

Recommendations



for the
management of
fire detection
and alarm
systems
in the workplace

RC47



InFiReS

LOSS PREVENTION RECOMMENDATIONS

The aim of the FPA series of Recommendations is to provide loss prevention guidance for industrial and commercial premises and systems. The series continues a long tradition of providing authoritative guidance on loss prevention issues started by the Fire Offices' Committee (FOC) of the British insurance industry more than a hundred years ago and builds upon earlier publications from the Loss Prevention Council and the Association of British Insurers.

Lists of other publications on loss control including other documents in the RC series are available at www.thefpa.co.uk and from the FPA at London Road, Moreton-in-Marsh, Gloucestershire GL56 0RH. Copies of publications can be purchased from the FPA at that address or else by calling 01608 812524 or by e-mailing sales@thefpa.co.uk.

Technical contact:

Adair Lewis

Fire Protection Association, 3rd Floor, Hampton House,
20 Albert Embankment, London SE1 7TJ

E-mail: alewis@thefpa.co.uk

IMPORTANT NOTICE

Insurers' Fire Research Strategy scheme (InFiReS) membership comprises a group of UK insurers that actively support a number of expert working groups developing and promulgating best practice for the protection of people, property, business and the environment from loss due to fire and other risks. The technical expertise for this document has been provided by the Technical Directorate of the Fire Protection Association (FPA), external consultants, and experts from the insurance industry who together form the various InFiReS Steering Groups. Although produced with insurer input it does not (and is not intended to) represent a pan-insurer perspective. Individual insurance companies will have their own requirements which may be different from or not reflected in the content of this document.

The FPA have made extensive efforts to check the accuracy of the information and advice contained in this document and it is believed to be accurate at the time of printing. However, the FPA make no guarantee, representation or warranty (express or implied) as to the accuracy or completeness of any information or advice contained in this document. All advice and recommendations are presented in good faith on the basis of information, knowledge and technology as at the date of publication of this document.

Without prejudice to the generality of the foregoing, the FPA make no guarantee, representation or warranty (express or implied) that this document considers all systems, equipment and procedures or state of the art technologies current at the date of this document.

Use of, or reliance upon, this document or any part of its content is voluntary and is at the user's own risk. Anyone considering using or implementing any recommendation or advice within this document should rely on his or her own personal judgement or, as appropriate, seek the advice of a competent professional and rely on that professional's advice. Nothing in this document replaces or excludes (nor is intended to replace or exclude) entirely or in part mandatory and/or legal requirements howsoever arising (including without prejudice to the generality of the foregoing any such requirements for maintaining health and safety in the workplace).

Except to the extent that it is unlawful to exclude any liability, the FPA accept no liability whatsoever for any direct, indirect or consequential loss or damage arising in any way from the publication of this document or any part of it or any use of or reliance placed on the content of this document or any part of it.

First published by
Fire Protection Association
London Road
Moreton in Marsh
Gloucestershire GL56 0RH

*Tel: +44 (0)1608 812500 Fax: +44 (0)1608 812501
E-mail: sales@thefpa.co.uk Website: www.thefpa.co.uk*

2007 © The Fire Protection Association, on behalf of Insurers' Fire Research Strategy

Copies of this document may be obtained from the publications department of the FPA, at the above address.

Printed by Modern Colour Solutions 1.5/11.07

CONTENTS

Scope	3
Synopsis	3
Definitions	3
Introduction	3
Recommendations	4
1. Design and installation standards and codes of practice	4
2. Unwanted and false alarms	4
3. Site control and responsibilities	7
4. System testing, inspection and maintenance	8
5. Site control self assessment checklist	10
References	11
Further reading	11

SCOPE

This document provides guidance to insurance surveyors and system users on the requirements for the effective management of fire detection and alarm systems in the workplace.

Guidance is provided on the accepted standards to which systems should be designed and installed; the need for suitable system installation certificates; testing, inspection and maintenance guidelines; the use of third-party accredited service providers; the control of unwanted alarms as outlined in BS 5839-1: 2002: *Fire detection and fire alarm systems for buildings. Code of practice for system design, installation, commissioning and maintenance* (ref. 1) and the Chief Fire Officers' Association (CFOA) *Model Agreement between Fire and Rescue Authorities and Users of Remotely Monitored Fire Alarm Systems*, 2004 (ref. 2).

SYNOPSIS

These recommendations introduce the Chief Fire Officers' Association (CFOA) *Model Agreement between Fire and Rescue Authorities and Users of Remotely Monitored Fire Alarm Systems* and explain the users' obligations to conform to this document.

Emphasis is given to the need to minimise unwanted and false fire alarm signals and how this may be carried out in practice.

DEFINITIONS

False alarm: A fire signal resulting from causes other than fire (for example, resulting from steam).

Unwanted alarm: A fire signal caused by a fire-like phenomenon (for example, smoke from bread in a toaster).

INTRODUCTION

Automatic fire detection systems are designed to give early warning of a fire condition and are installed to meet both life safety and property protection fire safety objectives.

In practice, the response of a detector to a fire condition or the activation of a call-point is transformed into a visual and/or audible signal. The signal provides early warning to building occupants to facilitate evacuation and to initiate a manual firefighting response, including calling the fire brigade if necessary. If the system is directly connected to an alarm receiving centre, the fire brigade will automatically be summoned and, assuming adequate and effective response, enhanced property protection can be anticipated in the event of a fire.

The need to provide effective means of giving early warning of a fire may result from:

- a need to meet the requirements of the Building Regulations, either by way of prescriptive or deemed to satisfy requirements such as Approved Document B (ref. 3), or as a result of a fire engineered solution;
- the findings of fire risk assessments conducted to meet the requirements of UK fire safety legislation under the Regulatory Reform (Fire Safety) Order 2005 in England and Wales (ref. 4) and equivalent legislation in Scotland and Northern Ireland (refs. 5 to 7); or assessments to address specific fire safety objectives, such as the protection of property and high value assets and business continuity;
- other relevant legislation, such as licensing, Dangerous Substances and Explosive Atmospheres Regulations 2002 (DSEAR) (ref. 8), housing and local Acts;
- requirements or recommendations from the insurance industry.

Like most fire engineering disciplines, fire detection and alarm system technology has evolved over recent years, resulting in a need for the codes and standards addressing their design, installation, testing and maintenance to be reviewed regularly in order to keep pace with developments within the industry.

The need to manage and reduce unwanted alarms continues to receive attention.

The volume of unwanted alarm signals relayed via remote alarm receiving centres to the fire service and the resulting fire brigade response has inevitably impacted on the operational and financial effectiveness of fire and rescue services.

The problem has now escalated to the extent that in the 12 months to March 2006 there were 434,300 false alarms attended by the fire service in the UK, with malicious false alarms counting for just 37,400 of these. In many cases, therefore, a reduction in response by the

fire and rescue services is now the norm, with some considering the possibility of a nil response to the worst offenders, or only responding with pumping appliances if the alarm has been confirmed by an eye witness.

It is therefore important that users are aware of the official alarm response policy for their area and are encouraged to contact their local fire and rescue authority on an annual basis for confirmation in terms of the brigade's Integrated Risk Management Plan. (Details of fire cover are also available, and searchable by postcode, on the InFiReS website, www.infires.co.uk).

The latest revision of BS 5839-1 (ref. 1) addresses the limitation of false alarms in considerable detail, from both the design and end use perspective. The Chief Fire Officers' Association (CFOA) has also released a policy to minimise the unnecessary burden on fire services as a result of turning out to unwanted alarms (ref. 2). The issuance of unique reference numbers for individual automatic fire detection installations, certification for the design and installation of systems and alarm receiving centres are all addressed in this policy.

The CFOA policy has been adopted in full or part by most fire brigades. In the meantime, the initial response to alarm activations has generally been reduced to one pump to premises other than residential, healthcare and other high life risk occupancies.

Generally, the reliability and dependability of a system will be influenced by:

- the adequacy of the design;
- the reliability of the components used;
- the quality of the installation;
- how effectively the system is inspected, maintained, tested and managed on a day-to-day basis.

Inspection and maintenance of life safety systems is also a requirement of certain UK fire safety legislation such as the Regulatory Reform (Fire Safety) Order 2005 in England and Wales (ref. 4) and the equivalent legislation in Scotland and Northern Ireland (refs. 5 to 7).

RECOMMENDATIONS

1. Design and installation standards and codes of practice

- 1.1 Systems should be designed, installed and commissioned in accordance with acceptable standards and codes of practice by third-party certificated suppliers.
- 1.2 Installations should conform to BS 5839-1. This code addresses general design considerations, the limitation of false alarms, installation requirements, commissioning/hand-over, maintenance and the responsibility of the user.

Other codes and standards relevant to the design and installation of fire alarm and detection systems include BS 5839, Parts 6, 8 and 9 (refs. 9 to 11), BS 6266: 2002: *Code of practice for fire protection for electronic equipment installations* (ref. 12) and the BS EN 54: *Fire detection and fire alarm systems* suite of documents (ref. 13).

Other supporting codes and standards include those addressing standard and enhanced fire-resisting cable, installations in hazardous atmospheres, remote centres receiving signals from security systems and relevant Health Technical Memorandums.

- 1.3 An introduction to automatic fire alarms, more information on unwanted fire signals and the effect on fire service response can be found in the InFiReS publication, *Report to Insurers: Remotely Monitored Fire Alarms: Unwanted Fire Signals and Fire Service Response* (ref. 14).

2. Unwanted and false alarms

High levels of false or unwanted alarms have, for some time, been unacceptable to the government, emergency services and standards generating bodies, such as the British Standards Institution. Some typical causes of false and unwanted alarms are set out in Table 1. The issue is addressed in detail in both BS 5839-1: 2002 and the Chief Fire Officers' Association (CFOA) Model Agreement, 2007 (refs. 1 and 2).

BS 5839-1: 2002 addresses the categories of false alarms, acceptable rates, causes and measures to limit their occurrence.

- 2.1 Measures to prevent unwanted/false alarms that should be addressed at the system design stage include:
 - the selection and siting of fire detectors and call-points;
 - protection against electromagnetic interference;
 - system performance monitoring;
 - filtering measures.
- 2.2 Measures to prevent unwanted/false alarms after a system has been installed, commissioned and handed over include:
 - service, inspection and maintenance;
 - effective fire safety management.
- 2.3 The code accepts that false/unwanted alarm rates will be influenced by several factors, but also recognises that the anticipated unwanted alarm rate is likely to be proportional to the number of automatic detectors incorporated in the system. As a result, this code of practice recommends the following:
 - for systems incorporating more than 40 detectors in any rolling year, the average false

alarm rate should not exceed one false alarm per 20 detectors, or not more than two false alarms from any single detector or call-point.

- for systems with 40 detectors or less, no more than two false alarms should occur in any rolling year.

Where these rates are exceeded, an in-depth investigation into the cause should be initiated and suitable mitigating action taken.

2.4 Nevertheless, the code recommends that a preliminary investigation should be conducted as part of the service work and the user informed accordingly if any of the following occurs:

- the rate of false alarms over the 12 month period exceeded one alarm per 25 detectors;
- more than 10 false alarms have occurred since the last service visit;
- two or more false alarms have arisen from any single detector or call-point;
- any persistent cause of a false alarm is identified.

All alarm activations should therefore be accurately recorded for periodic review and analysis.

2.5 Malicious false alarms are most likely to involve manual call-point activation. Occupancies prone to this may include schools, universities, public car-parks, shopping centres and public entertainment venues, such as cinemas, theatres, public houses and night-clubs. Measures to avoid

these include fitting call-points with hinged plastic covers that need to be raised before the glass can be broken, thus eliminating the alarm being raised by accidental collision with the device.

2.6 Subject to the approval of the enforcing authority, consideration could be given to the following to help reduce potential malicious false alarms involving call-points:

- not siting call-points within the mall areas of covered shopping centres;
- subject to adequate surveillance of the premises by persons or CCTV, siting call-points at staffed locations and in areas only accessible to authorised persons, or the use of call-points with hinged covers thereby requiring a dual action before the alarm is raised;
- the use of an emergency voice communication system linked to a permanently manned location, such as a security control room in lieu of the provision of call-points in public car parks.

2.7 A staff alarm arrangement is sometimes used in large and complex buildings to filter potential false alarms. This provides a period after activation of a detector to investigate, prior to the operation of the alarm. Where the alert signal is not silenced within a limited period – usually a maximum of six minutes – the system will automatically revert to an alarm condition. Signals from manual call-points normally produce an alarm condition and are not subject to the staff alarm arrangement.

Table 1: Examples of causes of false and unwanted alarms

Potential sources of smoke other than a fire in the building	Other potential causes of false or unwanted alarms
Cooking fumes	Dust
Tobacco smoke	Insects
Smoke from sources other than a fire in the building such as smoke entering from outside	Aerosol sprays
Cutting/welding	High humidity/steam
Smoke producing commercial or industrial processes	Ingress of moisture/water
Candles/incense	Cooking (eg toasters)
Cosmetic smoke (places of assembly/entertainment)	Fumes (eg vehicle exhausts/candles/manufacturing activities such as welding)
	Temperature fluctuations
	Accidental damage
	System testing without isolation or warning
	Pressure fluctuations where systems are interfaced with sprinklers
	Faulty system components
	Electromagnetic interference
	Malicious false alarms

Table 2: User false/unwanted alarm prevention checklist

Control function	Yes/No	Recommendation
1 Are staff and visitors aware of AFD protection and the potential causes of false/unwanted alarms and the precautions to prevent them?		
2 Is company policy regarding the causes and prevention of false/unwanted alarm activations included in tender documents and hot work permit procedures and contractors informed and controlled accordingly?		
3 Are the staff and the alarm receiving centre (where applicable) suitably notified prior to testing or work on the system?		
4 Are all false alarms identified, actioned, recorded and regularly reviewed?		
5 Are building defects that could result in false/unwanted alarms identified and resolved without undue delay?		
6 Are appropriate precautions taken where work/maintenance involves paint, duct or smoke that may activate system? Appropriate steps that can be taken, depending on the type of detectors used, include: <ul style="list-style-type: none"> • temporary replacement of detectors with a different type; • provision of a screen between the detectors and work being undertaken; • the use of temporary brightly-coloured covers on detectors in the affected area. 		
7 Are detectors in the affected area disabled or isolated?		
8 Are appropriate staff trained in the procedure for reinstating the alarm?		

Staff alarms should only be considered where a sufficient number of suitably trained staff are available and after consultation with the fire and rescue authority and insurers.

2.8 The CFOA Model Agreement provides a suggested framework for agreement between the protected premises, alarm receiving centre (where applicable) and the fire and rescue service.

The aim of the policy is to reduce the number of false/unwanted alarms and subsequent transmission of unwanted fire signals by:

- ensuring that remotely monitored systems are designed, installed, commissioned and maintained to a high standard;
- improving fire safety management on the protected site;
- reducing the impact of false alarms on business;
- reducing the number of false alarms and subsequent transmission of unwanted fire signals to the fire and rescue service;
- facilitating a risk-based approach to the deployment of fire service resources and reducing the waste of resources due to false alarms;
- reducing complacency in the workplace due to repeated false alarms.

2.9 The process outlined in the Model Agreement involves:

- the issuing of unique reference numbers to all systems in non-domestic premises;
- ensuring that systems are designed, installed, commissioned and maintained by companies certificated by a UKAS-accredited company in accordance with an acceptable standard;
- using an alarm receiving centre certificated by a UKAS-accredited company in accordance with an acceptable standard;
- the availability of keyholders for the premises;
- the monitoring of performance levels on a monthly basis and the tailoring of fire brigade attendance accordingly. This may vary from an immediate response appropriate to the risk (Attendance Level One under the CFOA agreement); to an attendance based on the risk but under non-emergency conditions (Attendance Level Two); to no response until the confirmation of a fire has been received from the premises (Attendance Level Three). Confirmed fires will always attract a full response in relation to the risk.

2.10 It should be noted that the false alarm rates determining the performance level of the system in accordance with the CFOA Model Agreement are

less generous than those indicated in BS 5839-1: 2002 (ref.1). This is because the CFOA Model Agreement adopts the principle that the frequency of unwanted alarms per detector is expected to fall as the number of detectors in the system increases.

For example, under the CFOA agreement, a system with 400 detectors would attract:

- an Attendance Level One for a performance level of seven or less false alarms in a 12 month period;
- an Attendance Level Two for a performance level of between seven and ten false alarms in a 12 month period;
- an Attendance Level Three where the number of false alarms in 12 months exceeds ten.

By comparison, under BS 5839-1, the user would instigate an in-depth investigation if, over a rolling year, more than 20 false alarms occurred for a system with 400 detectors, or if more than two false alarms were received from any single detector or call-point.

Note: The CFOA Model Agreement is currently under review and it is likely that a new edition will be published in early 2008. Readers should however be aware that the aims and general processes outlined here will not change.

3. Site control and responsibilities

3.1 Key requirements for the effective site control of fire detection and alarm systems include:

- a named responsible person appointed to supervise the system. This would be a 'competent person' appointed by the 'responsible person' in terms of UK fire legislation;
- control and indicating equipment checked every 24 hours to confirm no faults indicated;
- system log book up-to-date and available for inspection. Recommend a copy of the design, installation, commissioning and acceptance certificate be kept in the log book;
- all occupants have received suitable instruction regarding the system including interpretation of alarm conditions and faults and the actions to be taken in accordance with the company's emergency plan and the measures to avoid false/unwanted alarms;
- records regularly reviewed including false/unwanted alarm rates;
- regular visual inspections to ensure that manual call-points remain unobstructed and that a clear space of 500mm is maintained around all detectors;

- records, drawings etc are updated in the event of any changes to the system;
- suitable quantities of spare parts are kept available, including tools and frangible elements for manual call-points and spare printer cartridges and paper as deemed necessary for the control and indicating equipment;
- records kept in the system log book should include the name of the responsible person, details of the maintenance arrangements, details of all signals, causes of false/unwanted alarms, full details of all tests/maintenance, and details of all faults and defects;
- copies of the following system certificates should be kept readily available on site:
 - design certificate;
 - installation certificate;
 - commissioning certificate;
 - acceptance certificate;
 - verification and modification certificates as relevant;
 - inspection and servicing certificates.

3.2 UK fire legislation requires that the 'responsible person' in terms of the Regulatory Reform Order (and similar legislation in other parts of the UK) appoint one or more competent persons to assist in undertaking the required preventive and protective measures.

This implies that competent persons will need to be appointed to conduct the testing, inspection and maintenance of the fire detection and alarm system.

3.3 Routine testing can be conducted in-house by suitably knowledgeable and experienced persons. Suitable training to improve these skills should be available from the supplier/installer, or short courses available from fire safety training organisations.

However, unless specialist knowledge is available within an organisation, periodic inspection and testing is likely to be carried out by a specialist service provider. Competency can be assured by using an organisation that is third-party certificated by a UKAS-accredited certification body. The Loss Prevention Certification Board sets out *Requirements for Certificated Fire Detection and Alarm System Firms* in LPS 1014 (ref. 15) and BAFE operates SP203-1: *Fire Detection, Alarm and Suppression Systems Scheme* (ref. 16).

- 3.4 Routine testing and inspection frequencies should be based on the outcome of a fire risk assessment that has taken into consideration the type of system and environment in which it is installed. BS 5839-1: 2002 recommends a maximum period of six months between inspections, but more frequent inspection where determined necessary by the risk assessment.
- 3.5 When a user is changing service providers, the servicing organisation is likely to conduct a special inspection to obtain sufficient information for future servicing and to determine areas of non-compliance such as:
- inadequate provision of call-points;
 - inadequate detector coverage;
 - sound pressure level deficiencies;
 - inadequate stand-by power supplies;
 - cabling not meeting the requirements of BS 5839-1: 2002;
- non-compliance regarding monitoring of circuits;
 - unsatisfactory standards of electrical safety;
 - excessive unwanted/false alarm ratios;
 - structural changes that may adversely affect the efficiency of the system;
 - system log book and record-keeping deficiencies.
- 3.6 To facilitate arrangements for the repair of any faults or damage, it is recommended that suitable arrangements for emergency call-out be agreed with the supplier (24 hour coverage with attendance of a technician within 8 hours of notification from the end user). The contact details of the service provider should also be prominently displayed at the main control and indicating equipment.
- 3.7 The insurance broker/company for the property should be informed in the event of the fire alarm system being inoperative, or with remotely monitored systems, the level of fire and rescue service response being reduced or withdrawn.

4 System testing, inspection and maintenance

Table 3: System testing, inspection and maintenance routines

Maintenance function	Frequency	Details
Routine testing by user <i>To be carried out by a competent person, normally a suitably-trained employee</i>	Weekly	<ul style="list-style-type: none"> • Audible alarm test during normal working hours by operation of a different call-point by rotation. (The purpose is to test that the panel processes the signal and results in the activation of sounders. The test should be conducted at the same time each week and the duration of sounding the alarm should not exceed one minute)
	Monthly	<ul style="list-style-type: none"> • Additional tests organised monthly, for staff that work outside of normal working hours
	Monthly	<ul style="list-style-type: none"> • If a generator forms part of the stand-by power supply, it should be started by simulating a power failure and run under load for one hour. Check and top-up fuel, oil and coolant as necessary • Conduct a visual inspection of any vented batteries for condition and electrolyte levels • Check link to alarm receiving centre and the interface with other systems as necessary
Inspection and servicing <i>To be carried out by a competent person with specialist knowledge of fire alarm and detection systems, normally a specialist service organisation.</i>	Quarterly	<ul style="list-style-type: none"> • Examine all connections on vented batteries. Check and top-up electrolyte as necessary
	At each service visit (at least twice a year or more frequently as indicated by risk assessment)	<ul style="list-style-type: none"> • Log book checked for outstanding actions • A structural/occupancy visual inspection to confirm: <ul style="list-style-type: none"> - call-points unobstructed and conspicuous - any new exits provided with an adjacent call-point - no new or relocated partitions within 500mm horizontally of any detector - storage does not reach closer than 300mm to ceilings, unless detectors provided in each aisle - a clear space of 500mm is maintained below detectors - any changes of occupancy that may have affected the suitability of the detectors - extensions requiring the installation of detection and alarm devices

Maintenance function	Frequency	Details
		<ul style="list-style-type: none"> • False alarm records for the last 12 months reviewed and suitable action taken if required • Batteries disconnected and full alarm load simulated • Batteries and their connectors to be momentarily load-tested (other than those in radio-linked system components) to help ensure that they will not fail before the next test. Ensure specific gravity of vented batteries correct • Control and indicating equipment alarm functions to be checked by operation of at least one detector, or call-point on each circuit and full details recorded • Operation of fire alarm devices checked • Control and indicating equipment controls and visual indicators checked for correct operation • Automatic transmission of fire alarm signals to alarm receiving centres tested • All ancillary functions of the control and indicating equipment tested • All fault indicators and their circuits tested • Printers tested to ensure reports are legible • Radio systems serviced in accordance with manufacturers' recommendations • All further checks conducted as may be recommended by the manufacturer • On completion of work, defects to be reported to the responsible person, documented in the system log book and a service certificate issued
	Over a 12-month period (may be carried out over two or more service visits within the 12-month period)	<ul style="list-style-type: none"> • Test the switch mechanism of every call-point by removing the frangible element, using a test key or operating the unit as would be operated in a fire • Check all detectors for signs of damage, painting or similar and functionally test each detector using a product and method approved by the manufacturer of the equipment • Where relevant, check the analogue value is within the range specified by the manufacturer • Check all fire alarm devices for correct operation • Replace all unmonitored, permanently illuminated filament lamps at the control and indicating equipment • For radio-linked systems, check radio signal for adequacy • A visual inspection of accessible cable fixings to ensure they are secure and undamaged • Power supply capacity checked and confirmed as adequate

Due to the automatic monitoring of some system functions, some of the above recommendations may be modified or even omitted if deemed unnecessary by the equipment supplier and if it can be demonstrated that the automatic test achieves the same objective.

5. Site control self assessment checklist

5.1	Control function	Yes	No	N/A	Action required	Due date	Sign on completion
5.1.1	Has a named person been appointed to supervise the system?						
5.1.2	Does this named person meet the requirements for a 'competent person' under the Regulatory Reform Order and for implementing the preventive/protective measures related to routine testing?						
5.1.3	Is a system log book available, complete and up-to-date?						
5.1.4	Is the control and indicating equipment checked every 24 hours?						
5.1.5	Are weekly audible alarm test(s) of the alarm system carried out by the competent person?						
5.1.6	Is a regular visual inspection conducted to ensure call-points are unobstructed and a clear space of 500mm maintained around detector heads – with the results being suitably recorded?						
5.1.7	Are suitable quantities of consumables for the installation available on site (printer rolls, spare frangible units for call-points etc)?						
5.1.8	Has a service provider with suitable third party accreditation from a UKAS-accredited certification body been appointed for routine maintenance and inspection?						
5.1.9	Does the service contract include provision for 24 hour coverage and attendance within 8 hours of notification by user?						
5.1.10	Is the frequency for periodic inspection visits based on a suitable risk assessment (minimum of two within a 12-month period)?						
5.1.11	Are the records of unwanted/false alarms reviewed regularly and suitable action taken where necessary?						

Signature	Name	Date
------------------	-------------	-------------

REFERENCES

1. BS 5839-1: 2002: *Fire detection and fire alarm systems for buildings. Code of practice for system design, installation, commissioning and maintenance*, British Standards Institution.
2. CFOA *Model Agreement between Fire and Rescue Authorities and Users of Remotely Monitored Fire Alarm Systems*, Chief Fire Officers' Association, 2004.
3. Approved Document B to the Building Regulations 2000: Fire Safety: Volume 2: Buildings other than dwelling houses, Communities and Local Government, NBS (RIBA Enterprises Ltd), 2007.
4. Regulatory Reform (Fire Safety) Order 2005, SI 2005 No. 1541, The Stationery Office.
5. Fire (Scotland) Act 2005, 2005 asp 5, The Stationery Office.
6. Fire Safety (Scotland) Regulations 2006, Scottish SI 2006 No. 456, The Stationery Office.
7. Fire and Rescue Services (Northern Ireland) Order 2006, SI 2006 No. 1254 (NI9), The Stationery Office.
8. Dangerous Substances and Explosive Atmospheres Regulations 2002, SI 2002 No. 2776, The Stationery Office.
9. BS 5839-8: 1998: *Fire detection and fire alarm systems for buildings. Code of practice for the design, installation, commissioning and maintenance of voice alarm systems*, British Standards Institution.
10. BS 5839-9: 2003: *Fire detection and alarm systems for buildings. Code of practice for the design, installation, commissioning and maintenance of emergency voice communications systems*, British Standards Institution.
11. BS 5839-6: 2004: *Fire detection and fire alarm systems for buildings. Code of practice for the design, installation and maintenance of fire detection and fire alarm systems for dwellings*, British Standards Institution.
12. BS 6266: 2002: *Code of practice for fire protection for electronic equipment installations*, British Standards Institution.
13. BS EN 54: *Fire detection and fire alarm systems*, various sections address fire alarm and detection system components such as sounders, various types of detector, manual call points, and control and indicating equipment, British Standards Institution.
14. *Report to Insurers: Remotely Monitored Fire Alarms - Unwanted Fire Signals and Fire Service Response*, Fire Protection Association, 2004.
15. LPS 1014: Issue 5.1: *Requirements for Certificated Fire Detection and Alarm System Firms*, BRE Certification, 2005.
16. BAFE SP203-1: *Fire Detection, Alarm and Suppression Systems Scheme*, BAFE, 2006.

FURTHER READING

Fire Safety Guidance Booklet: Are You Aware of Your Responsibilities?, Scottish Executive, 2006.

RC47

for the
management of
fire detection
and alarm
systems
in the workplace

Recommendations



InFiReS