is at an early stage in the development of temporary CCTV systems that activate when an intruder is present and transmit images to a monitoring station, but such systems are becoming available. For details of temporary CCTV systems, see the IPCRes publication, *The selection and use of electronic security systems in empty buildings*.

8.5 Manned guarding services

Security personnel can be used to provide two different levels of service – permanent guards and mobile patrols.

Permanent guards

Sometimes known as ‘resident’ or ‘static’ guards, this type of service provides a continuous security presence at the protected building. It is to be preferred for large commercial or industrial buildings which are expected to be sold or reoccupied.

Permanent guards can be provided either by a contract company or can be directly employed. If a contractor is to be utilised, it is imperative to select a company whose procedures comply with appropriate standards (see below). In the case of empty buildings having only one guard, the guard must be able to communicate either with the police or their own control centre to enable them to call for assistance. Appropriate instructions should be prepared which specify a clearly defined area of patrol, and clear assignment directions should be given (see below). Additionally, specifiers should ensure that the selected company has guards that are adequately trained, fully screened and well supervised.

Care should be taken to ensure that comprehensive patrol routes are established and that a mechanism exists for checking that any patrols are correctly carried out. Proprietary systems are available to assist with this area.

Normal health, safety and welfare regulations apply where security guards are working and appropriate facilities (such as water, toilets, lighting and heating) should be provided.

Mobile patrol services

Many security service companies provide a patrol service where a guard will visit premises a specified number of times each day, at random intervals. While mainly acting as a deterrent, such patrols may provide an acceptable minimum level of security for certain types of empty buildings. In some cases, security contractors also offer a keyholding or response service where they will respond as a keyholder when required by the owner, emergency services, utilities or local authority.

Guarding standards

Licensing

In England, Wales, Scotland and Northern Ireland all contract guards are now required to hold a security licence issued by the Security Industry Authority (SIA). Licences are individual, but at a company level companies that adhere to SIA licence rules and other relevant procedural matters can be identified by the award of ‘Approved Contractor Scheme’ (ACS) status.

British Standards

BS 7858: 2006: *Security screening of individuals employed in a security environment*. *Code of practice* (ref. 7) lays down procedures for employers to follow to check that prospective employees do not have a criminal past.

BS 7499: 2007: *Static site guarding and mobile patrol services*. *Code of practice* (ref. 8) lays down criteria for the provision of manned security services and compliance with this standard should be specified as a minimum. It is essential to ensure that the contractor is inspected and certified by an independent organisation as complying with this standard and also has a quality assurance programme in operation. It is particularly important that the guard’s assignment instructions include requirements for actions to be taken, patrolling and record keeping. In particular, comprehensive records should be kept of:

- all inspections and patrols;
- contract personnel operating and any visitors;
- any incidents or actions affecting the security or safety of the building; and
- the issue and return of keys.

Many guarding companies demonstrate independently inspected compliance with BS 7499 and other relevant codes of practice by holding approvals from inspectorate bodies such as the National Security Inspectorate (NSI).

SECTION 9

INSURERS' REQUIREMENTS

Insurers must be informed of any material change in the circumstances of an insured building, otherwise insurance cover could be invalidated. It is therefore essential that the insurer or broker is informed immediately when a building becomes empty, and ideally as soon as the policyholder becomes aware of the intention. This is an important part of managing the shutdown of the building. Furthermore, compliance with, and disclosure of, any advice given by the emergency services following an arson assessment of the premises will be considered by insurers as material to any claim made for loss or damage connected with the change in the use of the building.

In many cases the insurance cover for the empty building will be dependent upon an agreed minimum level of physical, electronic or manned security commensurate with the perceived risk and the duration that the building is expected to be unoccupied.

In addition, it is likely that insurers will ask for the following simple but effective precautions to be taken from the outset:

- ensuring that all keys are accounted for and, if any key is missing, changing the locks immediately;
- preserving the integrity of any fire main, sprinkler installation, intruder alarm, automatic fire alarm and other electrical or electronic security system, including continuing inspection and testing arrangements, together with existing maintenance contracts;
- ensuring the integrity of lightning protection systems, including inspection and maintenance requirements. RC35 *Recommendations for the protection of buildings against lightning strike* (ref. 9) contains further detailed advice and information;
- disconnecting or isolating all services/utilities at the perimeter of the building or at another suitable location (other than those required to operate fire and security protection or for other essential services, such as those required for staff welfare, lighting or to prevent freezing of sprinkler pipework and control valves). Any disconnection/isolation (or locking off where appropriate) should be undertaken in such a way that reconnection is not easily achievable by intruders;
- where applicable, maintaining the temperature within the building at or above 4°C at all times to avoid frost damage to any sprinkler system or other essential water services;
- draining down all water tanks, pipes and apparatus, except those which are specifically agreed as needing to remain in use;
- immediately removing from the building all combustible materials such as furniture, waste, litter, flammable liquids, wooden pallets etc. Any temporary buildings and skips not in regular use should also be removed from the site, as should any item that could be used as a missile;
- sealing up letter plate apertures or, if impracticable, fitting the rear of the aperture with an enclosed metal box, bolted in place, then frequently removing any materials delivered;
- properly draining and purging tanks, pressure vessels and pipework containing combustible or explosive liquids or gases and implementing approved safety measures to minimise the risk of ignition or explosion from residual vapours (additional information on this subject can be found in the HSE guidance document HSG 176: *Storage of flammable liquids in tanks* (ref. 10));
- maintaining perimeter fence security and repairing any damage found during routine inspections as a matter of urgency; and
- conducting regular site inspections (to be carried out by an appropriate and responsible person) to check the general condition of the building, the integrity of all security measures and that no accumulation of litter, unsolicited mail or external waste has occurred. The frequency of such inspections will depend upon the building's vulnerability, but weekly is a typical minimum frequency. Details and observations from such visits should be recorded in a log or register, with any noted defects/damage attended to promptly.

SECTION 10

LIAISON WITH THE POLICE

Empty buildings should be managed in such a way that the demands on police resources are not increased due to avoidable problems. The police can help with specialist crime prevention advice and knowledge of crime patterns in the area. If all parties work together the risks can be minimised and the resource demands on everyone can be reduced. An up-to-date list of building keyholders should be provided to the police.

SECTION 11

LEGAL LIABILITY

The Occupiers' Liability Acts of 1957 and 1984 impose on those responsible for properties a duty of care to visitors and trespassers. Depending upon the circumstances of an accident suffered by a visitor or trespasser in an empty building, the owner of an empty building could be legally liable for the death of or injury to that person. Children may view an empty building as an interesting and exciting playground and it should be noted that where trespass by children is likely, it is necessary to take stricter precautions to prevent their access.

To help discharge the duty of care to trespassers the following measures should be taken:

- the building should be well secured, especially against access by children;
- if there are dangers within the building, for example due to structural defects, contamination, fragile roofs or security measures such as razor wire, suitable warning notices in accordance with BS 5499-5: 2002: *Graphical symbols and signs. Safety signs, including fire safety signs. Signs with specific safety meanings* (ref. 11) should be displayed around the site; and
- the use of any guard dog(s) should be strictly controlled in accordance with the Guard Dogs Act 1975 (ref. 12). Among other matters this Act requires that guard dogs must not be allowed to roam freely around the premises without the person in charge of the dogs being present, and that notices warning that guard dogs are present should be posted at all likely building entrances.

Authorised visitors such as surveyors, security guards, building contractors, prospective purchasers and local authority officers may need to access empty buildings.

Arrangements must therefore be made to ensure that they are not placed at undue risk while undertaking their duties. To help discharge the duty of care to visitors, the following measures should be taken:

- suitable warnings should be given regarding specific dangers, such as structural defects, isolated services, and contamination etc;
- adequate lighting should be provided;
- barriers should be provided around dangerous and unsafe areas;
- details of those visiting should be recorded; and
- visitors on their own should carry either a lone worker's alarm or a mobile telephone and ensure that they register or log in with a responsible person prior to entry and on return.

Those responsible for employees working in empty buildings should also consider these measures when preparing risk assessments as required by the Management of Health and Safety at Work Regulations 1999 (ref. 13), and when carrying out specific fire risk assessments to meet the requirements of UK fire safety legislation under the Regulatory Reform (Fire Safety) Order 2005 in England and Wales and equivalent legislation in Scotland and Northern Ireland (refs. 1 - 4).

Local authority building control departments have a variety of powers to require remedial works where structures become dangerous to the public. Owners of an empty building have a duty of care to maintain the building so that it does not become a hazard or a danger to the public. This would include taking adequate measures to prevent unauthorised access/use.

12. MANAGEMENT CHECKLIST

	Yes	No	N/A	Action required	Due date	Sign on completion
12.1 Administration						
12.1.1 Is there a plan controlling the shutdown?						
12.1.2 Have the building's insurers been notified?						
12.1.3 Have any requirements or recommendations made by insurers been implemented?						
12.1.4 Have arrangements been made for carrying out and recording routine external and internal inspections?						
12.1.5 Has a redirection of mail been set up and any letter plate aperture(s) sealed?						
12.1.6 Have keyholders been nominated?						
12.1.7 Has any alarm monitoring centre been given keyholder details?						
12.1.8 Have the local police/fire service been given keyholder details?						
12.1.9 Has the advice of the local police/fire service been sought?						
12.1.10 Have any requirements or recommendations made by the police/fire service been implemented?						
12.1.11 Has the local planning authority been consulted regarding any proposed external security alterations (planning permission considerations)?						
12.2 Health and safety						
12.2.1 Have suitable risk assessments (fire, security and general safety/building condition) been done?						
12.2.2 Has the health and safety of visitors and potential trespassers been addressed?						
12.2.3 Has the health and safety of security staff been addressed?						

	Yes	No	N/A	Action required	Due date	Sign on completion
12.2 Health and safety						
12.2.4 If there are means of escape from or through adjacent property, has the means for maintaining access to these routes been discussed with the local fire service?						
12.2.5 Have suitable signs been displayed to warn visitors or trespassers of any health and safety hazards?						
12.3 Fire safety						
12.3.1 Has all combustible and non-combustible waste/refuse been removed?						
12.3.2 Have all non-essential contents been removed?						
12.3.3 Where possible, have any temporary buildings and skips been removed from the site?						
12.3.4 Have all non-essential services been disconnected or isolated?						
12.3.5 Are any water supplies that are likely to be needed for firefighting suitably signed and accessible?						
12.3.6 Have any flammable liquid stocks been removed from the building?						
12.3.7 Have any tanks, pressure vessels and pipework containing combustible, flammable or explosive liquids or gases been properly drained and purged, and have appropriate safety measures been implemented?						
12.3.8 Is any existing automatic fire detection system operative?						
12.3.9 Is any existing automatic sprinkler installation operative?						
12.3.10 Are any fire hoses operative?						
12.3.11 Are any portable fire extinguishers operative?						

	Yes	No	N/A	Action required	Due date	Sign on completion
12.4 Physical security						
12.4.1 Are existing perimeter barriers in good repair?						
12.4.2 Are existing doors and door hardware adequate?						
12.4.3 Are existing windows in good repair?						
12.4.4 Are accessible windows adequately protected?						
12.4.5 Are all keys accounted for?						
12.4.6 Have all potentially vulnerable access points been suitably protected and has boarding up been considered?						
12.5 Other security measures						
12.5.1 Is any existing intruder alarm operative?						
12.5.2 Is any existing CCTV system operative?						
12.5.3 Has the need for a manned security presence been considered?						
12.5.4 Is there external security lighting?						
12.5.5 Is interior lighting appropriate?						
12.5.6 Is there a method of recording authorised visitors?						

APPENDIX A: HISTORIC BUILDINGS

Empty historic buildings can present particular attractions to intruders. Their historic associations, opportunities for concealment, valuable internal fittings, and remote or secluded locations are among the factors that make them especially vulnerable.

The value of the building and its fixtures and fittings should be carefully considered in relation to the precautions proposed to protect them, and specialist advice may be required. At the same time, historic value should be respected in the physical measures taken. It is always preferable to maintain the historic integrity of the fabric and the removal of items of value to a place of safe keeping should only be contemplated as a last resort, weighing up the likelihood of theft or vandalism against the risks of damage and loss associated with removal and storage.

If fixtures are collectable, possess historic or antique value, are made of intrinsically valuable materials or are vulnerable to vandalism, this should prompt higher levels of security.

Security precautions

As door and window frames may be historically important, the use of non-return screws (drive screws) or ribbed nails to directly secure them, or to secure boarding to them, may lead to unnecessary damage. The use of plastic security films is not recommended for historic glass as the films may prove difficult to remove without damaging the glass.

Routine changing of locks should not be carried out on historic doors, though additional rim locks may be fitted where necessary. In general, surface-mounted bolts, hasps and staples are preferred, as they cause the least damage to historic joinery.

Manned patrols accompanied by trained guard dogs can be very effective, but dogs should be carefully controlled inside empty buildings to prevent damage to decorations. The provisions of the Guard Dogs Act 1975 must also be borne in mind (see Section 11 of this document).

For historic buildings, the best means of protection while they are empty is probably to have a resident caretaker, site guard and/or an intruder alarm.

Maintenance

Routine maintenance and the clearing of gutters and vegetation should continue to be carried out in the normal way and not neglected. Deserted interiors – especially roof spaces, towers and spires in empty historic buildings – can easily become infested with pigeons or other birds, leading to health hazards, rodent infestation and general acceleration of decay. Ventilators in empty buildings should be fitted with fly mesh and disused flues should be kept clear of nesting materials and provided with ventilator caps.

Heating

To prevent dampness in an empty historic building, intermittent low-level heating should be provided via a permanent fixed heating installation wherever possible.

With insurer's consent, safe forms of temporary heating may be agreed, but not where it may pose a fire risk or introduce higher levels of humidity. Examples include electric convector heaters or oil-filled radiators, but in all cases the contents of RC15 *Recommendations for the use of portable and transportable heaters in commercial and industrial premises* should be observed (ref. 14).

In historic buildings, the risk of restricting ventilation and/or drying out also needs to be recognised, with suitable ventilators provided to prevent dry rot outbreaks.

Temporary use

The conservation and care of empty historic buildings is often furthered by making some use of them. Examples might include temporary tenants, provided they are suitably selected and vetted, or occasional opening to the public. Public openings may encourage local residents to feel involved in the future/wellbeing of the building and thus assist in the reporting of problems. Such openings may also provide the interiors with a beneficial intermittent airing.

REFERENCES

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3. Fire Safety (Scotland) Regulations 2006, Scottish SI 2006 No. 456, The Stationery Office.
4. Fire and Rescue Services (Northern Ireland) Order 2006, SI 2006 No. 1254 (NI9), The Stationery Office.
5. *The selection and use of electronic security systems in empty buildings*, Fire Protection Association for InFiReS, 2007.
6. *RC47 Recommendations for the management of fire detection and alarm systems in the workplace*, Fire Protection Association for InFiReS, 2007.
7. BS 7858: 2006: *Security screening of individuals employed in a security environment. Code of practice*, British Standards Institution.
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