BaptistInsurance

Guidance notes

church fire

Contents

Founded in 1905 as the Baptist Fire Insurance Company Limited, our roots are firmly in the protection of Baptist churches

Over 100 years' experience since then has allowed us to become experts in our field. We understand the needs of the Baptist Church and the diversity of its buildings and people.

We are a company committed to providing a personal, first-class service to all our customers dealing promptly and responsibly with any claims.

We recognise the tremendous work being done by Baptists at all levels in the community. One way we recognise this work is through our grant giving to the Baptist family including evangelistic projects. Available profits are re-invested back into the Baptist community, helping you to continue the great work that you do.

Useful contacts at Baptist Insurance

Enquiries

Tel 0345 070 2223
email enquiries@baptist-ins.com

Lines are open 8am-6pm Monday to Friday (excluding Bank Holidays).

Claims

Tel 0345 070 2223

New claims can be reported 24 hours a day, 7 days a week. Enquiries on existing claims can be made Monday to Friday 8am to 6pm.

For further information please call us on 0345 070 2223.

Note: Baptist Insurance provides these guidance notes without additional charge to policyholders.

This advice is provided to you as best practice guidance from Baptist Insurance. Please check your policy documents for details of any conditions specific to your policy.

pg 4

Electrical wiring in churches
Many fires are caused by faulty wiring or appliances.

pg 16

Repairs and restoration
There is a serious danger of fire or accident when works of repair or restoration are in progress.

pg 21

Installation of fire alarms
In addition to break glass points, protection should be provided by means of automatic heat/ smoke detectors.

BaptistInsurance

Experts in church and home insurance

Electrical wiring in churches

Despite increasingly high standards of installation, numerous church fires can be attributed to faulty electric wiring or apparatus. It is therefore important that electricity should be treated with respect.

Most Church Authorities are rightly aware that the organ presents a danger area'.

General

All new electric wiring should be installed in accordance with the 'Requirements for Electrical Installations' issued by the Institution of Engineering and Technology (IET). BS 7671 - the IET Wiring Regulations.

Only electrical contractors with 'Full Scope' registration or membership to work on commercial installations with the National Inspection Council for Electrical Installation Contracting (NICEIC), The Electrical Contractors' Association (ECA) or The National Association of Professional Inspectors and Testers (NAPIT) should be employed.

Electricians or electrical contractors who are only registered to undertake work on domestic installations under Part P of the Building Regulations are not acceptable.

The NICEIC carries out periodical and random inspections of contractors' work; should any remedial work be required to repair faulty work, then this is carried out at the contractors' expense. The Electrical Contractors' Association (ECA) operate a guarantee scheme for the work of their members - work done which does not comply with the safety requirements of the regulations will be rectified, at the members' expense. NAPIT operate a similar scheme.

Inspection and testing

Churches should have their electrical installations (including the organ blower box if appropriate) inspected and tested every five years. The inspection and testing should be carried out in accordance with IET Regulations, Guidance Note No. 3, and an inspection certificate obtained in every case. The certificate should be kept with the church records.

The switchgear should be labelled to show:

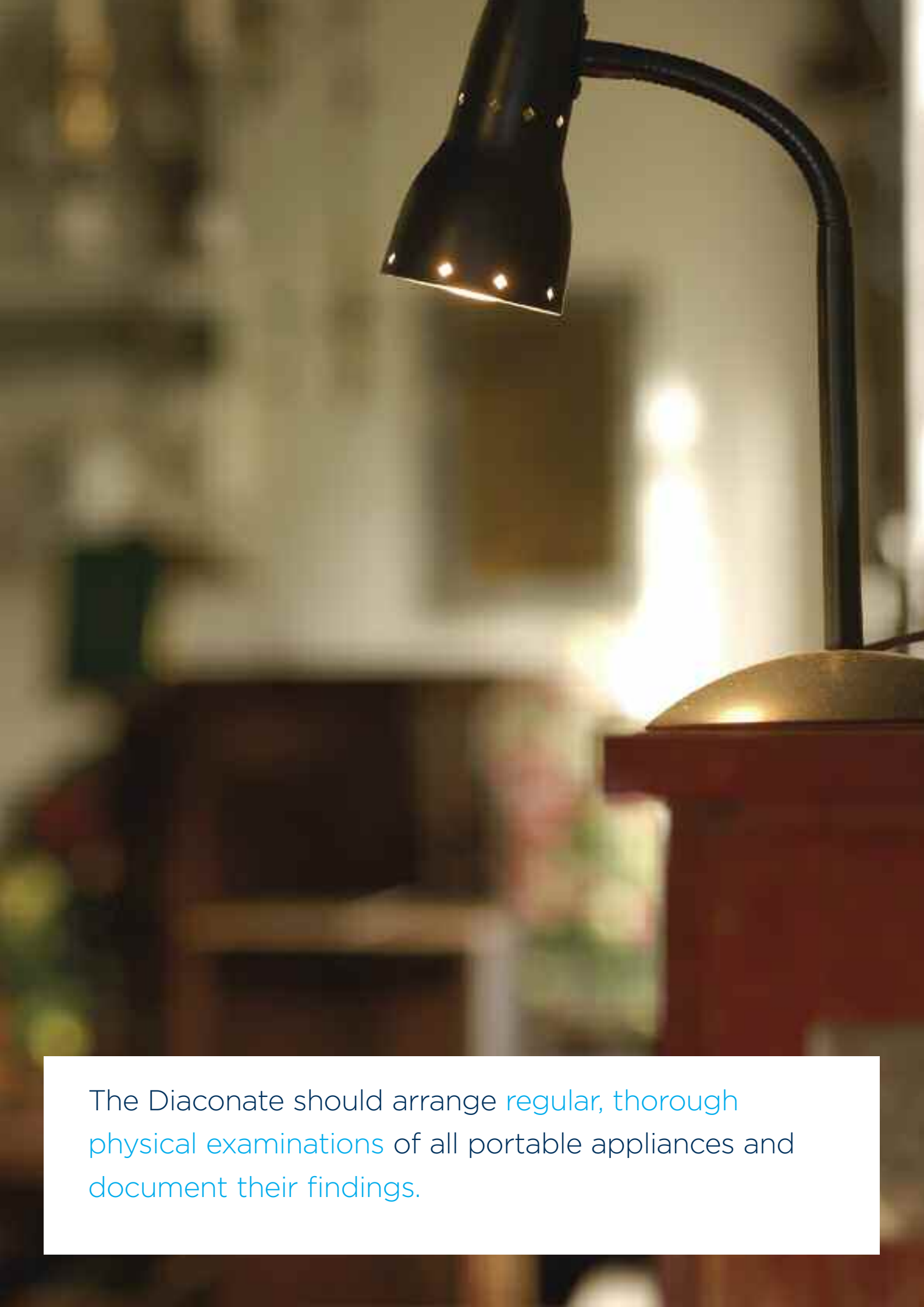
- the date of the most recent inspection; and
- the date of the recommended future inspection.

Portable electrical appliance testing

Portable appliances can be regarded as any electrical equipment capable of being carried and, in general, connected to the mains supply by a flexible lead and a plug. Once connected they are deemed to be part of the electrical 'system'.

There are two main classifications. Class I appliances rely on earthing of the conductive case and one layer of insulation covering its live internal parts for protection against electric shock, such as a kettle or heater. Class II appliances are 'double insulated' and rely on two layers of insulation between the live internal parts and the user for protection against electric shock, such as DVD players and multi-media projectors. The main difference as far as testing is concerned is that Class I appliances require an earth continuity/ bonding test which is not required in the case of Class II appliances.

If you employee anyone you will have a legal requirement to maintain portable electrical appliances under a number of pieces of legislation. The Portable electrical appliances being used must be maintained in a safe working condition to prevent injury. Electricity at Work Regulations 1989 require all systems to be maintained so as to prevent danger. The Provision and Use of Work Equipment Regulations 1998 require work equipment (which would



The Diaconate should arrange regular, thorough physical examinations of all portable appliances and document their findings.

If portable heaters are required they should be of the convector or fan-assisted type with a thermostatic cut out.

include portable electrical appliances) to be maintained in an efficient state, in efficient working order and in good repair. There are also general duties under The Health & Safety at Work etc. Act 1974 for employers to provide a safe place of work and plant and systems that are safe and without risks to health.

A competent person must carry out inspection and testing. This is someone with electrical knowledge and experience who understands the equipment to be worked on and the hazards which could arise and has the ability to recognise if equipment presents a hazard. Successful completion of an appropriate course, such as a City and Guilds 2377 Portable Appliance Testing course, would demonstrate competency to complete appliance testing. Visual inspections can be completed by anyone with the required level of basic electrical knowledge.

There is no statutory frequency for inspection and testing. The frequency should reflect the risk of the appliance causing damage or injury and this increases with the amount the appliance is used and the harshness of the working environment. A simple visual check should be carried out by the user every time before use to check for such things as damaged plugs, frayed cables and loose connections.

Records must be kept of all inspections, examination and maintenance carried out.

Portable electrical appliances – visual inspection checklist

Plug

- Cracked casing
- Bent pins
- Pins not insulated
- Incorrectly rated fuse
- Incorrectly connected wires
- Loose connections
- Loose cable clamp
- Outer insulation not held by clamp or cut short
- Should be marked BS 1363

Mains lead

- Cuts
- Fraying
- Brittle
- Kinked
- Coiled
- Taped joints
- Signs of burning or singeing
- Not secured by grommet/clamp on appliance

Appliance

- Damaged/faulty operation of on/off switch
- Damage to casing
- Loose parts
- Missing screws
- Evidence of overheating
- Evidence of moisture
- Accessible fuse holders
- Exposed cables

This is only a very brief outline and is based on our understanding of current law and practice. No electrical work of any kind should be undertaken by anyone who is not sufficiently qualified.

The organ

Most churches are rightly aware that the organ presents a ‘danger area’. Organ lights, whether for illuminating keyboards or for internal inspection, should be installed by a qualified electrician using permanent wiring.

Lights should be installed so that there is no danger of them igniting timber or music sheets if they are accidentally left on. The wattage of light bulbs should be kept as low as possible.

It is suggested that maintenance lights are fitted above each section of pipework within the organ. The lights should be of the non-heat producing fluorescent type. A ‘wandering lead’ from a 13-amp socket should be fitted in the lower section of the organ and be fitted with a proper

inspection lamp. All maintenance light switches should be fitted at the entrance to the organ chamber or casework.

If a portable electric heater is required for the organist, it should be of the convector or fan-assisted type fitted with a thermostatic cut-out that operates in the event of overheating. The plug should always be disconnected from the socket at the end of each service.

Inspection, maintenance or repair of all pipe organs, particularly those having electric or electro-pneumatic actions should only be entrusted to an experienced professional organ builder. Reliance should not be placed on the fact that an organ is regularly tuned because the tuner may not have the detailed technical knowledge required to detect dangers in the complex electrical circuitry of a modern organ. The organ builder should be consulted and arrangements made for a detailed inspection to be carried out at agreed intervals.

The electric organ blower is frequently overlooked, as is the specialised humidifying apparatus, which often sits alongside the blowing equipment. The electric organ blower should be examined at regular intervals by a qualified electrician. This is in addition to regular visual inspections, when the organ tuner may be able to observe the blowing apparatus during the course of a tuning contract visit and report anything felt to be suspect. Humidifying apparatus should be subject to a maintenance contract and be inspected every six months.

Switches incorporating pilot warning lights should be installed in the mains circuits to the organ and ancillary equipment to ensure that they are switched off whenever the instrument is not in use. Modern electronic organs should be routinely inspected and tested for electrical safety by a competent person.

The Institute of British Organ Building, the trade association for church pipe organ builders, will be happy to provide help and assistance.

The website address is www.ibo.co.uk

Towers

Church towers are very often a case of ‘out of sight, out of mind’. It is most important that they are not overlooked when carrying out inspections of electrical installations and portable appliances.

Extensions of electrical systems are often undertaken without authorisation and additional items of electrical equipment such as fans, heaters and kettles are often brought in without the knowledge or approval of the church officers.

Any new wiring in the tower should be installed in accordance with the ‘Requirements for Electrical Installations’ issued by the Institution of Engineering and Technology (IET), Current Edition, plus any formal amendments under BS 7671 by a NICEIC contractor, or member of the ECA, or of NAPIT.

Advice from a lightning protection specialist should be sought where external electrical equipment, including its cabling, is to be installed within one metre of lightning conductors (including earth conductors) as to whether there is adequate separation or whether bonding is required.

Temporary wiring

Temporary or extension wiring should only be allowed in exceptional circumstances. All temporary circuits should be physically disconnected from the mains when not in use (even where the mains switches are turned off).

Temporary wiring should always be installed in accordance with the ‘IET Requirements for Electrical Installations’ (BS 7671 current edition) and be protected against physical damage by means of armoured cable or conduit.

Temporary wiring should not be use for extended periods.

Permanently wired socket outlets should be installed as near to the location of lecterns, cribs or Christmas trees etc., as possible.

Mains circuits

Wiring should be arranged so that as many circuits as possible can be isolated at the mains switches when the church is not in use. All power and external circuits should be protected by Residual Current Devices (RCDs) to reduce the risk of electric shocks.

Physical damage

Any evidence of damage to wiring, plugs, sockets or other fittings should be attended to immediately upon discovery. Any wiring installations should take into account the possibility of Physical damage and be protected accordingly. Trailing cables are a health and safety hazard. Where essential, they should be kept to the absolute minimum length and should never be hidden under carpets, as the risk of Physical damage from sharp heels etc. is considerable.

Electricity at Work Regulations 1989

The Electricity at Work Regulations have wide application and apply to most churches. They require that electrical installations are safe and regularly checked by a qualified electrician working to the current edition of the IET 'Requirements for Electrical Installations' (BS7671). In no circumstances should an untrained person attempt any electrical work.

Provision and use of firefighting equipment

The Regulatory Reform (Fire Safety) Order 2005 requires that in all premises a responsible person ensures the provision of suitable fire safety measures.

The responsible person must ensure that a fire risk assessment is carried out, paying particular attention to those at special risk such as disabled people, those with special needs and children.

Every church needs some firefighting equipment.

The form and extent of the equipment required can vary from a small number of portable fire extinguishers to hose reels, fire blankets and an array of fire extinguishers in the largest churches. This guidance note describes the more widely used types of extinguishing equipment and their application.

Note: the minimum for any church is two portable fire extinguishers. A water one for organic materials such as wood and paper and a carbon dioxide one for electrical fires.

Fire extinguishing equipment

The chart on the next page indicates in general terms the type and number of fire extinguishing appliances that may be required for your church, however this must be determined from your own fire risk assessment of the building. For further details of the various types of extinguishers and their suitability for different applications please refer to 'Selecting the appropriate extinguisher'.

Purchasing recommendations

It is recommended that firefighting equipment should be purchased from firms that are members of the Fire Industry Association (FIA), British Approvals for Fire Equipment (BAFE) or Independent Fire Engineering and Distributors Association (IFEDA). Such firms can offer expert advice, maintenance facilities and appliances that have been approved by The Loss Prevention Council (LPC). LPC publishes lists of extinguishers that have been independently tested in accordance with BS EN3 and that are manufactured in accordance with a satisfactory quality assurance scheme.

Approved extinguishers can be obtained from:

- Fire Industry Association
  Tel: 020 3166 5002
  www.fia.uk.com

- British Approvals for Fire Equipment
  Tel: 01608 653 350
  www.bafe.org.uk

- Independent Fire Engineering and Distributors Association
  Tel: 0844 225 1800
  www.ifeda.org

Fire extinguisher colours

For new extinguishers only 5% of the body surface may be coloured to indicate the type of extinguisher.

Water	Red
Carbon dioxide	Black
Dry powder	Blue
Foam	Cream

Old extinguishers sold before the end of 1996 are still acceptable and do not have to be repaired or replaced until they have become unserviceable.

Portable fire extinguishers should be sited where they can readily be seen near the risks for which they are most suitable.

Location	Type of extinguisher
General areas	
Very small church	1 water
Small church	2 water
Medium-size church	3 water
Large church	4 water
Organ	1 carbon dioxide
Boiler house	
Solid fuel-fired boiler	1 water
Gas-fired boiler	1 AFFF
Oil-fired boiler	
– Where electricity can be switched off	1 foam or AFFF
– Where not	1 dry powder
Kitchens	
	1 fire blanket plus 1 foam or wet chemical
Electrical equipment	
	1 carbon dioxide

Maintenance

All firefighting equipment should be inspected and maintained professionally at least annually by an FIA, BAFE or IFEDA firm.

Siting of fire extinguishers

Fire extinguishers should be sited in reasonably prominent positions close to where they will be used and not hidden behind curtains or locked away in the vestry. Preferred locations are near to exits, wall mounted with the carrying handle mounted 1 metre above floor level. For the organ a carbon dioxide extinguisher, sited fairly close to the instrument, is recommended.

Training

The Minister, Stewards, employees and voluntary workers should learn how the different types of extinguisher operate and whenever possible the supplier or local fire brigade should be asked to arrange a practical training session.

Kitchens

Before using a fire extinguisher on a fat fire, electricity or gas should be turned off to remove the heat, and a fire blanket used first to cover the burning object.

Boiler rooms

The gas supply must be turned off before attempting to tackle any secondary fire.

Further advice

Specific advice about all matters relating to fire prevention can be obtained from the Fire Prevention Officer of the local fire brigade.

Selecting the appropriate fire extinguisher

Type	Advantages	Disadvantages
Water These use 'gas' or 'stored' pressure to expel the water and the minimum appropriate capacity is 9 litres. Smaller extinguishers are also available, which by using an additive have an equivalent rating of 9 litres.	Water is the most effective agent for extinguishing fires in organic materials such as wood, paper or textiles. Water-type extinguishers are the easiest for inexperienced people to use effectively.	Water must never be used in an attempt to extinguish fires involving petrol, paraffin, any oils or hot fat. It is both dangerous and ineffective. There is a danger of electric shock to the user if a stream of water is directed onto apparatus containing live electrical circuits so they are not recommended for use, for example, in or near photocopiers, computers or other electrical equipment. Extinguishers using a soda-acid reaction to expel the water should now be replaced with extinguishers meeting current standards.
Water mist The extinguisher's nozzle disperses microscopic "dry" water mist particles to supress fires and extinguishing burning materials. The mist cools the fire and reduces the oxygen content of the fire.	Can be used on most types of fires e.g. wood, paper, textiles, flammable liquids and fat fires. Less mess to clean up after a fire. A 6 litre water mist extinguisher is as powerful as a standard 9 litre water extinguisher.	None
Hydrospray These discharge water in the form of a fine mist. The minimum appropriate capacity is 6 litres, which is equivalent to an ordinary 9-litre water extinguisher.	They are smaller, lighter and hence easier to use than a standard 9-litre water extinguisher.	Their use is restricted to the same materials as water, but if accidentally discharged onto electrics there is a much-reduced risk of electric shock.
Carbon Dioxide (CO_2) To match the effectiveness of one 9-litre water type, two CO_2 extinguishers, each having a capacity of 4.5 kilograms, are needed.	Suitable where electricity is involved. Leaves no residue so will not cause additional damage to electrical apparatus.	Much less efficient than water against fires in organic materials.
Dry Powder To match the effectiveness of one 9-litre water type, one 4.5 kilogram dry powder extinguisher is needed.	Useful against fires involving petrol, paraffin, oil, etc. Within a church, dry powder extinguishers should only be situated in boiler houses.	Dry powder extinguishers contain a mixture of chemicals with the potential to cause considerable damage to the building fabric and contents due to its corrosive nature where moisture is present. It is also abrasive. The provision of a combination of water and carbon dioxide portable fire extinguishers will be suitable for most fire scenarios. Where there are existing dry powder extinguishers steps should be taken to ensure they are not being used in inappropriate places, for example, in close proximity to pipe organs, paintings, textiles and electronic equipment.
Foam (Aspirating) A 9-litre foam is equivalent to a 9-litre water type.	The most efficient extinguisher for dealing with fires involving oil or other flammable liquid.	High possibility of an electric shock if directed onto electrical equipment. Use only on oil-fired boilers if the electricity supply can be turned off quickly and easily. Training in the correct use of these extinguishers on flammable liquid fires is vital.
Foam (AFFF Spray) A 9-litre foam is equivalent to a 9-litre water type; smaller capacity extinguishers may be used, but the numbers should be increased to equate to the number of 9-litre extinguishers required.	A relatively new development for extinguishers, designed as a general-purpose replacement for Halon. Suitable for use on both flammable liquids and organic materials such as wood, paper or textiles.	Design minimises risk of electric shock if used on electrics. Application to flammable liquids is easier than the aspirating foam extinguisher, but will only deal with smaller fires, and may not be the best extinguisher for oil-fired boilers.
Wet Chemical A type of extinguisher specifically designed for fires involving cooking oil.	More effective than foam, CO_2 or dry powder for cooking oil fires. The most effective extinguisher for deep fat fryers. It can also be used on wood, paper and textiles.	Should not be used on electrical fires.

Number of fire extinguishers

The number of extinguishers required will vary according to particular circumstances but in general it is considered that there should be one 9-litre water extinguisher or equivalent for each 200m² of floor area or part thereof, with at least one per floor.

Additional extinguishers should be provided in boiler houses or kitchens and in any areas above ground floor level where activities take place (organ lofts, meeting rooms, etc.).

P50 Fire extinguishers

The P50 low-maintenance extinguisher is the latest development in the UK fire extinguisher industry. These extinguishers are certified to EN3 with a 20 year life, requiring no discharge testing or re-fills for 10 years.

The P50 is designed to remove corrosion and reduce maintenance because it only requires a simple visual inspection and checking of the gauges.

If these extinguishers are selected, you must maintain written records of the extinguisher to include purchase date, inspection dates, condition details and any repairs undertaken.

Fire alarms

Early detection and warning of fire is vital if damage is to be limited and the installation of an automatic fire detection system should be considered. Professional advice should be sought and Baptist Insurance consulted before proceeding along this route. Any fire alarm system should comply with BS 5839 Part 1: P1/L1. If at all possible it should also include remote signalling to an alarm monitoring station (conforming to BS 5979). It is also recommended that the system is designed, installed, commissioned and maintained by an LPS 1014 Certificated Fire Detection and Alarm System firm or an installer accredited under the British Approvals for Fire Equipment (BAFE) adopted SP 203 scheme. Further information is given in the section 'Installation of Fire Alarms'.

Heating in churches

Many different forms of heating are used in churches, all presenting different fire hazards. These notes summarise the main problem areas.

All heating apparatus should comply with the relevant British Standards and Building Regulations, be installed in compliance with the relevant British Standard Codes of Practice and be operated carefully in accordance with the manufacturers' instructions.

Gas installations

All persons fitting piped gas must, by law under the Gas Safety (Installation and Use) Regulations 1998, be registered with the Gas Safe Register, a register of certified installers qualified to work on gas fittings and appliances. They will ensure registered installers are competent to carry out the work they are registered for, and investigate any allegations of 'unsafe' working practices.

As the regulator with responsibility for gas safety, the HSE oversee the scheme.

Apart from the obvious fire and explosion hazards, the danger of carbon monoxide poisoning from the use of faulty equipment is ever present. Regular maintenance is therefore essential.

Chimneys and flues

Chimneys and flues are a major source of danger and should be inspected and swept regularly. Inspection of the chimney is not normally included in a maintenance contract with a heating engineer so special arrangements may need to be made in consultation with the church architect.

Flue pipes should be installed well clear of woodwork or other combustible material and should not pass through the roof unless it is possible to cut back woodwork for a distance of 250mm all round and provide a collar of metal, earthenware, or other incombustible material.

Boiler rooms

Wherever possible, boiler rooms should be of fire-resisting construction with an external door only. If a boiler room has to be within the building then it should be constructed to the appropriate standard of fire resistance indicated in British Standard BS 5410, irrespective of the type of fuel used. The boiler room should never be used to store rubbish or other combustible material. Other items should be stored at least one metre clear of the boiler.

Oil-fired heating systems

Oil-fired systems should be installed in accordance with the relevant sections of both British Standard BS 799 for 'Oil Burning Equipment' and BS 5410 'Code of Practice for Oil Firing'. Reference should also be made to the RISC Authority. Recommendations for Oil-fired heating installations RC9 are available as a free download from www.riscauthority.co.uk/free-documentlibrary.

Of particular importance is the provision of an automatic fire valve in the oil supply pipe close to the point where it enters the heating chamber, or preferably in the tank chamber if that is adjacent, operated by a fusible link mounted over the oil burner and by a quick-release mechanism sited close to the heating chamber door. Any oil-fired systems should be maintained by an OFTEC registered contractor.

All heating apparatus should comply with the relevant British Standards and Building Regulations.

All hot water heating systems fuelled by oil or gas should be protected against freezing.

Apparatus should be operated in accordance with the manufacturers' instructions which should be clearly displayed in the heating chamber or else be readily available for consultation by responsible persons. Regular expert inspection and maintenance is necessary both for safety and for efficient operation of the apparatus.

Oil storage tanks used in England should be installed in accordance with the Control of Pollution (Oil Storage) (England) Regulations 2001. This requires the use of a bund or catchpit, which will contain any leaking oil. Similar regulations apply in Scotland and the England regulations should be regarded as 'best practice' in Wales. More detail is contained in the Guidance Note 'Church Health and Safety'.

If the recommendations in BS 5410 cannot be complied with, then care should be taken to site tanks clear of any window or doorway opening and well away from any lightning conductor.

If a tank has to be sited within the heating chamber then it should be isolated from the boiler by a solid brick or concrete block wall at least 115mm thick. The tank chamber should be leak-proof and of sufficient volume to hold the contents of a full tank plus 10% to allow for expansion.

Fixed oil-fired space heaters should have fire valves (normally the 'spring-loaded' type) fitted in the oil supply pipe close to its point of entry into the building and also close to each heater. With these type of heaters, combustible materials should not be allowed to come in contact with the heater body and should preferably be stored at least one metre away. This could be encouraged by the use of suitable guards or the whole floor area 'hatched' denoting a restricted storage area.

Electric heating systems

Generally speaking, fixed electrically powered heating systems are acceptable if installed in accordance with the 'Regulations for Electrical Installations' issued by the Institution of Engineering and Technology (IET), Current Edition, under British Standard BS 7671. The systems should be fixed and have any heating elements enclosed–as in electric under pew tubular heaters–or protected by adequate metal guards. Electric panel heaters for pew heating should be constructed entirely from non-combustible materials. Panel heaters using timber or hardboard to sandwich the electric heating element are unsuitable and must be avoided – Baptist Insurance should be consulted before the installation of panel pew heating is first considered.

Portable heaters

Portable heaters should only be used in a church when there is no alternative. Paraffin and oil-fired heaters and others designed specifically for use in industrial, agricultural or commercial buildings should never be considered for use in church, even as a temporary measure.

Heaters should be carefully sited well clear of woodwork or other combustible materials and, where possible, protected against the possibility of being knocked over or moved accidentally by the fitting of guards.

Heaters should not be left unattended for long periods or used when the building is unoccupied and should never be moved while alight. Reserve stocks of liquid petroleum gas (LPG) bottles and cylinders for cabinet-type heaters should be kept to a minimum and preferably be stored in a locked and well-ventilated outbuilding or secure compound.

Cylinders should ideally be changed in the open air. Where this is not practical the operation should take place in a well-ventilated area away from any source of ignition. After the connection has been made the valve on the new cylinder should be opened cautiously in order that any leakage may be detected before a serious escape can occur.

It should be remembered that heating appliances using LPG as their fuel source create large amounts of water vapour in the atmosphere which can seriously damage the fabric of the building, particularly assisting with the early onset of rot in timber.

Portable electric radiant heaters are dangerous in a public building and only convector or fan-assisted types fitted with a thermostatic cut-out that operates in the event of overheating should be used. They should be positioned well away from any combustible materials to avoid the risk of fire damage.

Churches should be aware that the Electricity at Work Regulations 1989 require the inspection of electrical equipment having a lead/cable and a plug and which can be easily moved from place to place.

Protection against frost damage

All hot water heating systems fuelled by oil or gas should be protected against freezing by the installation of one or more 'frost-stats' which are designed to operate the heating system when the external ambient temperature falls to a pre-determined level. They should be sited outside the building (in weatherproof covers) on the north side and also on the east side where appropriate.

Insurance considerations

Baptist Insurance should be advised well before any change is made in the existing heating system.

Church repairs and restoration

There is a serious danger of fire or accident when works of repair or restoration are in progress and Church Authorities should, in their own interest, exercise close supervision of all such works.

Smoking should be prohibited if possible and should never be permitted in the building or where flammable liquids or vapours are present.

They should also impress upon the building contractors the need for a thorough inspection whenever work ceases for a meal break, or at the end of the day to make quite sure that there are no signs of incipient fire caused by blow lamps, surreptitious smoking or temporary unapproved electric circuits.

Basic precautions

All workmen should be shown the location of fire extinguishers and be told where responsible officials or telephones can be found in the event of an emergency. The local Police and Fire and Rescue Service should be advised if major repair works are to be undertaken.

During the contract period, responsible church officials should inspect the church carefully at the end of every working day ensuring that all is in order. Whenever possible, irregular visits should also be made during the day.

Smoking

Smoking should be prohibited throughout the site if possible and must never be permitted in the buildings or where flammable liquids or vapours are present. Where permitted, it should be confined to a designated area with adequate waste disposal arrangements, and the area thoroughly inspected at the end of each working day.

Temporary electric wiring

All temporary electric wiring should always be installed in accordance with the 'IET Regulations for Electrical Installations' (BS 7671). Circuits should be physically disconnected from the mains supply at the end of the day even where the mains switch is turned off at night. Where there is a risk of mechanical damage to wiring, suitable protection should be provided or the wiring re-routed.

Waste material

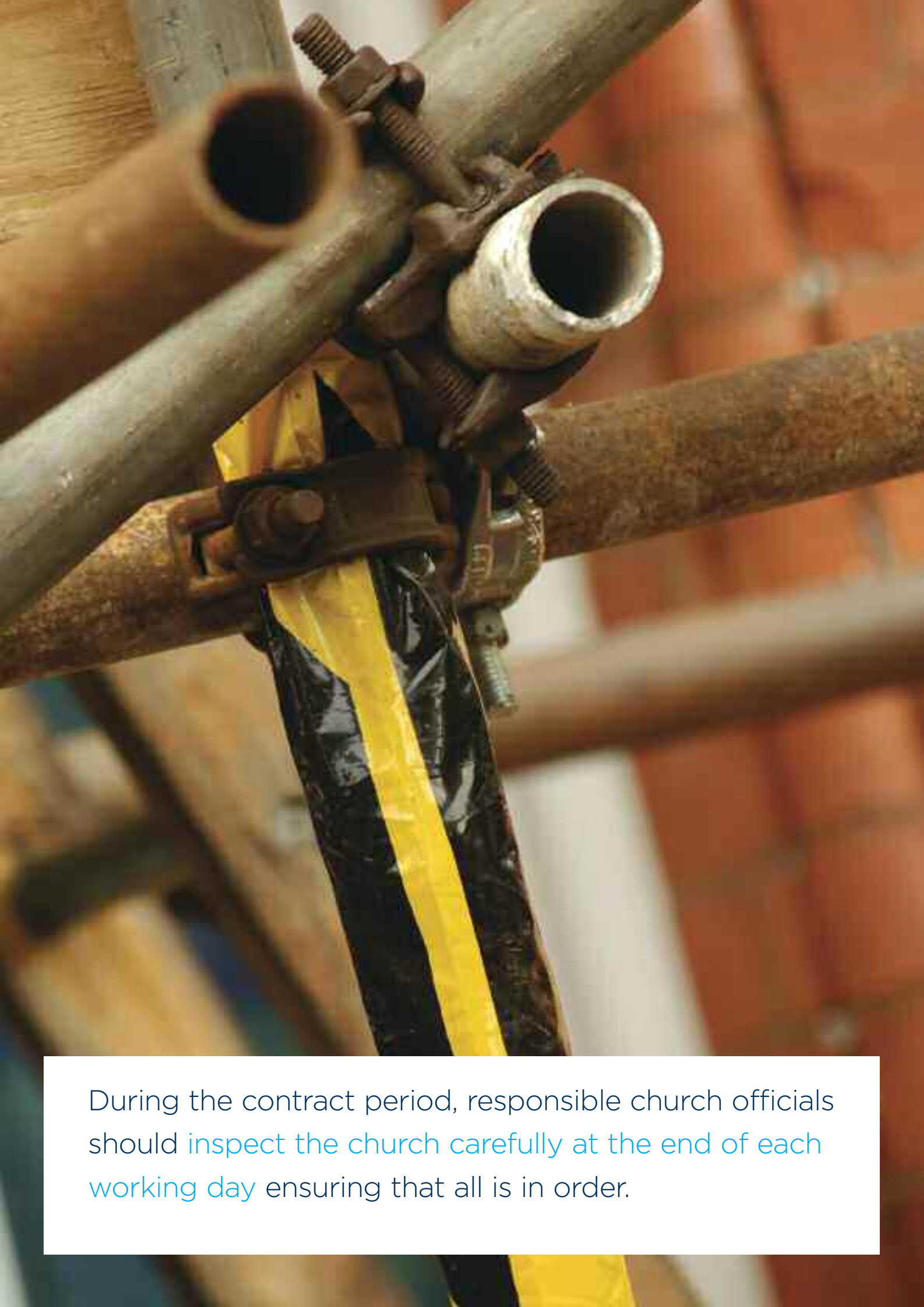
Ensure that it is clearly arranged that all fittings are unpacked outside the church. Paper, straw, crates and other waste materials should be removed for disposal and should not be burnt. Attention to the removal of trade and other combustible waste on a daily basis is essential.

Asbestos

Before any maintenance or construction work is undertaken it is essential that you are aware of any asbestos which may be present in the building and that it is either removed or measures are put in place to ensure it is safe.

There are two types of asbestos survey that can be undertaken, a Management survey, or a Refurbishment and Demolition survey. A Management survey may be appropriate where simple and routine maintenance work is being undertaken but otherwise a Refurbishment and Demolition survey should be undertaken. A competent person must be employed to undertake the survey of the premises to identify asbestos containing materials (ACMs). The survey should be carried out in accordance with the HSE Guidance 'Asbestos: The survey guide'.

Further information is available in the Guidance Notes 'Health and Safety'.



During the contract period, responsible church officials should inspect the church carefully at the end of each working day ensuring that all is in order.

Stained glass windows, particularly those of historic interest, should be suitably protected against accidental damage.

Valuables should be locked away whilst work is in progress.

Your architect will need to be closely involved with all stages of the survey process, any removal of asbestos and any subsequent plan for managing asbestos. All contractors will also need to be kept informed.

Hot work permit

A 'permit to work' system must be adopted where hot work is being undertaken unless there is no risk of damage to any surrounding property. It is essential that a hot work permit system is in place where roof work is being undertaken.

The person nominated to authorise hot work, normally the fire or safety officer, must have experience or training in the problems associated with hot work and be of suitable status to ensure compliance with the procedures.

Prior to the commencement of work, a hot work permit should be obtained from the authorised person. This should be done on every occasion that hot work of any type is undertaken within or upon the fabric of established buildings or any structures or plant in the open. This procedure should also apply to construction sites once fitting out has commenced, and to all buildings which are being refurbished.

A hot work permit should not be issued without considering the significance of any other permits to work in the vicinity, or adjacent processes which may involve the use of flammable liquids or gases.

A hot work permit should also be issued for a specific task that is undertaken in a clearly identified area. Hot work permits should not be issued for protracted periods. Separate hot work permits should be issued for work which extends from morning to afternoon periods. Before completing the first part of the hot work permit, the person responsible for carrying out the work should complete the checklist shown on the hot work permit to indicate that fire protection measures are adequate, suitable precautions have been taken and the equipment to be used is safe.

If the person authorised to issue the hot work permit is not satisfied with the arrangements, further measures may be requested, and any additional conditions should be entered in the space provided. The earliest time at which a final fire-check should be made will also be specified. This will normally be at least one hour after the time of expiry of the hot work permit, when work must be complete. If trained personnel will not be available to make this check (for example in the case of a permit issued late in the day) work must not be commenced. The hot work permit should be completed in duplicate, with the top copy being handed to the person responsible for carrying out the work. The second copy should be retained by the issuer who may wish to inspect the site of the work or instigate spot checks to ensure that conditions have been met and that work is complete before the hot work permit expires. The completed form should be returned to the issuer and retained for future reference.

A Hot work pro-forma is attached.

Flammable materials

Provisions should be made for gas cylinders, paints, oils and any other flammable liquids or materials to be stored outside, well away from the building in secure, lockable, adequately ventilated compounds. Smoking must be prohibited in storage areas. Building materials are attractive to thieves and precautions should be taken to prevent their unauthorised removal. If spraying of roof timbers is undertaken, this should only be done in a well-ventilated atmosphere and all forms of heating switched off until work is complete. Illumination of the work area should be by means of suitable low-temperature fluorescent lighting. Halogen lights must not be used.

Site huts

Huts provided for workers' breaks or storage should be erected well away from the church and be adequately secured.

The organ

Special precautions may be needed to prevent damage to the organ by water or dust, such as covering with polythene sheeting. There is a possibility that the organ blower housing may contain asbestos. Seek specialist advice from the organ builder.

Stained glass

Stained glass windows, particularly those of historic interest, should be suitably protected against accidental damage – either metal mesh or temporary boarding can be considered.

Theft

While work is in progress, valuables should be locked away in the vestry or be removed to the home of a responsible official for safekeeping. You should ensure that easy access to roofs is prevented by arranging for ladders to be removed and suitably secured at the end of each working day.

Scaffolding is valuable and attractive to thieves and practical measures should be taken to ensure, as far as possible, that both fixed and unfixed scaffolding is not at risk from unauthorised removal.

Site security

Keep the general public away from the area of the works by erecting suitable barriers and warning notices. Access via scaffolding must be prevented by removal and securing of low-level ladders and it may be necessary to erect perimeter security fencing to keep intruders well away. The base of any scaffolding should be enclosed with either timber or metal hoardings to a minimum height of 3.0 metres. In some instances alarm protection of the scaffolding may be desirable. Specialist systems exist for this purpose and have proved to be most effective.

Workmens' tools, plant and unfixed building materials should not be left unsecured on the site. Provision should be made for a lockable compound or site hut.

CDM Regulations

The Construction (Design & Management) Regulations apply to all construction work in Great Britain. You should be aware of your responsibilities under these regulations. As a 'client' - an individual or organisation for whom construction work is being carried out, you have a number of specific duties under the CDM Regulations; however, you can appoint a competent person to assist you in the discharge of these duties if you wish. The Approved Code of Practice to the CDM Regulations summarises the duties of a client as follows:

- check the competence and resource of all appointees;
- ensure there are suitable management arrangements for the project including welfare facilities;
- allow sufficient time and resources for all stages;
- provide pre-construction information to designers and contractors.

A project is notifiable to the HSE if the construction phase will be longer than 30 days and have more than 20 workers on site simultaneously at any point in the project or 500 person days of construction work, and for such projects, clients must:

- appoint a CDM co-ordinator;
- appoint a Principal Contractor;
- make sure construction work does not start unless there are suitable welfare facilities, and a construction phase plan is in place;
- provide information relating to the health and safety file to the CDM co-ordinator;
- retain and provide access to the health and safety file.

Insurance

Baptist Insurance should be advised as soon as building work is contemplated. We will issue a Building works questionnaire to be completed by the architect and Diaconate who should indicate the insurance obligations of the church under the terms of the contract. In certain circumstances, the employers (i.e., the Diaconate) may need to arrange additional insurance cover in respect of:

(a) the existing structure together with the contents; and,

(b) the works and all unfixed materials and goods other than builders' plant, tools and other equipment.

The Diaconate must ascertain that the builders have effected suitable insurances against Public Liability (Third Party) and Employers' Liability risks and that such insurances have been extended by specific reference to protect the interests of the Diaconate. A copy of the insurance policy schedule or a letter of confirmation from the builders insurance brokers must be obtained. For major works, (usually where the contract value exceeds £1,000,000) Baptist Insurance will require that the contract is subject to the Joint Code of Practice on the Protection from Fire of Construction Sites and Buildings Undergoing Renovation published by the Construction Confederation and The Fire Protection Association.

Copies are available from:

The Fire Protection Association
London Road,
Moreton in Marsh,
Gloucestershire GL56 0RH.
Tel 01608 812500
email fpa@thefpa.co.uk
www.thefpa.co.uk

Installation of fire alarms

These notes are intended to provide guidance to churches that wish to install or update a fire alarm in order to qualify for a fire alarm discount.

These notes provide a basis upon which to obtain comparative quotations although in all cases a visit by a Risk Management Surveyor will be required in order to approve any specification prior to installation work being carried out.

General

The building should be protected by an automatic fire alarm system installed to BS 5839 Part 1. The control panel must have keypad operation and be analogue addressable.

The system must be designed, installed, commissioned and maintained by an LPS 1014 Certificated Fire Detection and Alarm System firm, or an installer accredited under the British Approvals for Fire Equipment (BAFE) adopted SP 203 scheme.

There must be an annual maintenance contract. The specification must include confirmation by the alarm company that sub-contractors will not be used or specify the extent to which sub-contractors will be used.

Signalling

In order to obtain the higher levels of discount, remote signalling must be incorporated to a permanently manned monitoring station conforming to BS 5979.

Detection

In addition to break glass points, protection must be provided by means of automatic heat/smoke detectors of either the point or beam variety. All equipment must be LPC approved.

Alarm discounts

In order to qualify for a discount, in addition to the system being installed as set out above, the Fire and Rescue Service must be able to attend the church within 20 minutes.

The amount of the discount will depend on the extent of the system and the method of signalling. The following are in descending order from the highest to the lowest discount.

Full building protection to P1/L1 with remote signalling.

Part protection (P2/L2) with remote signalling.

Full building protection with audible signalling assuming someone is able to act upon hearing the alarm operate.

Part building protection with audible signalling assuming someone is able to act upon hearing the alarm operate.

Discounts cannot be given until the building has been inspected by an Insurance Consultant and Surveyor.

Important notes

It is the responsibility of the party implementing the above specification to ensure that the implementation does not contravene any statutory or Local Authority requirements, e.g., under the Health and Safety at Work Act, and other relevant legislation.

Prior to contract, copies of design drawings and/or specifications are to be forwarded to Baptist Insurance for approval.

In addition to break glass points, protection must be provided by means of automatic heat/smoke detectors.

Lightning protection for churches

As well as lightning conductors, consideration should be given to the installation of surge protection equipment.

Consideration should be given to the installation of surge protection equipment.

Prior to August 2008, systems should have been installed to BS 6651, Code of Practice for Protection of Structures against Lightning. A typical system, generally described as a Faraday Cage system, comprises a mesh of conductors at intervals laid over the roof and down the walls of the building, and connected to earth by earth electrodes. Most existing systems, however, predate the recommendations of BS 6651 and have changed very little over the last 100 years.

What are the chances that lightning will strike?

Statistics indicate that a church with no lightning protection is about five times more likely to suffer structural strike damage than one with lightning protection. Furthermore, the risk of damage to electrical systems and equipment in unprotected churches is increased by about 50%.

Paradoxically, a lightning conductor will make a building more rather than less liable to attract a strike. However, its purpose is to direct the energy within a strike to earth where it can be discharged safely. A strike to an unprotected building may still discharge safely, for example down a rain-wet masonry surface; however, because the discharge is uncontrolled, there is a greater risk of structural damage to an unprotected building. Earthed metalwork, such as wiring systems and piped services that inadvertently form part of the discharge path, may also be damaged.

Typical lightning damage to churches

There are two types of lightning damage, namely direct effects to the structure and indirect effects to the electrical wiring and equipment.

Direct effects are usually minor, damaging copings and pinnacles mostly on the tower or spire, however, there is also a risk of fire. There is also the possibility of secondary damage from falling masonry. Even minor damage, however, can be costly to repair where scaffolding is required.

Most indirect effects from lightning damage result from voltage surges causing shutdown or malfunction or the complete burnout of electronic systems such as alarms, boiler controls, sound reproduction systems, computers, telephones and electronic organs.

All such equipment is at risk of damage from unwanted voltages known as surges, spikes or transients. These surges can be very damaging to electronic components, such as printed circuit boards, and may result in a loss of a facility such as a fire alarm system, computer or telephone system.

The most common and the most damaging surges are those caused by lightning which produces voltage surges on overhead and underground cables, both power and communications.

Approximately six out of ten insurance claims for lightning damage to churches are for damage to electrical wiring and equipment rather than structural damage. Consideration should be given to the installation of surge protection equipment.

There is a range of devices tailored for the protection of different types of equipment and it is essential that specialist advice is obtained before installation. Only electrical contractors with full scope registration or membership to work on commercial installations with the National Inspection

Council for Electrical Installation Contracting (NICEIC), The Electrical Contractors' Association (ECA) or The National Association of Professional Inspectors and Testers (NAPIT) should be employed.

Mains surge protection devices should always be installed in accordance with BS 7671, the Institution of Engineering and Technology (IET) Requirements for Electrical Installations, Current edition.

Installation of new systems

It is usual for a church-appointed architect or building surveyor to take the lead in these matters and to liaise between church authorities and other bodies, including English Heritage where appropriate.

A suitably qualified specialist installer will need to be appointed and all relevant statutory regulations, including those under the Health & Safety at Work etc. Act 1974 must be followed.

Baptist Insurance policy

After a period of running in parallel, from the end of August 2008, BS 6651 has been replaced by BS EN 62305. The new standard incorporates hundreds of changes and is considerably larger and more complex. There are four main parts covering (1) General Principles, (2) Risk Management, (3) Physical Damage to Structures and Life Hazard and (4) Electrical and Electronic Systems within Structures. The protection of electronic equipment is now an integral part of the standard.

Whilst BS 6651 recommended that lightning protection systems should be inspected and tested at fixed intervals, preferably not exceeding 12 months, the maximum interval under the new standard is four years; it may be convenient to reduce this to two and a half years to fit the quinqennial inspection cycle, with an annual visual inspection by a church officer. An inspection and test is also advisable following a strike or suspected strike as some damage may have occurred. Records of all inspections and tests should be maintained.

Installing a lightning conductor system is not usually a policy condition where cover against lightning damage is provided. However, installing lightning protection, as part of a risk assessment strategy, together with its ongoing maintenance and testing, not only serves to protect the building for future generations to enjoy, but should help to reduce claims costs in the longer term.

This is only a brief summary of a very complex subject. Specialist advice must always be sought before installing any electrical equipment and installation must only be undertaken by competent persons.

The design of a lightning protection system should be carried out by a specialist such as a consulting engineer, preferably a member of the Association of Consulting Engineers, with experience in lightning protection systems.

Only specialist contractors with experience in this kind of work should be employed for the installation, such as members of the Association of Technical and Lightning Access Specialists (ATLAS).

Candlelit services

The use of candles in church can be an aid to worship. However, it is important to remember that they can also be the cause of major fires and serious injuries if not used correctly. Simple precautions should mean that candles can be used safely.

Fire extinguishers must always be readily available where candles are being used.

Choice of candle

Good quality slow-burning candles are best. Cheaper, catering-quality candles will burn down quickly, and the flame may soon get dangerously close to foliage or decorations.

Hand-held candles

Great care needs to be taken where people are given candles to hold, especially where large numbers are involved. Apart from the risk of igniting flammable materials, molten wax can cause damage to clothing and is very hot. Purpose-made candles are available, and should be used with proper slide-on card drip trays.

Even greater care is necessary where children are involved. Children should be properly supervised and care taken to ensure that they do not stand too close together and, in particular, not too close behind one another as there is a risk of both clothing and hair being set alight. Processions while holding candles are probably best avoided.

Placing of candles

Candles must be kept clear of all combustible materials including flammable decorations, foliage and electrical equipment. Ideally candles should be placed in metal holders on non-combustible surfaces such as stone or brick.

Fire extinguishers

Fire extinguishers must always be readily available where candles are being used. Water extinguishers are the most suitable for dealing with burning foliage, paper and wood. Church members must know where the extinguishers are and how to use them. Training can be provided either by your fire extinguisher supplier or the local Fire and Rescue Service. Water should not be used on electrical equipment.

Fire blanket

A fire blanket may be a better way of dealing with certain fire situations, and you should have at least one available. They are particularly suitable for dealing with burning clothing.

Means of escape

If a fire should start you must be certain that people can get out of the building quickly. All doors must be unlocked and be capable of being opened quickly.

Lighting

Stewards should have torches so that any minor problems can be dealt with, without turning on the main lights. In the event of a fire or other serious emergency the main lights must be turned on immediately.

Procedures

It is strongly recommended that a team of stewards is appointed and that each person has specific duties in accordance with a list of written procedures. A specific steward should be appointed to each door and must ensure that it opens easily before the service starts.

Similarly fire extinguishers should be allocated to specific stewards, who should know how to use them. For large services, a trained first aider with first aid equipment should be available.

Announcements

The person leading the service should be aware of the fire risk, and in the event of an emergency be ready to ask everyone to leave in an orderly fashion following the directions of the stewards.

Ideally candles should be placed in metal holders on non-combustible surfaces such as stone or brick.

Fire risk assessment

The Government is committed to reducing death, bodily injury and damage caused by fire. To implement this initiative the Regulatory Reform (Fire Safety) Order 2005 (RRO), which took effect from 1 October 2006, repealed and replaced over 100 pieces of previous fire safety law.

Protect people by providing fire precautions such as fire extinguishers, emergency escape routes and exits.

Application

The RRO applies to all businesses, places of worship and the voluntary sector. It does not apply to private dwellings in single occupation. A Responsible Person is required to conduct a comprehensive risk assessment in order to:

- identify any possible dangers and risks including sources of ignition;
- identify people who may be at risk, especially those working alone or in isolated areas, children or parents with babies, the elderly or infirm and people with disabilities;
- evaluate the level of risk, and remove or reduce any fire hazards where possible;
- protect people by providing fire precautions such as fire extinguishers, emergency escape routes and exits;
- record any major findings and the action taken, prepare an emergency plan, inform and instruct relevant people, such as stewards, and provide any necessary training;
- review the fire risk assessment regularly and make changes where necessary.

Where five or more persons are employed a formal record of any significant findings and remedial measures, which have or may need to be taken, must be made. We would advise that irrespective of the number of employees, or even if you have none, that you make a record of your risk assessment and record the measures you have put in place.

Responsible Person

The Responsible Person can be one of the following:

- employers with control of the workplace;
- person with overall management control of a building;
- occupier of the premises;
- owner of premises if an empty building;
- landlord where the building is in multi-occupancy.

Competent Person

The Responsible Person must appoint one or more Competent Persons to assist in undertaking the preventative and protective measures.

A person is regarded as competent where they have sufficient training and experience or knowledge and other qualities to enable them to properly assist in undertaking the preventative and protective measures.

Government guidance documents

The Government has issued a range of detailed guidance notes. These include Small and Medium Sized Places of Assembly (up to 300 persons) which includes churches and church halls and Large Places of Assembly (over 300 persons) which includes large churches.

An entry level guide ‘A short guide to making your premises safe from fire’ and a fire risk assessment form are also available.

This and all of the other guides can be downloaded from:

www.firesafetyguides.communities.gov.uk

Undertaking a fire risk assessment

The Baptist Insurance have produced a fire risk assessment for Baptist Churches. See www.baptist-ins.com

Fire risks in the workplace must be assessed either as a separate exercise or as part of a general review of health and safety. Any fire hazards within the premises will need to be identified including possible ignition sources (e.g., electrical wiring or processes using the application of heat). The use and storage of combustible materials, together with the presence of flammable liquids and gases needs to be noted.

Another hazard to document is the susceptibility of the premises to arson attack. Although it is now illegal to smoke in most premises the control of smoking and the disposal of smoking materials also need to be noted.

Reasonable firefighting equipment must be provided. As part of the initial risk assessment, a record must be made of all firefighting equipment.

The location of fire hydrants and the accessibility of the premises for Fire and Rescue service appliances should also be noted.

Checks that need to be made:

- Whether or not a fire can be detected and people warned within a reasonable time. Details of any existing fire detection system and other methods for raising the alarm need to be recorded;
- Anyone who may be in the building should be able to get out safely in the event of a fire. This means looking at fire exit routes, signage and emergency lighting, and recording the existing arrangements;
- Everybody who is in the building needs to know what to do in the event of a fire. This means examining existing arrangements for evacuation, written fire procedures, staff handbooks and manuals, and induction and refresher training courses for staff;
- Fire safety equipment should be properly maintained. This includes looking at existing service and maintenance contracts and procedures for routine inspections.

A check also needs to be made of the effect a fire in your premises would have on neighbouring premises so that they can take the appropriate action.

If five or more persons are employed the significant findings of the fire risk assessment must be recorded.

We would strongly recommend, however, that all fire risk assessments are recorded irrespective of the number of employees. A written record is invaluable evidence that a fire risk assessment has been carried out.

Are any changes required?

Having noted the existing situation, the next stage of the assessment is to decide whether any changes to the existing arrangements are required including the introduction of additional safety measures.

The following will need to be considered:

The first stage is to examine the various hazards that have been identified and what control measures can be introduced to eliminate or minimise the risks as far as reasonably practicable. The best possible control measure is to eliminate the fire hazard altogether. This may be achieved, for example, by the removal of rubbish and combustible materials that are no longer required or the prohibition of smoking from the entire site.

The substitution of hazardous materials with less hazardous counterparts can reduce the fire risk. For example, replace solvent-based paints, thinners and cleaners with water-based counterparts or ones with higher flash points.

If hazards cannot be eliminated or substituted, the risk can be reduced by the introduction of engineering controls such as the use of metal cabinets for storing flammables. Ideally, large quantities of flammables should be stored in a purpose-built detached building away from the main premises.

A decision will need to be made whether there is a need to upgrade existing fire detection and warning methods. If the premises are such that a fire could go undetected for some considerable time or people could be working in a part of a building and be unaware of the need to evacuate, an automatic fire detection and warning system is probably required.

Improvements may also be required to escape routes. This may require the provision of additional fire exit doors. As a minimum, steps will need to be taken to ensure that all exit routes are kept clear of obstructions and that fire exit doors can be opened easily from the inside without the use of keys, cards or digital locks. Additional fire exit signs and emergency lighting may also be required.

Is additional firefighting equipment required? As a general guide, one water fire extinguisher with a rating of 13A is required for each 200m² of floor area. In addition, other extinguishers, such as carbon dioxide for electrical hazards, will be required.

The final part of the assessment will be to form an emergency plan. It will need to include the actions to be taken by nominated church members in the event of a fire, evacuation procedures and the arrangements for calling the Fire and Rescue Service.

The necessary training will need to be undertaken to ensure that all nominated church members know what to do.

A periodic review of the fire risk assessment must be undertaken to ensure it remains valid and it must be updated in light of any fire related incidents or other change in circumstances, e.g. alterations to the building.

The regulations are enforced by the Fire Authority who may inspect the premises to check that the regulations are being carried out.

Following an inspection of the premises, the Fire Authority may issue an enforcement notice requiring safety work to be carried out. If they consider that there is a serious risk to people from fire, a prohibition notice could be issued restricting the use of the premises until remedial action is taken.

Conclusion

In practice there is very little change from the situation prior to the implementation of the Fire Safety Order. The need to carry out a fire risk assessment has not changed, although this now applies to all premises and open air events, and there is no longer the need for there to be at least one employee for it to be a legal requirement. The assessment now also requires the Responsible Person to think about the effect of a fire on their neighbours.

Guidance on Fire Risk Assessment has been produced by the Communities and Local Government organisation. Whilst the notes are detailed, they are designed to be used by lay people. The introduction to the guidance says that it is not prescriptive and that there is no obligation to adopt any particular solution in the guide if fire safety can be met in some other way. However, if you are unable to apply the guidance then you should seek expert advice.

For example, churches do not necessarily have to have fire alarm systems, fire exit signs, emergency lighting or outward opening doors if the risk assessment shows that these are not necessary. However, arrangements must be in place to ensure that a fire can be detected and that persons can evacuate the buildings safely. For example, stewards should have torches and be positioned to open exit doors.

Enforcement

The Order is enforced by the Fire Authorities who can enter premises at any reasonable time without force and issue Improvement and Prohibition notices.

Sources of information

The Health and Safety Executive
www.hse.gov.uk

Royal Society for the Prevention of Accidents
RoSPA House,
28 Calthorpe Road, Edgbaston
Birmingham, B15 1RP
Tel 0121 248 2000 Fax 0121 248 2001
Email help@rospa.com www.rospa.com

The Fire Protection Association
London Road, Moreton-in-Marsh
Gloucestershire, GL56 0RH
Tel 01608 812500 Fax 01608 812501
Email fpa@thefpa.co.uk www.thefpa.co.uk

Food Standards Agency
Aviation House, 125 Kingsway
London, WC2B 6NH
Tel 020 7276 8829
Email helpline@foodstandards.gsi.gov.uk
www.food.gov.uk

Environment Agency
National Customer Contact Centre
PO Box 544, Rotherham, S60 1BY
Tel 03708 506 506
Email enquiries@environmentagency.gov.uk
www.environment-agency.gov.uk

Communities and Local Government
Eland House, Bressenden Place
London, SW1E 5DU
Tel 0303 444 0000
Email contactus@communities.gov.uk
www.communities.gov.uk

Notes

Hot work permit

Issuing organisation **Permit no.**

A. Proposal

To be completed by the person responsible for carrying out the work

Building

Exact location of proposed work

Nature of hot work to be undertaken

The above location has been examined and the precautions listed on the reverse side of this form have been complied with as indicated

Signed	Name (BLOCK CAPITALS)
Date	Position
Contractor (where applicable)	

B. Agreement

To be completed by the fire officer or other nominated person

This hot work permit is issued subject to the following conditions:

Time of issue of permit **Time of expiry of permit***

A final fire check of the work area shall be periodically undertaken for one hour immediately after the hot works have been completed and before the permit is signed off

Additional conditions required

Signed	Name (BLOCK CAPITALS)
Date	Position

C. Fire watch

To be completed by a member of staff or contractor responsible for the work before returning this permit to the issuer

The work area and all adjacent areas to which sparks and heat might have spread (such as floors below and above, and areas on other sides of walls) have been inspected and found to be free of fire following completion of the work

Time inspection completed

This must be filled in one hour after hot works have been completed.

Signed	Name (BLOCK CAPITALS)
Date	Position
Contractor (where applicable)	

** It is not desirable to issue permits for protracted periods. Fresh permits should be issued, for example, where work extends from morning to afternoon. Note: where work is being carried out by a contractor, the issuer of the permit should ensure that the contractor has complied with the requirements prior to work being carried out, and should be satisfied that the area is free of fire when work is completed.*

Procedure for Hot work permits

1 The person nominated to authorise hot work, normally the fire or safety officer, must have experience or training in the problems associated with hot work and be of suitable status to ensure compliance with the procedures.

2 Prior to the commencement of work, a hot work permit should be obtained from the authorised person. This should be done on every occasion that hot work of any type is undertaken within or upon the fabric of established buildings or any structures or plant in the open. This procedure should also apply to construction sites once fitting out has commenced, and to all buildings which are being refurbished.

3 A hot work permit should not be issued without considering the significance of any other permits to work in the vicinity, or adjacent manufacturing processes which may involve the use of flammable liquids or gases.

4 A hot work permit should also be issued for a specific task that is undertaken in a clearly identified area. Hot work permits should not be issued for protracted periods. Separate hot work permits should be issued for work which extends from morning to afternoon periods.

5 Before completing the first part of the hot work permit, the person responsible for carrying out the work should complete the checklist shown below to indicate that fire protection measures are adequate, suitable precautions have been taken and the equipment to be used is safe.

6 If the person authorised to issue the hot work permit is not satisfied with the arrangements, further measures may be requested, and any additional conditions should be entered in the space provided in section B. The time within which a final fire check should be made is also specified in section B. This will normally be an hour after the time of expiry of the hot work permit, when work must be complete. If trained personnel will not be available to make this check (for example in the case of a permit issued late in the day) work must not be commenced.

7 The hot work permit should be completed in duplicate, with the top copy being handed to the person responsible for carrying out the work. The second copy should be retained by the issuer who may wish to inspect the site of the work or instigate spot checks to ensure that conditions have been met and that work is complete before the hot work permit expires.

8 The completed form should be returned to the issuer and retained for future reference.

Hot work permit checklist

Can this job be avoided? Is there a safer way?

(The person carrying out the check should tick the appropriate boxes)

Fire protection

1. Where sprinklers are installed they are operative in sprinklered premises, hot work should not be carried out when the water supply to the sprinkler system is shut off. ☐
2. A trained person not directly involved with the work will provide a continuous fire watch during the period of hot work and for at least one hour after it ceases, in the work area and those adjoining areas to which sparks and heat may spread ☐
3. At least two suitable extinguishers or a hose reel are immediately available. Both the personnel undertaking the work and providing the fire watch are trained in their use ☐
4. Personnel involved with the work and providing the fire watch are familiar with the means of escape and method of raising the alarm/calling the Fire Brigade ☐

Precautions within 10 metres (minimum) of the work

5. Combustible materials have been cleared from the area. Where materials cannot be removed, protection has been provided by non-combustible or purpose-made blankets, drapes or screens ☐
6. Flammable liquids have been removed from the area ☐
7. Floors have been swept clean ☐
8. Combustible floors have been covered with overlapping sheets of non-combustible material or wetted and liberally covered with sand. All openings and gaps (combustible floors or otherwise) are adequately covered ☐
9. Protection (non-combustible or purpose-made blankets, drapes or screens) has been provided for:
   - walls, partitions and ceilings of combustible construction or surface finish ☐
   - all holes and other openings in walls, partitions and ceilings through which sparks could pass ☐
10. Combustible materials have been moved away from the far side of walls or partitions where heat could be conducted, especially where these incorporate metal ☐
11. Enclosed equipment (tanks, containers, dust collectors etc.) has been emptied and tested, or is known to be free of flammable concentrations of vapour or dust ☐

Equipment

12. Equipment for hot work has been checked and found to be in good repair ☐
13. Gas cylinders are sited at least three metres from the burner and have been properly secured in a vertical position and fitted with a regulator and flashback arrestor ☐
14. Hazardous materials will be removed from the hot works location as soon as work is completed ☐
15. Any lit tar boilers will not be left unattended ☐

Insurance