# DIOCESE OF CHELMSFORD DIOCESAN ADVISORY COMMITTEE



Diocese of Chelmsford Diocesan Advisory Committee

Revised March 2007

# FIRE PRECAUTIONS AND SAFETY

# Guidelines to assist parishes

### INTRODUCTION

- 1.1 The purpose of this booklet is to assist parishes in providing protection for people, buildings and contents from fire hazards, including advice on areas of principal risk, and problems connected with new works, alarm systems and insurance. In practice there is very little change from the situation set out in the previous booklet.
- 1.2 Although churches, particularly ancient ones, are buildings which deserve the best possible protection from fire, it should always be borne in mind that the protection of life is paramount.
- 1.3 Churches fall into a particular type of public building, which is normally occupied by people who are familiar with the layout, and the main means of access and egress. However, more frequently today churches are becoming community facilities attended by audiences who are unfamiliar with the building.
- 1.4 By their nature many of our churches contain elements of great intrinsic and artistic value. Artifacts such as stained glass, paintings and furniture are particularly at risk. Organs can be the single most expensive items to replace after fire damage.
- 1.5 Parishes should bear in mind that, in the case of complete loss, insurance will not cover the rebuilding of the original structure, but will cover the building of an alternative place of worship.
- 1.6 There is reference throughout this document to the EIG (Ecclesiastical Insurance Group) but other insurers may be used by parishes, in which case that company's advice should be taken.

# **LICENSING**

- 2.1 Normally any entertainment provided in a church would not be licensable under the Licensing Act 2003. However, there are times when a church is put to a use that would require a license under this Act e.g. public concerts. Those responsible for such functions and for the building have a *duty of care*.
- 2.2 The fact that in most cases the legislation does not apply does not lessen the risk nor the responsibility for duty of care. It should be noted that all places of worship are covered by the Regulatory Reform (Fire Safety) Order 2005.

### RISK MANAGEMENT

- 3.1 This document covers the major points of fire safety. Risk management is concerned with reducing the likelihood of fire and the best means of protecting the building, its occupants and its contents as far as possible.
- 3.2 The current trend of fire safety practice is to use a *Risk Assessment* process, as highlighted by the Regulatory Reform (Fire Safety) Order 2005. There are two principal benefits of this approach. Firstly, each individual venue and event is assessed for hazards and risks peculiar to it, e.g. low risk associated with a conventional service in a modern building, or a higher risk associated with a large youth event with extra electrical equipment in an older building. Secondly, the solutions to these risks are control measures, foremost of which is the management of each event.
- 3.3 The form which a risk assessment should take is set out in the above Order: 'fire safety risk assessment small and medium places of assembly'. For larger premises where more than 300 people may gather the 'larger places of assembly' guide should be used. The Order sets out five steps in fire risk assessment:
  - Step 1 Identify fire hazards
  - Step 2 Identify people at risk
  - Step 3 Evaluate, remove and reduce and protect from risk
  - Step 4 Record, plan, inform, instruct and train
  - Step 5 Review

Fire risk assessments can be carried out by the responsible person or by a company suitably qualified. The relevant fire risk assessment guide should enable the responsible person to carry out a 'suitable and sufficient' fire risk assessment. Advice can be obtained on specific matters from the Essex County Fire and Rescue Service Community Command in your local area (listed in the rear of this guide). The parish's fire equipment servicing representative may advise on particular matters.

3.4 Every PCC should appoint a member as the fire officer (responsible person), whose responsibilities will be to ensure a continuing review of all fire prevention measures, housekeeping, safe working practices, control during building works, security during special events, and a review of all incidents which may, or could, lead to fires. Ideally the duties of this role should go hand in hand with those of the person responsible for health and safety. The incumbent, churchwardens and all PCC members should all be familiar with the location and use of extinguishers in the church. The supplier or the local fire brigade should be asked to arrange a demonstration.

- 3.5 The congregation should be encouraged to familiarize themselves with the alternative exits, possibly by occasionally using different exits after services.
- 3.6 Any faults found should be recorded in the premises log book and a note of significant findings and/or an action plan recorded in the appropriate section of the premises risk assessment.
- 3.7 During building works the prime responsibility will, of course, lie with the contractor, any sub-contractors, and the parish's professional advisor. The PCC member's role would be to ensure that all these parties are aware of the risk potential.

# **AREAS OF RISKS**

- 4.1 The causes of fires in churches are much the same as in other buildings. High on the list are lightning strikes, followed by a variety of electrical faults; wiring and appliances, organ wiring, defective heating appliances other than electrical (gas or oil), smoking, the use of naked flames, and arson.
- 4.2 The most common time for fires to occur is when building works are in progress, a time when many of these risks can be present.
- 4.3 There has been an increase in the use of candles during services and modern, manmade fabrics can be very flammable. The combination of the two has potential for serious incidents.
- 4.4 Most Church of England churches are of masonry or brick construction. The walls, therefore, are not a major risk factor. The roofs, however, are a principal concern. Firstly they generally house electrical wiring a major cause of fires. Secondly, by their nature, they tend to harbour dust, frass, and other debris which can act like tinder once ignited.

# PRECAUTIONS AGAINST MAJOR RISKS

- 5.1 Fires arising from lightning strikes can be minimized by ensuring that the lightning protection is always complete. During building works, masonry repairs, or ground excavations the continuity of the conductors can be broken. Any such disruption should be immediately corrected. Regular testing must be ensured.
- 5.2 Faulty electrical wiring will be identified at the quinquennial inspection. EIG advice is that an installation should be tested every 5 years. If it fails a test immediate steps should be taken to have the faults corrected. If this is not possible in the short term the faulty sections should be disconnected.

- 5.3 Small electrical fittings, fires, kettles, fans etc. are frequent causes of fires. These appliances are often quite old and rarely tested; their flexes are particularly liable to be defective. Such appliances will not normally be considered at quinquennial inspections. It is therefore the responsibility of the PCC to ensure that the fittings and their connecting flexes are regularly inspected and replaced where necessary. Extension leads, other than for short-term use with vacuum cleaners etc., should never be used on a 'permanent' basis.
- 5.4 Similarly gas heaters, both fixed and portable, gas boilers and heaters should be inspected by a qualified (CORGI) engineer on a regular basis. Chimneys or flue pipes should be swept regularly.
- 5.5 Electrical wiring and equipment connected to organs should also be regularly tested.
- 5.6 Non-standard or amateur wiring to organs (or elsewhere) **should never be contemplated.**
- 5.7 During building works it is important that all parties are aware of the risks. Smoking must be prohibited at all times. Naked flames for lead burning should generally not be allowed; in special circumstances it may be permissible, but only under the strictest supervision. Any builder's temporary wiring for electric tools or temporary heating etc. must be disconnected each evening. Waste material, packing, crates etc, should be cleared away immediately and never stored within the church building.
- 5.8 When new building work is contemplated the adequacy of the mains supply for all future requirements should be calculated and an adequate supply ensured to avoid the possibility of overloading.
- 5.9 If special electrical equipment is brought in for particular events the fittings and any temporary wiring should be installed and checked by a qualified electrical contractor. Any permanent equipment such as amplifiers should be properly connected to the mains supply, not via extension leads. Earth leakage devices should be used and, where possible, made a permanent feature.
- 5.10 Electrical switchgear should always be securely boxed in.
- 5.11 Care must be taken with the storage of flammable materials. Cleaning materials, polishes etc. are a particular risk and only the minimum amounts should be stored and these must be kept in a safe place. The storage of any materials which are rarely used is inadvisable. Cans of petrol or other fuel for mowers should never be stored on site.

5.12 More and more churches are making alterations and extensions which include rooms with separate functions, in particular offices, meeting rooms and kitchens, all of which present particular risks. During alterations to provide these facilities the authorities will require standards of fire safety. Subsequently it will be the parish's responsibility to ensure that those standards are maintained, i.e. fire blankets, extinguishers, door closers etc. must all be kept *in situ* and in good order.

# THE FIRE PRECAUTIONS REGULATIONS

6.1 The Regulatory Reform (Fire Safety) Order 2005, hereafter referred to as the Fire Safety Order (FSO), came into force on 1<sup>st</sup> October 2006. It develops and extends the concepts first laid out in the Fire Precautions (Workplace) Regulations. No longer is it the Fire Service's duty to make sure the premises are safe. That duty lies with the 'responsible person'.

The scope of the document covers:

fire detection fire fighting equipment emergency exits

Places of worship are not exempted by the Order.

- 6.2 The new Regulation treats volunteers as if they were employees of the PCC. The PCC is treated as 'the employer' and the church premises as the 'workplace'.
- 6.3 The responsible person, in relation to a workplace, is the employer, if the workplace is to any extent under his control. If the premises or place is not a workplace, the responsible person is the person who has control of the premises and/or the owner. The concept of 'control' is essential to establishing who is the responsible person in premises other than workplaces. The Order covers 'any place' (with few exceptions). It should be noted that it covers any workplace, any tent or movable structure and any vehicle, vessel, aircraft or hovercraft.
- 6.4 The Fire Safety Order adopts a flexible approach to fire safety, and when a fire officer audits premises he will be assessing the suitability and sufficiency of the fire risk assessment. An audit of the premises will then take place to ensure that the fire safety management of the premises reflects the content of the fire risk assessment. The responsible person should use the appropriate guide (such as 'small and medium places of assembly') as the basis of advice for their fire risk assessment. However, the local authority fire officer is available to give further assistance at the local Community Command. As many places of worship are listed historic buildings, the local authority fire officer will be sensitive to maintaining the character of the building whilst maintaining the balance of ensuring fire safety.

- 6.5 The following is a suggested procedure for addressing the new regulations:
  - (a) carry out a fire risk assessment of your church premises (taking account of the needs, in the event of a fire, of any people who may be affected and making adequate provision for disabled people who use the premises);
  - (b) identify the significant findings of the risk assessment and the details of anyone who might be especially at risk in case of fire (these must be recorded if more than five people are employed i.e. those members regularly on the premises)
  - (c) provide and maintain such fire precautions as are necessary; and
  - (d) provide information, instruction and training to other appropriate church members.

# Other legal duties include:

- (e) where necessary, nominate people to undertake any special roles, which are required under your emergency plan;
- (f) consult employees on proposals for improving fire safety precautions and the nomination of people to carry out particular roles;
- (g) inform other employees (if any) who also have workplaces on the premises; and
- (h) establish a suitable means of contacting the emergency services.

See 6.2 for definitions of 'employee', 'employer', and 'workplace'.

6.6 If, after dealing with the above matters and consulting the relevant fire safety guide, the parish is still in doubt regarding safety, the fire officer, the parish architect and the DAC should be consulted.

# PROTECTION AND ALARMS

- 7.1 For existing churches a fire alarm system installed to BS 5839 is recommended by the EIG. In cases where a church is altered or extended in such a way as to require building control consent, the local authority and the fire brigade may have specific requirements. Fire detection systems are usually based on smoke detectors and a link to a commercial collecting station is established. Fire alarm systems may be set up in conjunction with intruder alarms, but these are dealt with in a separate DAC booklet.
- 7.2 The current code for lightning conductors is BS 6651:1990. This gives very substantial expensive protection. The earlier 1985 version must be the minimum base line.

- 7.3 One step suggested which can be useful for both fire safety and security is to have one key to fit all the external doors. However, in many churches this is impractical; in such cases the question should be discussed with both the Fire Officer and the church insurers.
- 7.4 The EIG lists suitable fire extinguishing equipment for churches of various sizes, with particular types for organs, boiler houses and kitchens. Advice on the most suitable type of extinguisher for different locations is also given.
- 7.5 Extinguishers should always be carefully sited where they can easily be seen and accessed, generally near to exits and with the top no more than 1 metre above floor level. Location must also take into account the effect upon the character and appearance of the building and its fabric.
- 7.6 It is important that all fire protection equipment is regularly maintained and tested in accordance with the maker's instructions and employees and PCC members should be familiarised with usage. Contracts with appliance suppliers should be read carefully to understand the long-term costs.

# **NEW WORKS**

- When new works that require Building Control consent are proposed, the building 8.1 inspectors apply the relevant parts of the Building Regulations. These Regulations ensure, amongst other things, that all materials and fittings have the required fire resistance. The fire brigade will also be consulted in regard to fire safety, in particular escape routes with suitable alternatives, the provision and siting of extinguishers, necessary signage, and access for fire brigade vehicles. Your professional advisor will be aware of all these matters and will negotiate in the interests of the church to ensure that, whilst safety is of prime importance, costs and the impact of any requirements on the use of the church and the impact on its character must also be taken into account. Certain matters recur when extensions or alteration are proposed. These matters, which are discussed in the following paragraphs, are issues being discussed between the Church Heritage Forum and the Home Office. It is hoped that guidance will be issued shortly making it clear that a fire authority must consult with those responsible for faculty jurisdiction before issuing any notice requiring an alteration to be made that requires a faculty. The current guidance requires the consent of English Heritage to 'an alteration to an historic building'.
- 8.2 The normal requirement for the final exit doors in public buildings is that they should open outwards. Traditionally historic church doors open inwards (psychologically this is a welcoming feature). To convert such doors to open outwards would cause considerable damage to the historic fabric and character. It can be argued that for normal services where the numbers are not excessive and the congregation is familiar with the building, the risk may be minimal and could be disregarded. However, for special events, where the public may be unfamiliar with the layout of the building,

other solutions may be devised. Inner outward opening doors can be installed and the old doors locked in the open position during public performances. Familiarity with a building does not compensate for inward opening doors. However, good stewarding is essential.

- 8.3 The Fire Officer will generally look for alternative means of escape. These can usually be provided through a north or west door or a vestry, although leaving vestry doors open during services may have security implications. The opening up of a previously sealed doorway may be an alternative. Alternative exits must be kept clear and, if necessary, a key made available.
- 8.4 The signing of means of escape with illuminated green 'running men' can be a disturbing visual intrusion. These should only be needed for certain special events, in which case temporary signs might be agreed. Also, providing the signs are well lit by external lights, internal lighting may not be required. Emergency lighting should be considered. Quite small units sufficient for a moderately sized church are available.
- 8.5 Fire Service access may be a problem with churches that are set well away from a hard access road. This is a matter that can only be resolved by direct discussion with the brigade.
- 8.6 There may be rare occasions when situations cannot be resolved and the assistance of a specialist who will be able to calculate the 'fire load' of the church may be needed. The fire load is the potential amount of energy that would be generated by a fire. A traditional church with stone walls, a solid floor, a lofty roof and solid oak pews will have much lower load than, say, a modern public house. The volume of a church with ceilings 10 metres or more high will be much greater than most other building with a similar plan area and 3 metre ceilings. Such a church therefore will accommodate much more smoke at a high level before it drops low enough to make breathing and vision difficult.
- 8.7 Rarely will the cost of a sprinkler system be justified in a church, unless difficult Fire Service access becomes an issue. It might however be appropriate in a hall where regular public performances are proposed.

# **INSURANCE**

9.1 When considering change the question of insurance must be addressed. The advice of the EIG has already been mentioned, and the insurers should be informed before any works are started. It should also be borne in mind that the better the church is protected, the stronger is the parish's argument to pay a lower premium.

# FACULTY CONSENT AND SUMMARY

- 10.1 Life and building safety must always be of paramount importance and, whatever the regulations may or may not demand, the moral imperative must be to protect life. The risks must be assessed against all other relevant factors.
- 10.2 All the types of work and installations that have been described will require faculty consent as well as local authority approvals. In complex cases, a PCC may have to seek the help of an independent expert in the field of fire safety engineering who will be able to represent their views to the fire authorities. The DAC will always be prepared to consider proposals and advise parishes at an early stage and, if necessary, help to find a suitable consultant.

### **USEFUL REFERENCES**

If you are in doubt about the need to provide particular fire protection measures, the local fire service (which is responsible for enforcing the Regulations) will advise you.

# Written advice:

- The Regulatory Reform (Fire Safety) Order 2005, No. 1541, The Stationery Office All fire risk assessment guides and general fire safety advice are available from the Stationery Office and are free to download at:

  www.firesafetylaw.communities.gov.uk
- Heritage under fire: a guide to the protection of historic buildings, Fire Protection Association (for the UK working party on fire safety in historic buildings), 1991, ISBN 0902167944
- The Churches Main Committee's *Fire Precautions Guide*. The Diocesan Resources Centre (tel: 01245 294405) is happy to assist in obtaining copies.
- 4 Guidance notes for churches: Section 1 Fire, published by the Ecclesiastical Insurance Group.
- 5 Insuring your historic building Churches and Chapels, by English Heritage and the R.I.C.S.
- 6 Lightning protection for churches: Ecclesiastical Insurance Group and English Heritage

## **POLICY**

- All parishes should consider nominating the responsible person as required under the Regulatory Reform (Fire Safety) Order 2005 and 6.1 and 6.2 of the above note.
- 2 Parishes should consult with their architect whenever changes are proposed which may lead to fire safety matters being critical.
- The DAC should to be consulted at an early stage on such proposals and may wish to make a site visit.
- In cases where there is a clear conflict of interests between the building, both as a place of worship and as an historic monument, and the requirements of the fire officer, it is recommended that an independent fire engineer be appointed by the parish.
- 5 Major schemes must be discussed with the fire officer at an early stage.

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# FIRE RISK ASSESSMENT FORM

Name of Church	
Address	
Assessment undertaken by	
Date	
Area assessed (e.g. Ringing Chamber)	
HAZARDS/RISK/PERSONS (Note here the existing situation)	ADDITIONAL CONTROLS  ( Note here the additional measures that are needed to reduce the risk to an acceptable level and record when they have been implemented)
What are the Fire Risks? (Note details of any flammable liquids, combustible materials, and persons at risk)	
Can a fire be detected in a reasonable time and people be warned?	
Can people in the building get out safely? (Look at escape routes, emergency lighting and signage)	
Is there adequate fire fighting equipment?	
Do people know what to do if there is a fire? ( Are there any written evacuation procedures?)	
6. Is a regular check made that fire fighting equipment is in place, are people trained in its use and is it regularly maintained?	

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