



***CATHOLIC BISHOPS' CONFERENCE  
OF ENGLAND AND WALES***

***PATRIMONY COMMITTEE***

**SOME NOTES AND GUIDANCE**

**FOR THOSE RESPONSIBLE**

**FOR LISTED BUILDINGS**

**UNDER THE GOVERNMENT EXEMPTION SCHEME**

*(These notes contain much information that was first brought together  
by the Diocesan Advisory Committees of the Anglican Dioceses of Hereford and Chichester,  
to whom acknowledgement and grateful thanks are due)*

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# **CONTENTS**

	Page
ADVICE ON NEW BUILDING IN AND AROUND EXISTING CHURCHES	3
YOU AND YOUR ARCHITECT / SURVEYOR	5
THE SALE / DISPOSAL OF ITEMS FROM CHURCHES	7
CHURCH SECURITY	8
A CHECKLIST FOR BUYING A SOUND SYSTEM	10
MATERIALS FOR CHURCH DECORATION	12
CONSIDERATION OF CHURCH FLOORS	14
CHURCH WINDOW GUARDS	15
PHOTOGRAPHIC RECORDS OF STAINED GLASS WINDOWS	18
CLEANING OF CHURCH INTERIORS	20
CHURCH PLATE	22
CHURCH NOTICE BOARDS	24
HEATING YOUR CHURCH	25
CHURCH FLOODLIGHTING	27
HEALTH AND SAFETY ISSUES	29
LIGHTNING PROTECTION AND YOUR CHURCH	30
SKILLED LABOUR AND CHURCH REPAIRS	31
PARISH CHECK LIST	32

# **ADVICE ON NEW BUILDING IN AND AROUND EXISTING CHURCHES**

## **1. INTRODUCTION**

We tend to think of our churches as immutable shrines but if we look at a church with the help of an expert we find that it may have been adapted and extended many times to meet new needs. Thus the stones proclaim that Christian Theology has always been biased towards growth and change. In our task of ministry and mission buildings must always be open to change. The evolving needs of Church and community will require new facilities and amenities from time to time.

## **2. DISCERNING THE NEED AND HOW TO MEET IT**

Rather than jump straight to a decision to build an extension the Parish needs to go through the orderly process set out below. The HCC (and Liturgy Commission) should be consulted early on. They will want to hear the answers to the questions in paras 2:1 and 2:2 following.

### 2:1 Analysing the need

At the start of the process the Parish with the help of its architect must answer these questions:

- What are our present needs?
- What future needs should we try to provide for?
- Which of these needs are not met by the building as it is?

### 2:2 Evaluating the existing building(s)

Again, with the help of its architect the Parish must ask itself:

- What features of the present buildings must be preserved at all costs?
- What features of the present building could be altered but reluctantly?
- What features of the present building can be sacrificed if necessary?

The Parish's answers to these questions may be challenged by one or more of the bodies whose consent is needed (see 5:3 following) so these bodies should be consulted before too much money has been spent on design work.

### 2:3 Deciding whether to adapt or extend

On the basis of the above it should be possible to make a well-founded decision on whether to modify the interior or build a new extension.

## **3. MODIFYING AN EXISTING INTERIOR**

Many of our churches have examples of relatively unused space but it takes high architectural imagination to contrive a likable scheme to exploit such space and high political skills to overcome the objections of those in the parish who wish to preserve all the pews for Christmas midnight Mass. The HCC will have regard to two guiding principles:

### 3:1 The new work must be courteous to the old

Architectural courtesy is regrettably a matter of fashion and so for each proposal courtesy is defined by those who have to approve the design, namely the Parish and the bodies whose consent is needed. What can be said is that it is quite wrong to suppose that the new work must look as if it is old.

### 3:2 The new work should be reversible

This means that it must be possible to remove the new work without leaving unacceptable scars on the old. Of course the Parish may seek exceptions to this rule but HCCs are strongly in favour of reversibility in churches with a high listing.

## **4. BUILDING AN EXTENSION**

### 4:1 Types of extension

There are three common types:

1. an enlargement of the existing building
2. free-standing with a covered link
3. free standing without a link

Types 2 and 3 not being bound to the existing work offer more flexibility of design and materials and so may be cheaper. Links (type 2) are common but present architectural problems that are difficult to solve satisfactorily.

### 4:2 Architectural considerations

It is difficult to lay down guidelines for architects except to say that the new work must not insult the old. Rather it must honour the old and should normally be subservient to it. There is no formula for achieving this result and so the only measure of success is the approval of those in the Parish who are interested and of those outside the Parish whose

consent is needed. In short, it is a subjective matter. Nonetheless here are some matters that a HCC will consider when examining a proposed scheme.

Before starting the design the architect should analyse the existing building, in particular:

- the plan shape
- the uses to which the building is put
- its architectural character
- its architectural elements
- the materials
- its monuments, furniture and fittings

The design should:

- have a plan shape appropriate to the new or altered use
- be of appropriate scale and mass
- relate harmoniously to surrounding buildings, site and landscape
- retain the integrity of the existing architecture inside and out
- have materials compatible with, or accentuating, the existing materials
- intervene with the existing as little as possible, and in such a way that the intervention is reversible.

Designing a satisfactory extension to an existing church is a major challenge for any architect and the Parish will do well to seek an architect who can show some relevant previous experience of extensions to churches and other buildings or failing that can talk persuasively about how he would approach the job.

#### 4:3 Maintenance and running costs

In its budgeting the Parish must try to make a realistic allowance for running and maintenance costs. It is fallacious to assume that a new building will need no maintenance for ten years or more. In fact new buildings particularly those that incorporate materials or details that are not well proven often show unexpected maintenance problems early on. An HCC in its scrutiny of architects' drawings tries to uncover such problems but if the Parish have a friend who knows building it is well worth asking him/her also to look over the drawings with maintenance in mind.

## **5. HURDLES TO BE CLEARED**

### 5:1 Graves, Gravestones, Memorials or Monuments

A free standing or linked extension will most probably cover old burials if you have a cemetery. You will have to follow careful procedures to remove them.

### 5:2 Archaeology

If yours is an ancient church any work below existing ground level in the churchyard is potentially significant as would be new openings in mediaeval walls. Well before the HCC application is submitted there must be discussions with the local Archaeology Officer and possibly with the HCC's own Archaeology Consultant. Proposals for dealing with the demands of archaeology will form part of the architect's specification for the job. Any extra costs are normally borne by the Parish as client.

### 5:3 Consents

The following all have to be satisfied before work can start and it can be difficult to get all of them to pull in the same direction.

- the Local Planning Authority for Planning Permission – certainly for new build and for work affecting the exterior of existing buildings and possibly for work to existing interiors
- the Local Building Control Officer for Building Regulations consent – probably, depending on what is proposed
- English Heritage – as a consultee in the Faculty and Planning Process
- HCC for the Faculty.

On the first three the architect will guide the Parish. The Faculty cannot be issued until other hurdles have been cleared. The Parish must prepare to be surprised at the length of time it takes to secure all these consents.

## **YOU AND YOUR ARCHITECT / SURVEYOR**

### **1. INTRODUCTION**

From time to time a Parish may experience problems in its relationship with its Architect. This note is intended to help such situations. It complements but does not supplant the relevant Diocesan guidelines. The paragraphs that follow offer notes on the various stages of the normal Architect/Parish relationship. The word 'Architect' is used in all cases to denote 'Architect/Surveyor'.

### **2. APPOINTING YOUR ARCHITECT FOR QUINQUENNIAL INSPECTIONS (QI)**

The appointment of your Architect must be undertaken with care. It is sensible to proceed as follows:

Seek advice from the Diocesan Office on the names of Architects that are most suitable for your particular church building.

Invite the selected two or three to submit applications and CVs.

Interview them.

An architect would then usually be willing to supervise the repairs arising (see 5 below) and would hope to be instructed for other work (see 6 below). Such matters and of course fees, should be discussed at the initial interview and understandings confirmed in writing when the appointment is made.

### **3. THE QUINQUENNIAL INSPECTION**

It is important that you and your Architect reach an understanding on what each needs to do. For example your Architect will want to be sure that when he arrives to do the QI you will have made proper arrangements for access, keys, ladder etc. Best practice is for your Architect to write to you in good time setting out all his requirements and for a church member to meet him when he arrives and if necessary remain present, or have a builder present, to assist the Architect with ladders and to conform with Health and Safety Regulations which apply to ladder work.

### **4. DECIDING WHAT TO DO WITH THE QI REPORT**

Such reports are as comprehensive as possible and can be dauntingly long and complex. A good practice is for your Architect to meet the Parish and explain the Report, answer questions and help the Parish decide what items need urgent attention. He may perhaps charge a fee for such a visit and if so it is obviously better if this is clarified in writing before his visit.

### **5. REPAIRS ARISING FROM THE QI REPORT**

*It is important to remember that the QI report is not a Specification.* Any prices given for necessary work should only be treated as a guide and not an accurate estimate of the actual cost. If the proposed work requires a Faculty the HCC will not consider the submission without a specification prepared by or to the satisfaction of your Architect. Whoever you appoint you need to make an appointment agreement with him which is quite distinct from the appointment for the QI. Guide lines for such an agreement are given in 7 below.

### **6. WORK NOT ARISING FROM THE QI REPORT**

For works to historic churches, the HCC strongly advises that if the QI architect is not appointed for other works, then the parish should appoint either an architect with appropriate experience of work to historic building, or a surveyor with the conservation accreditation of the Royal Institute of Chartered Surveyors.

### **7. APPOINTING AN ARCHITECT FOR ANYTHING OTHER THAN THE 'QI' ITSELF**

It is vital that the Parish and Architect agree at the outset what each expects of the other. Parishes tend to favour a loose informal arrangement and some manage well this way while others sooner or later get into difficulties. Dioceses favour a more formal arrangement in which the Architect writes to the Parish setting out his terms on such matters as fees and enclosing as part of the agreement the RIBA booklet, Architect's Appointment - Small Works'. This sets out rights and obligations for each stage of a project and includes notes on resolving disputes. There are two other forms of agreement now in use namely: 1) Architect's Appointment for work on historic buildings. 2) SFA/92 -The Standard Form of Architect's Agreement.

### **8. QUESTIONING YOUR ARCHITECT'S PROPOSALS**

On aesthetic matters a Parish should not hesitate to question and disagree with their Architect. On the much more common matters of technical sufficiency such questioning is possible but more hazardous because it is likely to encroach upon the Architect's responsibility. If a Parish believes that certain works can be simplified, deferred or omitted, and they have good technical advice within the Parish then early discussions with the Architect are essential. In the event of the Parish proceeding on the basis of different advice the Architect will almost certainly ask to be relieved of his responsibility for the different specification or working method.

## **9. YOUR ARCHITECT'S RESPONSIBILITY AND LIABILITY**

It is important to remember that on work he has inspected your Architect may be open to legal proceedings in respect of defects which may become apparent years after the work was completed. This is bound to make him cautious and there could be occasions when the Parish considers that he is being too cautious. On such occasions it is open to the Parish to impose modifications and relieve the Architect of some of his responsibility as outlined in para 8 above. Any such modifications, and any agreement to relieve the Architect of some of his responsibility, should be in writing to protect both the Parish and Architect should problems arise in the future.

## **10. CHANGING YOUR ARCHITECT**

There are occasions when a Parish gets at 'cross-purposes' with its Architect and decides to make a change. When changing an Architect appointed under para 7 above you have to be guided by the appointment agreement. Whether such agreement is formal or informal you will probably find that a change of Architect in the middle of a contract will result in extra Architect's fees for abortive work and a claim from the Contractor(s) for extra costs due to delay. Both costs can be substantial.

## **11. ROUTINE MAINTENANCE**

Regular maintenance is your responsibility and it is a good plan to work through a standard check list at least twice a year. This will include such items as gutters, downpipes and drains, replacing slipped or broken tiles, undergrowth against the walls, clutter in vestry and tower. Where it becomes evident that work to the fabric (e.g. pointing) is needed you should talk to your Architect at an early stage. You and he may agree that the work be done without his being formally instructed on the normal fee basis but you should give him the opportunity to influence your proposals. *NB - Repointing of masonry and brickwork is not considered routine maintenance as it may drastically alter the character, appearance and technical performance of historic building fabric. Always secure the advice of your Architect before commissioning such work.*

## **THE SALE/DISPOSAL OF ITEMS FROM CHURCHES**

Paintings, silver, furniture, textiles, and a whole host of other items may well have been given to a church as a memorial to some local worthy, or to a long time worshipper, or in memory of a previous incumbent. However, it is acknowledged that fashions in church furnishings change, as does the liturgy, and sometimes church treasures simply become redundant. In extreme cases the sale price of an item might be seen as the only option to pay for vital repairs. This brief paper tries to give an idea of how to put together an application to the Diocesan Trustees for consideration and what information it they will need in considering giving permission.

- Petitions for the sale of items from churches can often be contentious. It is not often from within the church itself that opposition arises but from outside organisations that have an interest in the faculty process. English Heritage, the local planning authority and the appropriate national amenity society may well have views if the removal of the item in question would affect the character of the building. Consideration should be given to these requirements as they add to the length of time any such permission will take. Where such a removal would affect the character of the building, an HCC Faculty would also be required.
- As much information as possible should accompany the request. Photographs, precise descriptions of the object, a valuation (if appropriate) should all be supplied. It may be helpful to have a site visit by someone delegated by the Trustees.
- If the item was given as a memorial, details of when and by whom should be included. Every effort to find as much information on the provenance of the item will be expected. It is acknowledged that in some instances items were simply given to the church and little or no record made of the donation: in such cases old inventories or photographs of the church can give some idea of how long it has been there. An effort should be made to trace any relatives of those commemorated by the item. Some items even though they are in the church and may have been for years do not actually belong to it. Monuments, for example, belong to the heir-at-law of the person commemorated. Having said that, an HCC faculty would be needed in order for him or her to remove it from the church.
- The parish should make it quite plain why it wishes to sell the item. Is the item redundant? For what purpose would any proceeds be put? If the funds are needed for repair work, what alternatives have been explored and what was the result of these enquiries? Is the sale because the parish fears for the item's safety if it remains in the church, or cannot afford to insure it if it does remain? A detailed risk assessment report should accompany such applications, as should documentation from the church's insurer to give their views on the matter.
- If the proposed sale is because it is too valuable to retain within the church, serious consideration should be given to loaning the item to an appropriate museum. A local museum would enable the item to remain in the community while taking the burden of security away from the church. Evidence that this approach has been looked at should be provided.
- A valuation from a competent authority should be supplied in every case of a petition for sale.
  - a) The items should have become absolutely redundant;
  - b) There is a real emergency, in relation to the fabric of the church;
  - c) Despite every serious attempt, there was no other way in which the church could raise the money needed for the repairs.

## **CHURCH SECURITY**

It is a sad reflection on our society that many churches, among the most beautiful and historic buildings in the country, have to be kept locked because of the fear of theft, arson and vandalism. Yet there is also a great need in our time for places where people can sit quietly, reflect, pray, or simply be still. It is in balancing these two extremes that some simple church security measures will help, enabling the building to continue as a welcoming and open place of prayer while seeking to protect the building and the valuable objects it contains.

What follows will never be more than brief pointers. For further information you may wish to speak to your local crime prevention officer (contact your local police station for details), English Heritage, the local fire prevention officer (contact your local fire brigade for details) or the HCC.

- Decide if you want to keep your church open during daylight hours. Statistics show that a locked church is far more likely to be damaged than an unlocked one -by its nature you have to break in to see if there is anything worth stealing! If you do keep it open, it may be helpful to have a rota of people on duty to keep an eye on the building. They can act not only as guards but also as the human face of the Church. Many lay people will be happy to play their part in this, even those who are not regular mass-goers!
- Look at access and entry to the building. Ideally, there should be only one door open and any others should be securely locked. Is there a church gate? Is it usually open or closed? If it is wide enough for a hearse to drive through it is probably big enough for a thief's van to get through too.
- Discuss with those who live closest to the church if they would keep a special eye open for mischief in or around the church. It is surprising how much neighbours notice, simply because it is out of the ordinary. Ask the congregation to pop into the church when they go past to the shop, the post office or when walking their dog.
- A clean, tidy, loved church is far less likely to be vandalised than one that looks uncared for.
- Make sure you know what you have got! You really should feel obliged to maintain an inventory; supplement this with good photographs and descriptions and it will be an invaluable asset. Should the unthinkable happen, giving the police, insurers, and you accurate details of what was taken. Include as many items as possible; silver is obvious but look also at paintings, frontals, carpets, carved doors and fittings, memorials, stained glass, interesting woodwork. Never underestimate a thief: if it can be stolen there is a good chance that somewhere in the country it already has been. Keep two copies, one in the church and one with the Diocese, just in case.
- Keep walls and boundary hedges in good order; hedges of hawthorn, hedging rose or holly have obvious disadvantages for those who try to get through them. Lighting may be a good deterrent to thieves and vandals; passive infra red (FIR) devices switch lights on when someone walks past the sensor.
- Stained glass is an obvious target to vandals. It is surprising how many churches have piles of stones or rocks readily available for throwing at them! If there is a persistent problem with vandalism, look at the possibility of installing wire guards to protect the glass. The cost of these may seem large but if vandalism is ongoing it will prove its worth in the long-term.
- Locks and keys are the frontline of defence against thieves. Limit the number of keys available ( does every flower arranger need one?) and keep a note of who has them. Don't keep them on hooks in the church that are clearly labelled as to which lock they fit. Do not keep keys in 'safe places' -they are not safe! There should be a 'safe area' in each church that can remain locked and secure even when the church itself is open. A sacristy can usually be upgraded to provide such a space.
- Anything that can be stolen will be up for grabs. The silver may be locked in the safe but what about the little table used for a credence? Underneath its lacy covering it could well be antique, easy to pick up and put in the boot of a car. You may consider securing it by a chain and bolt into the floor.
- The safe can sometimes be anything but safe. Some may look very sturdy, especially the older solid ones, but can be opened relatively easily, some can be cut open with a tin opener. Discuss the matter with your insurer or the crime prevention officer.

- Lock away matches, candles and other ignition sources. Try not to allow piles of combustible material to accumulate. Fuels of any sort should be locked away or made secure. Appropriate fire extinguishers should be available and must be regularly maintained.
- It is amazing how many churches do not bother to report thefts or vandalism or arson. All too often we assume that little or nothing can be done. By undertaking some of the precautions outlined above there is a much greater chance that you will get your stolen items back. It may even prevent another church from falling victim to the same thieves.

## A CHECKLIST FOR BUYING A SOUND SYSTEM

HCCs often consider applications for the installation or updating of sound systems in listed churches. The aim of these brief notes is to provide parishes with simple guidelines and 'food for thought'.

- First define the problem as clearly as possible.
  - a) If the church has managed for years, what has changed now? Is it changes in liturgy, or changes in expectation of a congregation used to the intimacy of television?
  - b) Is the problem experienced by all listeners, or confined to some complainants?
  - c) Is the problem in all parts of the building, or in an area such as side aisles?
  - d) What are we prevented from doing?
- This would give some indication of whether the problem is a real one, and of a possible solution: altering speaking positions, investing in a small platform for the ambo or a course of elocution lessons, or the consideration of a sound reinforcement system.
- If a sound reinforcement system seems a sensible solution, think carefully about the liturgy. Once microphone points are installed, they define much of what can and cannot be done with ease; if the possibilities opened up by a sound system are only recognised once the system is installed, it may be too late to utilise its potential. The whole range of use needs to be listed, but some equipment (particularly microphone points) will serve several occasional uses; weddings, funerals, nativity plays, carol services and Holy Week meditations can all need different arrangements from regular Sunday Masses. A microphone at the sanctuary step for weddings could operate on a lead to the socket by the Presidential Chair if the two are not needed simultaneously.
- Itemise the requirements. This is not a 'specification' as such, and requirements can be discussed when the church is visited for estimation, but the fullest possible details of the requirements (rather than the equipment to do the job) help to produce comparable quotes. Within limits, separate costings can be requested for various options, such as an induction loop or a feed to a cry chapel.

A check-list for a typical church might look something like this:

*Our sound reinforcement system should:*

Provide speech intelligibility to  
Nave  
Sanctuary  
and depending on cost, feed to choir loft etc.

from speakers at:  
Altar  
Ambo  
centre Sanctuary for weddings  
radio microphone

Levels to be controllable from 'desk' in church (?)

Equipment securable when not in use (can installer provide cabinet, and at what cost?).

Estimate for induction loop.

Equipment to play music; socket available for connection of cassette recorder.

- The choice of firms for obtaining estimates is largely a matter of circumstances. The best recommendation is a satisfactory installation in another church; the Diocese can certainly provide names of those who have done good work in the past or the deanery grapevine can make suggestions. Estimates could be obtained from the area specialist of one of the national firms, from a more local firm, and from one other -perhaps one advertising in the religious press as experienced in church installations.
- Conversation with the representative of the firm who draws up the estimate can reveal much of the firm's experience of and sympathy with work in churches. Make sure that the firm has a good after sales service plan. How long is the equipment guaranteed for? Will there be a call out charge, if so how much? How far will an

engineer/contractor have to travel? Would they be willing/able to visit at a weekend (especially Saturday afternoon/evening!).

- Some firms are willing to demonstrate the equipment which is offered, if the estimate is of interest, and this is often a deciding factor; it can be expected that the fully installed and optimised system will operate somewhat better than a temporary demonstration rig.
- The final choice of estimate not only depends on the price and any demonstration, and the appearance of the loudspeakers and microphones offered, but also on the details of facilities offered and frequently on what 'feels' right. This is not necessarily as irrational as it seems; in practice an unsuitable system is usually obvious, and any suitable system is a reasonable choice. The only difficulty -but a common one -arises when too little thought has been given to setting out the requirements, and the estimates are not comparable.
- Any sound enhancement system has to be functional but equally consideration should be given to the aesthetic impact on the church building. The most suitable speaker might be obtrusive and spoil the sight line. Speaker cases come in different materials and can be painted to match walls, stonework etc. This aspect is of great importance to the HCC. A sound system will inevitably have an effect on the appearance of the church but careful consideration can keep this to a minimum and prevent any unnecessary invasion on the beauty of the church.
- The location of any controls requires some thought. Some firms claim that 'fiddling about', during a service is unnecessary. Experience tends to prove otherwise. The person responsible for any alterations should be in a position to hear what is happening. Placing the control box in the sacristy may be more secure but impractical if two people are needed to signal "louder" or "softer"! The degree of security required will obviously depend on the individual area but electronic equipment is attractive to thieves
- The trials and tribulations of having a sound system installed are no different from those of having any major work done. Once installed, it then has to be introduced into use. Obviously, sacristans, servers or whoever prepares the church must know how to connect microphones and then switch on the amplifier (connecting microphones *after* switching on is likely to cause nasty noises), and speakers and an operator must know how to use microphones and control the volume level. The reaction of the congregation is usually as varied and vociferous as for any innovation, and as short lived. This is the point at which doubts arise, but a few more weeks prove that it really has all been worthwhile.
- Obviously the cost of any installation depends on the complexity of the system. Induction loops are usually zero rated for VAT under group 14 of the zero rated schedule. The introduction of a new sound system into a listed building may be zero rated. Referral to the Diocesan Surveyor is advisable
- Papers for consideration by the HCC should include the following:
  - a) A short statement stating what the problems are and how they are to be addressed. Basically, why the parish needs a sound system.
  - b) A detailed specification by the installer.
  - c) Photographs/copies of brochures of speakers, amplifier (and cabinet if applicable) and fixed microphones and stands.
  - d) A simple floor plan of the church showing locations of speakers, fixed microphones, loop and wiring run. Some idea of dimensions would help.
  - e) Photographs of the interior of the church. These should show proposed locations of speakers, amplifier, fixed microphones etc. Also give an idea of the size (i.e. height) of the building.
  - f) A current test certificate for the electrical installation in the church: there is an obvious danger of connecting a new sound amplification system into a defective power circuit.

## MATERIALS FOR CHURCH DECORATION

The redecoration of a church interior is not the easy or straightforward matter that at first sight it may appear to be. Churches vary greatly in their age, condition and physical atmosphere and each case therefore must be judged on its merits. What may be appropriate for a solidly built 19th or 20th century building might be disastrous if applied to a church of the 11<sup>th</sup> or 12<sup>th</sup> century.

Traditionally in older Churches, natural limewash has been used for decoration; this material has a number of significant benefits and it should always be the first choice, only being discarded in favour of other materials if there are sound and valid reasons for doing so.

During the last thirty years there has been a tendency to overpaint old limewash with other modern water-based paints (generally known as emulsions) in the belief that these are easier to apply, more readily available, and more durable. There are undoubtedly places where emulsion paint has been shown to be satisfactory, but there is plenty of evidence to suggest that in the majority of cases its use is a mistake. The merit of limewash is that, unlike most other paints, it is porous, and allows moisture and water vapour to pass through it and the wall to "breathe". Most church walls are solid ~ unlike those of a private house, contain within them considerable quantities of moisture. If an impervious paint is used this moisture will be trapped, and eventually it will force the paint off the wall and quite likely the plaster with it as well. Problems associated with mildew and algae may also arise. Limewash is a natural product, and readily available: whilst well proven, it is likely to perform differently in various locations. Nevertheless, when carefully specified, and with good workmanship, it will give a good appearance in sympathy with the traditional qualities of an older building and will offer a durable surface. With age it mellows and if anything, improves in appearance.

Modern paints, on the other hand, have generally been manufactured to suit modern buildings. They will tend to offer a smooth and regular appearance; many appear to take on a sheen as they age, and this often is at odds with the architecture of the building.

Generally, the walls of mediaeval churches always look best when decorated with limewash; there are many 19th and 20th century churches (including those in the Gothic style) where a relatively smooth finish can look appropriate. Unless there are strong environmental grounds for using an alternative, the HCC strongly prefers to see churches re-decorated using a traditional limewash. Limewash can, of course, be tinted.

All decoration schemes should take into account the age, condition and porosity of the surfaces to be decorated. It is also necessary to carefully consider the levels of humidity and ventilation within the building. Even small changes, such as the use of a low permeability paint, can upset the often very delicate environmental balance of the building and thereby set up new problems. The existence of wallpaintings or stencilling should always be taken into consideration in older buildings.

Previous decorations in other materials should not necessarily be used as a reason to reject limewash. There are various well-tried methods for removing modern paints: where these have been applied over lime plaster they are best removed before redecoration. *Extra coats of paint applied over existing layers can add enough weight to cause the combined layers to peel away from the backing.*

It is possible to scarify the surface with a carborundum block to remove emulsion paint, but this only works when it is already somewhat loose. A steam-kettle is more effective, but rather slow, and involves a degree of scraping: this might be damaging if, for example, there is any possibility of wallpainting or stencilling remaining beneath the emulsion.

It is however possible to remove emulsion paint entirely from virtually any surface by using a chemical formulated for this purpose. This is expensive and, since it is toxic, needs to be handled with care; but it is not difficult to use, and is extremely effective. Langlow's Peel Away can be obtained from some builders' merchants and from Potmolen Paints, 27 Woodcock Industrial Estate, Warminster, Wiltshire, BA12 9DX (01985213960).

Where it is not practicable to remove the old emulsion, there are paints that will bond to the old emulsion and also receive limewash: Classidur Classic is a Swiss product imported by Wandset Limited, 24 Fore Street, Bishopsteignton, Devon PQ14 9QP [01626 770570] and is now fairly widely available through builders merchants. A single coat of this is generally sufficient, and then the whole wall can be limewashed in the normal way.

In theory, limewash will adhere to almost any sound surface, and it is not always necessary to remove emulsion before applying it, provided the emulsion is roughened to give an adequate key. There are instances known to where a *partial* removal of emulsion paint and the subsequent painting with limewash has been successful; nevertheless, generally it is

preferable to remove the old materials in their entirety. If the substrate is lime plaster and there is any likelihood of damp penetration, emulsion is in any case likely to fail and is best removed.

Because of the greatly differing conditions experienced in churches, and even within different parts of the same building, it is advisable to undertake some small-scale tests by way of trial patches, both to assess the visual effect and the efficacy of different treatments over a period of time, ideally including both damp and dry seasons.

## **CONSIDERATION OF CHURCH FLOORS**

In recent years a large number of parishes have sought approval to make alterations to the interior of their church and these often involve changes to the floors. The desire to re-cover a floor completely may arise following a reordering when a patchwork appearance is left; sometimes it is a wish to play down the east-west feeling that existed when pews were arranged on either side of a long aisle. That there was a previous layout need not be a disadvantage and two or more floor surfaces can be acceptable. Sometimes an original aisle (perhaps Victorian paved) can be visually divided along its length with an alternative material to reduce this effect.

Stone, clay brick and tile floors have stood the test of time and provide a suitable floor. Such floors can easily accommodate changes in layout without the need to change the floor itself. They allow for extension and alterations without visual disruption as their natural colours and textures blend old and new together. Wood in the right setting can prove durable with low maintenance costs, but care must be taken to ensure that sub-floors are suitable for wood finishes and there is a suitable damp-proof membrane in place. The possibility of repairing and re-surfacing existing wooden floors by grinding and re-waxing should not be overlooked.

There is an increasing fashion for carpet to be used as a floor covering in churches, and although there are instances where carpet is appropriate, its indiscriminate use is likely to have a number of disadvantages:

1. Man-made fibre carpets are widely advertised but they tend to crust and flatten in use, as well as 'wearing dirty' and despite advances in technology they hold surface dust through static attraction. Only a high quality natural wool carpet on underfelt is likely to be suitable and this is expensive.
2. Many carpets show 'tread marks' due to the construction of the pile and this gives an uncared for appearance. Patterned carpets mask this effect but some patterns are more appropriate to offices or public houses than churches.
3. Natural carpets should only be laid on completely dry floors and all carpets should be protected from the risks of condensation. Fixing man made carpet with adhesive prevents easy removal.
4. Every carpet must be laid on level smooth sub-floors as otherwise irregularities will show through and the carpet will wear.
5. Patterns of traffic (e.g. around doorways and in aisles) will wear carpets unevenly and give the church a worn appearance even though the majority of the flooring is still good. Even carpet tiles that can be replaced in most used areas will present problems of colour matching.

As a result, an apparently cheaper and easier decision to use carpet may in the long term prove expensive and leave future custodians of the church with as great (or even greater) problem than is currently faced. Soft floor coverings will also result in a noticeable alteration in the acoustic response in the majority of churches. Combined with the changed visual impact of carpeting the introduction of 'cosiness' may not always help the life of the congregation. Nevertheless, carpet is a useful material that has its place in church furnishings. Carefully used in a restrained manner, it can assist in highlighting a particular area, for example, a place set aside for a repository or welcome/coffee area. There are instances where an altar is set on a carpeted platform to assist in defining the visual focus. All such schemes need consideration in the whole context of the building's design.

Beside carpets, there are various materials available for flooring:

- Vinyl tiles: These and similar 'plastic tiles' are unlikely to be satisfactory as they are affected by damp and look domestic in character and are usually manufactured in inappropriate colours. The maintenance of a good surface can be difficult.
- Cork tiles: Occasionally these can be appropriate, but the sub-floor must be damp proof and the tiles must be covered with a factory bonded clear vinyl film, but this tends to discolour and any damp, even from washing, will cloud the vinyl. It can have a reasonably good life span.
- Artificial stone: This material can be considered as a less expensive alternative to natural stone, but care must be taken in choice as many examples are aimed at the garden patio and the over-texturing of the surface and variations in slab sizes would be inappropriate. If artificial stone has to be proposed it should be restrained in style and colour.
- Marble: A very satisfactory and hard wearing material, usually very low maintenance, but will involve a high initial capital outlay.

The Diocesan Surveyor / HCC is always pleased to give informal advice on flooring. A visit may help to establish the most appropriate material. Good samples of carpet, stone or tile assist members in giving an opinion on the quality.

## **CHURCH WINDOW GUARDS**

This brief paper, dealing with the most common types of church window guards to help in the fight against vandalism, is based on experience gained over a number of years. It also draws on other papers, written or presented at conferences and discussions of associated problems with architects, structural engineers, stone masons, stained glass studios and with Parishes.

It should be noted that the guards discussed are for the protection of glass from casual vandalism and not for deterring unauthorised entry. It is a mistake to assume that window guards will prevent burglary.

The initial thought on installing some form of guard comes from the desire to protect windows in the best way possible. It is important that any system used should show the greatest regard to the architecture and must do as little harm as possible to the fabric, both in the long and short term. A good test of the latter is to look hypothetically forward to happier times when guards could be taken down again. At that future time there should be little trace of there ever having been guards in place. In other words, the process should be reversible.

It should always be established at each church whether it would be feasible not to have any guards at all. All guards compromise the architecture to a greater or lesser extent; the only real solution to the problem of vandalism is to attempt to re-educate those responsible; to involve them in the life of the church and so on. There is evidence to support the theory that attempts at providing security actually encourage acts of destruction. For example, if some, but not all windows are guarded, the attacker's attention is drawn to those unguarded.

### **Types of guard:**

There are a number of types of guard commonly used to protect church windows.

#### ***Galvanised ferrous metal wire guards.***

While in many ways wire guards provide a useful solution to the problem, the following points should be taken into account:

- They call to mind an industrial building, or maybe a jeweller's shop, and can seem inappropriate to a place of worship;
- The feeling that they are out of context is exaggerated if a silver/grey finish is used, but greatly reduced if they are finished in black.
- Unless regularly maintained, they will rust and this can cause serious staining to stonework. The damage can be irreversible, short of major stonework repairs. Cases are known where rust has penetrated one-and-a-quarter inches (32mm) into the stonework.
- They can be visible from the inside, looking out: in the case of leaded lights, the building becomes a 'cage'; and in the case of stained glass, the lightly painted windows can be compromised by a grid of unwanted lines.
- If fitted over whole multi-light windows, including mullions, tracery etc, the appearance is dreadful: they should always be fitted to each light separately.
- They reduce the transmitted light.
- They do not give protection against someone armed either with an airgun or with a hammer in one hand and a spike (e.g. screw driver) in the other.

#### ***Non-ferrous wire guards:***

The additional points to make about guards in non-ferrous wire are as follows:

- All the points listed above apply equally to copper guards. The only difference is that the staining will be green rather than red.
- The cost of guards in copper or stainless steel is higher than those in galvanised steel.
- Stainless-steel wire guards secured with stainless fittings eliminates the problem.
- Because the raw material is more expensive than galvanised wire, manufacturers will sometimes skim on the specification and produce a guard lacking in rigidity.

#### ***Powder-coated wire guards:***

The technique known as powder coating gives good protection to ferrous-wire guards and offers a longer life span than the galvanising process. There is a real architectural advantage to the black finish of powder-coated guards. The outer surface of stained glass naturally has an overall black finish and so the guards to some extent 'disappear'.

The top of the range wire guard is one made of stainless steel *and* powder-coated in black.

### ***Polycarbonate guards:***

When shields of polycarbonate were introduced, a number of grave mistakes were made both in the design of the guards and the fittings. Amongst these were:

- It was being fitted in large sheets covering stonework as well as glass, which was aesthetically and technically unacceptable. Sometimes sheets of only 4mm thickness were used.
- Due consideration of the large coefficient of expansion (0.5%) was not given, so that buckling and damage occurred. Although polycarbonate is virtually indestructible by the action of external forces, it can break itself up, if restrained, by the internal forces of expansion.
- The buckling led to dreadful distorted reflections of light.
- The fittings used were of poor quality materials, such as aluminium.
- The sheets were sealed into the wall or into frames, thereby producing unventilated cavities. Often the frames were of poor quality materials. (Possibly the function of protection against damage was confused with that of double-glazing). Sometimes the polycarbonate was introduced as a misguided alternative to restoring a leaking window.
- The large sheets fitted by contractors with all their equipment and manpower were difficult to remove for access.

The design of polycarbonate guards can be greatly improved technically and visually, if the following standards apply:

- The guards are made of 6mm thick polycarbonate sheet.
- The guards are cut to exactly the same shape as the 'sight size' of the glazing; all stonework is exposed and the area of reflection is reduced to a minimum and confined to areas where, visually, glass is expected anyway.
- They are fixed on brackets of unpolished stainless steel with fittings of stainless steel and nylon. The fittings allow for the expansion of the polycarbonate. No frames are to be used.
- The guards are made in small panels that can be removed for access if needed and which allow for a free flow of air round, thereby not encouraging the problems of condensation or the growth of organic matter. Each panel of polycarbonate might be, say, only 36 inches by 18 inches and, conceptually, these small units relate well to other 'building bricks'. Thus, the modern material is less at odds with the architecture of the building. This method also allows for expansion with temperature. The spacing between adjacent panels should be 10mm.

There remain drawbacks as follows:

- The reflection of light gives the building an unpleasant 'blind' look. This is somewhat more acceptable if the plane of the sheet material is preserved and the reflections undistorted. The problem is not so apparent at the more sheltered windows of the church.
- The polycarbonate can be deliberately scratched or disfigured with graffiti.
- Unlike wire guards, the long-term properties of polycarbonate are not known. Possibly they will last for twenty years. An investment in these might well not be as sound as an investment in stainless steel wire guards that (if well maintained) are likely to put in at least a hundred years' service.
- They are visually much less attractive than stainless steel wire guards, and can seriously impact upon the architecture of the church.

### ***The option of not guarding:***

The deliberate option of leaving windows unguarded is a sensitive matter and each case must be taken on its merits. At the two extremes, leaded lights could well be left unguarded, whereas particularly rare or beautiful stained glass should be guarded. Again, guarding is more appropriate in some localities than in others.

For this approach to be effective, it must be accompanied by an untiring but rewarding campaign aimed at helping the offenders who might have broken the windows in the past. In our experience, a young age group causes most damage: this area of activity, touching as it does on sociology and pastoral matters, is beyond the scope of this paper. It could well form the subject of research.

### ***Supporting measures:***

Whether or not guards are fitted, the following supporting measures are paramount:

- The church should have in safe keeping a thorough photographic record of the stained glass, preferably in the form of colour slides, both overall views and details. This procedure is being increasingly recommended by the insurance companies and might one-day become mandatory. There is now a plan to set up a national archive of all such photographs. It is both more feasible and less costly to repair a stained glass window if good photographs exist. The churchwardens and cleaning volunteers should be made aware of the importance,

follow a breakage, of collecting and saving every fragment of broken glass and lead, both inside and outside. This needs to be 'written into the constitution' so that the principle is not lost as personalities change.

- The church should review its insurance cover.

***Conclusions:***

No design or guard is perfect. The only completely acceptable state of affairs would be to have unguarded windows in the context of a society whose members were not reduced to causing damage.

Our order of preference is:

1. No guards at all
2. Stainless steel wire guards (preferably black finished)
3. Black powder coated steel wire guards
4. Correctly designed polycarbonate guards.

## **PHOTOGRAPHIC RECORDS OF STAINED GLASS WINDOWS**

For centuries stained glass has been one of the many ways in which stories from the Bible and the lives of the saints have been conveyed to the faithful. A complete photographic record of the stained glass windows in your church is a valuable asset. It can greatly assist the appreciation of these works of religious art, especially if coupled with a list of the artists, studios and dates and some background information. All of this will be of interest not only to the members of your church but also to visitors, possibly through a guidebook. Good quality slides can be used for education purposes and to form the basis of postcards or Christmas cards.

Another important use to which a photographic record can be put is to assist with the repair of damaged windows. By the very nature of the material from which it is made, a stained glass window is particularly vulnerable. Whilst having a vital architectural function it is also a valuable and unique work of art. Experience has shown that faithful repairs to windows following damage can be carried out more effectively if photographs of the window exist.

Many Dioceses are now strongly recommending that it is in the interest of all concerned for you to make a photographic record of these important items of ecclesiastical art (and indeed of all items of value in your church), of which you are the custodian on behalf of the Trustees.

You may wish to undertake the photography yourselves or you may prefer to employ a professional photographer or stained glass studio. There follows notes that will help, whichever path you prefer to undertake. The first part is for the 'do-it-yourself' approach and the second contains more advanced advice for the enthusiast or professional photographer.

### ***Stained glass photography -elementary advice***

- Plan of church -Make a simple plan of the church including the windows and number the sanctuary east window as W1 then proceed with W2, W3 etc. in a clockwise direction through south, west and north.
- Film -Transparencies (slides) are preferable to negatives and prints and will turn out to be more useful in whatever use you put them to.
- Processing- For slide film, send to the manufacturer's processing laboratory in a prepaid envelope. For prints, use a laboratory that is prepared to adjust the automatic exposure of their machine to give better prints for this application. The main requirement is that the highlights (e.g. the faces) should not 'burn out'. Postal laboratories will not in general do this but many high street laboratories will (e.g. Bonusprint and Boots).
- Labelling -Label each slide, or each print, with the name of the church and the window number.
- Numbers of copies and storage -Make at least two complete sets, stored at different locations. The best and cheapest way to obtain two copies of a colour slide is to press the shutter twice, rather than to have duplicates made. Store prints or slides in a dry, cool, dark place for longest life.
- Framing - For large windows, do not attempt to show the whole window in one frame.
- Lighting -Turn all church lights off. Do not use a flash or photographic lighting.
- Focus - The most common problem seen in photographs of stained glass is poor focus, possibly due to having to deal with transmitted light in a relatively dark environment. Careful use of automatic focus is of great help here.
- Weather - Choose a day, or time of day, when there is not direct sunlight. The ideal conditions are bright but overcast.

### ***Stained glass photography -advanced advice***

The elementary advice should be read first. The following provides *additional* information.

- Film -Transparencies make for the best record of stained glass. If any prints are needed for a particular purpose, these can now be made very effectively direct from the transparency.
- Using a slow (low ASA transparency film. Agfachrome 50RSX is ideal having accurate colour and widest dynamic range. Some photographers prefer Kodachrome 25.
- Storage and processing of films - for best results, keep new films in the fridge and allow them to warm up for two hours before use. Having carried out the photographs, send the slide film the same day, by Special Delivery, to a professional colour laboratory.
- Tripod -use a tripod -the taller the better -and a cable release.
- Lens -use long-focus rather than wide-angle lenses to reduce perspective distortion. A good quality 100- 300 zoom is ideal for most purposes.
- Framing -take both overall shots and details. In many ways, details are more useful.

- Aperture, shutter speed and metering –if first-rate results are wanted, the choice of exposure is crucial. This is a complex matter and cannot be dealt with in any detail in this brief advice note. The best results are obtained by using a specially calibrated hand-held spotmeter in conjunction with the Ansel Adams Zone System.
- If the meter within the camera is to be used, the exposure that it proposes is seldom of use. As a guide, for darker windows give a shorter exposure than the camera meter suggests and for brighter windows give a longer exposure than it suggests. Use bracketing if unsure (i.e. several alternative exposures).

## **CLEANING OF CHURCH INTERIORS**

Cleaning the interior of an historic church is a matter to be approached with care and caution if serious damage to the historic fabric is to be avoided. Excellent advice on cleaning can be found in the National Trust Manual of Housekeeping (NT. 1984). This brief note cannot hope to give details of cleaning every item. However, some of the most common questions are answered.

### ***General information***

**DO NOT** attempt to clean objets d'art, wall plaques, alabaster monuments, ancient stained glass, memorial brasses, or other delicate items with anything other than a soft brush.

**DO NOT** attempt to clean paintings, wallpaintings, gilding or textiles other than with a vacuum cleaner at its lowest power setting. The nozzle should be covered with gauze and should not be allowed to touch the surface being cleaned. **DO NOT** clean any of these objects if their surfaces are flaking or have loose threads, etc.

**DO NOT** allow cleaning materials to spread to adjoining materials or surfaces.

**USE** different brushes for different materials. Write the purpose of the brush clearly and boldly on its handle.

**DO NOT** use water or damp cloths to clean marble and stone surfaces. The acidity in the water will damage the surface of the stone and may lead to the formation of salts on it.

### ***Glass***

**NEVER**-wash stained glass. The paint may be loose and can easily be dislodged. Plain glass should be washed with clean water to which a few drops of methylated spirits have been added. Use a soft clean cloth. Dry and then polish with chamois leather. **DO NOT** use proprietary window cleaners as they leave powder traces along edges and corners.

### ***Timber***

Painted timber can be washed with a mixture of water and detergent (see below for advice on detergent use).

Unpolished timber should be dusted with a soft dry duster or vacuumed at low power. Crevices and carved work should be brushed out at the same time with a hogs hair or paperhanger's bush, depending on the scale of the carving, using brush in one hand and vacuum in the other. Damage to carved work can be avoided by wrapping a piece of foam rubber around the head of the crevice tool of the vacuum cleaner.

Polished wood should be dusted as described above occasionally buffing up the surface with a duster or chamois leather. Only apply polish once or twice a year very sparingly and evenly using a wax polish of the same or slightly lighter colour than the wood being polished. **NEVER** use polishes containing silicone or furniture cream or aerosol spray polish. **NEVER** polish near pieces of wood that are cracked or lifting as this could result in further damage and will make future repair more difficult.

### ***Metal***

**NEVER**-try to clean bronze statues or statuettes. **NEVER** wash bronze. Dust lightly once or twice a year and carefully remove dust trapped in tooling and crevices with a soft bristle brush.

Rub brass and copper with Goddards Long Term Silver Cloth; if it is highly tarnished then use Goddards Glow. Keep separate cloths for each type of metal being cleaned. **DO NOT** use these polishes on brass fittings on doors, furniture etc. In these cases use the same cleaner as is being used for the furniture.

Aluminium should be cleaned with warm soapy water applied with a cloth or leather and dried and polished with a soft dry cloth.

### ***Paintwork***

Before cleaning paintwork it is wise to test a small area to ensure that the paint surface is not removed by the cleaning method. **NEVER** use proprietary cleaners or abrasive powders on any paint surface.

**DO NOT** wash limewash but brush with a soft broom or brush.

Wash other paintwork with water to which a small amount of detergent has been added.

### ***Bricks and tiles***

Loose dirt and dust can be removed from fair-face brickwork with a dry bristle brush. **DO NOT** try and remove ingrained dirt with water as it will simply spread the problem.

Glazed bricks and tiles can be washed with a mop and water to which a small amount of detergent has been added. Wash off with clean water and polish with a soft cloth.

### ***Floors***

The best way of reducing damage to floors is to provide a good length of doormat inside the entrance door

Unpolished wood, stone, marble, terrazzo and tile floors should be mopped very occasionally with a damp mop rinsed in clear water and dried off with a dry mop. If soaked or left wet too long the surface of stone and marble floors may be damaged by harmful salts. Rough stone floors can be cleaned with a stiff brush after sprinkling the floor with damp sawdust to keep down the dust.

Polished wood floors should be dry polished from time to time. Do not let polisher brushes become impregnated with polish. A woollen cloth impregnated with a 50/50 mixture of paraffin and vinegar can be wrapped round a mop to collect dust and leave the floor shiny. Two or three times a year apply a thin coating of Johnson's Traffic Wax

Linoleum, rubber and vinyl floors should be polished with a water/wax emulsion paste applied with a dry cloth and buffed with a polishing machine. Accumulations of polish can be removed with a detergent in hot water.

Ceramic tiles and mosaic floors should be lightly washed with clean water .

### ***Fabrics and textiles***

**NEVER** attempt to wash or dry clean textiles of any historic interest. **DO NOT** attempt to clean textiles that are fragile, have beads, loose fringes etc.

Vacuum textiles at low power and cover the nozzle with a nylon gauze screen (for example, a pair of tights). Do not press down onto the textile with the vacuum head.

Carpets and rugs should be vacuumed frequently to prevent damage from dust and dirt.

Take care when dusting furniture that the duster does not come into contact with any textiles upholstery. Upholstery can be gently patted with a plastic fly swat before vacuuming to loosen dirt.

Clean leather with a small amount of saddle soap and a soft cloth. Test an area hidden from view before cleaning generally.

### ***Detergents***

In the past, the National Trust recommended a neutral detergent. Unfortunately the recommended product is no longer available. The best option is to use Boots Sensitive Skin washing up liquid using no more than 1 drop per pint of water.

### ***And finally...***

This information can only be a general guide. If there is any doubt that a particular product or method of cleaning is suitable, discuss the matter with the HCC Secretary. The cost of a brief telephone call may be much cheaper than a hefty bill to put damage right.

## CHURCH PLATE

In money terms, the church silver is often the most valuable item owned by the parish church. But current cash values obscure more important truths. The parishioners of a hundred years ago may have had to scrape and save for a decade to buy the church its lovely chalice or monstrance. These are precious vessels indeed.

It is essential that church plate is properly secured, cared for and recorded. Plate should be kept in a locked safe built into a wall or dry floor in a room to which the public do not have access; there are dangers in storing it elsewhere.

As the manner of worship has changed over the centuries, so has the design of church plate. The result is that certain designs of chalices etc., are not regarded by some parishes as suitable for today's requirements and have gone out of use. Nevertheless they are part of the Parish's patrimony and should continue to be cared for and perhaps used on special occasions.

### *Care*

#### Plate use for every Sunday

Church silver in use needs to be treated with the same hygiene as the silver and crockery at home. Articles should be washed in soap and water after each service, very well rinsed in hot water and dried with a clean cloth. Beware of the yellow sponge with the green back found in many kitchens as it scratches silver very badly. To avoid tarnishing and the necessity of regular cleaning, rather than just putting the silver on a shelf in the safe, try and prevent the air from circulating freely around it. For example, ask a member of the congregation to run up a velvet bag with a draw string neck, with the velvet on the inside. This in turn can be put into a simple wooden box that can be placed in the safe. Since the air cannot circulate there should be little tarnishing.

#### Plate used at festivals or on very rare occasions

Most metalwork may be washed safely in washing up liquid and hot water. If the piece is not to be used for some time, after washing in warm soapy water, rinse very thoroughly in running water, as hot as possible, and allow it to dry naturally without using a cloth. Avoid touching the silver with bare hands; wear cotton gloves, or handle it using a clean dry tea cloth. Otherwise, when you next come to use it you may well find a fine set of black fingerprints on the silver. As with the plate used regularly, to avoid tarnishing and the necessity of cleaning, store the silver in bags that exclude the air. Special plastic bags made for this purpose are obtainable. Since the air cannot circulate there should be little tarnishing. If polishing is needed, use Plate Powder or Goddards Foaming polish. Most other polishes contain abrasives. If a piece is badly tarnished Goddard's Long Term polish or a Silver Dip may be used, and in extreme cases, Duraglit silver polish. Thereafter, only occasional polishing with a clean chamois leather will be sufficient. Unless they really are black, do not clean the hallmarks or they will become too worn to be read accurately. They provide important information about the maker, the date and the purity of the silver, and are the best means of identification if the piece is lost or stolen. When cleaning or polishing a piece, wear cotton or rubber gloves, otherwise your fingermarks will be left on the surface as an acidic deposit, as mentioned above. Under no circumstances should old silver be re-gilded.

In general, while it is best to avoid the necessity of cleaning by storing plate in clean, dry conditions, with the air excluded, three things are important.

1. Plate must first be washed and very well rinsed in hot water.
2. Plate is liable to corrode if stored in damp conditions, and must never be stored sealed in plastic bags or Clingfilm unless it is absolutely dry.
3. Most paper, including tissue paper, and especially newspaper, is acidic and should not be used for wrapping silver. Suitable acid-free tissue paper may be obtained from specialist suppliers

Old metalwork is often fragile and should be polished only gently, if at all.

Brass is especially sensitive to damp. Light red tarnishing may be removed by Duraglit metal polish but, should there be green corrosion or pustules, advice should be sought.

### ***Recording and security***

Church plate should be carefully recorded and a copy of the record kept with your inventory. A record must be made of the dimensions of each object (in the case of a chalice the height, diameter of the foot, diameter of the bowl and the depth of the bowl), its hallmarks and other marks, and of any inscriptions. With marks, it is most important to draw accurately the shapes of the punches, i.e. whether the outline is oblong, or a particular shape of shield and so on, or better still take photographs. General descriptions of the shape of an object are often of only limited use, because of the standard design of much church plate. A photograph, even an amateur snapshot, of each piece with a clearly marked ruler to give the scale is essential.

## **CHURCH NOTICE BOARDS**

The church notice board is often the first point of contact that visitors or passers-by will have with a church. The impact it has may be far greater than you think and it is therefore essential that you take advantage of what, in modern times, may be one of the 'prime advertising sites' available to your church.

The notice board is important at the best of times. However, if the church has to be kept locked the board gives the opportunity to provide information on the church and its activities and, thus, the Christian message: it will be doing this twenty-four hours, seven days a week. It is worthwhile, then, spending some time on the serious consideration of the design so that you can ensure that the board will give the message it is intended to impart.

The following notes may be of help when considering this:

- The board and the lettering on it should be sympathetic to its surroundings, particularly in terms of colour and materials but the most important aspect of this is readability. A notice board is not a poster but is there to convey information with clarity and the contrast between the background colour and the lettering upon it is vital.
- Do not forget the effects of exposure to all weathers and to vandals. Careful choice of materials is important. Peeling paint, fading colours and fluttering paper notices always give an impression of neglect.
- Choose lettering for its legibility rather than for its decorative effect or its association with some 'religious' or historical concept. Arrange the lettering with some suggestion of relative importance and do not forget that the board will probably be prominent in its setting and should be of artistic value to the scene.
- Do not be afraid to call upon the skills of professional designers. An original design produced specifically for your church is more likely to have an impact and qualities you desire.
- Do not forget to inform the public where further information can be found and how access to the church can be obtained.
- Remember that a notice can offer welcome as well as information. There is no harm in making the point on the board.
- A cheap job will always look cheap and rarely pays in the long run. Make sure that the board is worthy of your church.

## **MEMORIAL BOARD TO PREVIOUS PARISH PRIESTS**

Many parishes like to have a board recording the names of their previous Parish Priests. Sometimes, and with a little historical research, the list can take us back to the beginning of the particular Catholic Mission.

The following points should be noted:

- It should be placed where it can be seen and read, and where it will be in sympathy with other features in the church.
- Care and research will be necessary to ensure that the historical record it contains is as accurate and complete as possible.

## **HEATING YOUR CHURCH**

Each church building needs to be considered as a special case of its own -there is no blue print answer on the best form of heating.

There is a general opinion that the best form of heating for a church is a traditional 'wet' system of radiators and pipework operated by a modern gas-fired boiler and controlled by modern timing and thermostatic/humidistatic equipment. Oil can be used as an alternative fuel where a gas supply is not available.

Electrical heating may be appropriate in small churches and where the building is seldom used during the course of the week. It is not likely to be appropriate for larger churches or for those where there are several Sunday Masses or there are weekday Masses

### ***How to set about installing a new heating System***

The following checklist may be helpful.

Write down a list of your needs.

- prepare a schedule of church services and meetings or events that are held in your church
- prepare information on numbers of people who use the building and the areas that need heating
- Tell your Diocesan Surveyor of your wishes and requirements and seek his advice.
- Visit other churches that have a similar heating system as that which you think you would like: talk with some of the congregation who are the users!
- Ask your selected heating engineer to design the scheme and cost it. Ensure he works closely with your architect -heating systems have a considerable impact upon a church building, and often have important implications for the fabric of the church building and its contents.

Your HCC will be concerned as to the impact of the sources of heat ,(radiators etc..) on the appearance of the building. This is why a Faculty will be required. Since your Church is a listed building, then it is wise to consult English Heritage at an early stage. Seek advice from your HCC Secretary

- Submit a formal application to the HCCC for approval of your scheme. This should be accompanied by:-
  1. A technical specification of what is proposed, supported where appropriate by heat loss or heat requirement calculations.
  2. A brief description of what exists at present and the reasons for the proposed new works.
  3. A plan drawing of the church suitably marked up by the heating design engineer or architect to show the size and position of pipes, radiators, heaters, etc.
  4. Technical literature illustrating the form of radiators or heaters proposed.
  5. The proposed system of operation and the method of control.

### **Electric heating**

Diocesan Surveyors are often consulted by parishes wishing to install electric heating. Their minds are sometimes turned to the need for electricity, either because of the non-availability of other kinds of fuel. Often, however, they are encouraged by the fact that such heating is comparatively cheap to install, and they are led to believe that it will be economical to run.

While electric heating may be appropriate in small churches and in those that are used comparatively seldom during the course of the week, it is not likely to be so for larger churches or for those where there are many Sunday Masses, or frequent Masses during the week. There is no ideal system of electric heating for churches. It remains the opinion, based on considerable experience gained over many years, that the best form of heating for a church is a traditional wet system, especially with modern fuel and a modern boiler, and especially also if controlled by modern timing and thermostatic equipment.

Electric heating of any kind should be adopted only after all other options have been considered, and as a last resort to meet the particular circumstances of the parish, or particular difficulties in the building itself.

It may help, nonetheless, to give some consideration to the different methods available, with their respective advantages and disadvantages:

### **Off-Peak Storage Heating**

It should be said at once that such heaters have proved unsatisfactory in buildings used only once a week, or intermittently, and in buildings with high heat loss, which churches are likely to be. They are also, because of their bulk and design, likely to be obtrusive and ugly.

### **Under-Pew Heating**

This form of electric heating is likely to be the least undesirable, though it is obviously only suitable in churches where there are pews rather than chairs. Tubular heaters are mounted under the seats where they are out of sight; the congregation is immediately conscious of the source of warmth even though the heater will not warm the whole building. Such heaters should be protected by wire guards. Not all pews are suitable to accommodate tubular heaters.

A similar possibility is offered by the use of Dimplex Skirting Convectors SCH5 which can be provided with connector kits for multiple mounting. These are more expensive than tubular heaters but for their length have a greater output of heat, and do not require a wire guard. There are also panel heaters produced by Servitherm, which can be painted to blend in with the pews; the opinion of the manufacturers that these do not need wire guards is not shared by users, at any rate where there is any likelihood of children coming into contact with the panels.

### **Wall-mounted Convector Heaters**

These are not usually satisfactory in churches, where the wall-space is often obstructed; furthermore to warm the volume of air in a tall building with an open roof is very expensive.

### **Fan-assisted Heating**

Fan heaters are undoubtedly an effective method of space-heating but are likely to be unsightly and noisy in churches. In practice, where they are used they are often turned on for some hours before the service, and turned off when it begins.

### **Infra-red or Radiant Overhead Heaters**

These were frequently installed in churches some forty years ago as a cheap method of heating. They are almost always unsightly, and the effect of heating is not altogether satisfactory, as it warms the head, particularly the top of the head and not the feet. A new problem is that most manufacturers have discontinued their ranges, and spares may no longer be available, leading to demands for replacing the heaters with others even less desirable.

### **Quartz-halogen Heaters**

These have been recently developed and are the only practicable replacement for the older radiant heaters. Parishes should be warned that they are being heavily promoted in the trade, and by electricity boards, and should beware the "hard sell". Quartz-halogen heating is effective in its own way but, unless installed at an angle is likely to prove uncomfortable. The design of the heaters themselves can be very poor, and the effect on the appearance of the church is likely to be detrimental.

## **CHURCH FLOODLIGHTING**

The floodlighting of church building has become increasingly popular during the past few years, probably reaching the height of its popularity during the run-up to the Millennium. The following notes have been taken from the lighting design brief issued by the Church Floodlighting Trust that, during 1999, grant aided lighting schemes for churches in preparation for the Millennium celebrations. They are aimed at those with an understanding of the technicalities behind lighting and floodlighting. While the scheme ceased at the end of 1999 the general guidelines they issued are still useful for parishes contemplating floodlight installation.

### **Introduction**

Whilst this specification refers primarily to the decorative floodlighting of churches, the requirements of other associated elements of external lighting, which may be integrated with the floodlighting are also considered.

### **General objectives**

These are to:

- Enhance the night-time appearance of church buildings and, where appropriate, associated footpaths and/or grounds;
- Minimise any light pollution resulting from the lighting installation;
- Use energy efficient lighting equipment scheme designs to minimise energy consumption.

**General.** The decorative floodlighting shall be designed to reveal the shape and form and surface detail of the church when viewed from the principle direction(s) of view. In those instances where a surface is obscured from the view of observers then that surface shall not be floodlit.

**Illuminance.** Care should be taken not to overlight; this can easily result from overestimating the 'district brightness'. For example, it does not follow that, if a church is located in a city centre, it is an area that has a High District Brightness. It is essential that a night time visit is made to assess the brightness of the immediate surrounding area and background to the church.

**Light Pollution.** Design of installations should avoid or minimise light pollution by careful selection positioning and aiming of the floodlights to minimise light spill

The level of design luminance for any given installation should be appropriate to the Environmental Zone concerned (eg Countryside, Urban Fringe, Town or City) ensuring that the church is not over-lit. A voiding unnecessary light spill should prevent untoward or visual light intrusion into any nearby properties but, if there is any doubt, the actual illuminance into windows and source intensities in potential obtrusive directions should be checked. If such calculations indicate a possible problem, or observations on site after installation give cause for complaint, then the floodlights should be repositioned, re aimed or fitted with suitable light shields, whichever is the most appropriate to overcome the problem.

Other exterior luminaires, eg post-top lanterns, illuminated bollards, security lighting, should comply with the recommended limits.

### **Energy Effectiveness**

Lamps. To ensure reasonable energy effectiveness 95% of the installed lighting circuit watts should comprise lamps of the following types:

- Low or high pressure sodium
- Metal halide
- 25mm diam (T8) tubular fluorescent, on low loss or h.f control gear; compact fluorescent, above 11 W;
- induction

Alternatively the energy effectiveness of the installation will be considered acceptable if the overall efficacy of the lamps used in the installation is 50 lumens per circuit watt.

Overall lamp efficacy =  $\frac{\text{total initial lumens provided by all lamps in installation}}{\text{total circuit watts of all lamps in installation}}$

Luminaires. The light distribution of all luminaires should be such as to ensure a high application efficiency; this will also reduce light pollution by minimising light spill.

### **Other considerations**

Control. This should include a time switch to ensure that the installation does not operate longer than intended.

Security lighting. A component of decorative floodlighting may be the lighting of porches and doorways using small luminaires, such as bulkhead luminaires. If required, this component of the overall installation can be extended to light all doorways and controlled separately to provide security lighting.

Hazards. Lighting equipment should not be installed in such a position or manner that it presents a hazard.

Specifications should include a summary of maintenance requirements for the installation together with operating cost estimates.

## **HEALTH AND SAFETY ISSUES**

Health and safety now has an impact on all organisations and churches are no exception.

We live in an increasingly litigious society, where it is considered that any accident, no matter how caused, must be someone's fault, and compensation should therefore be due. An increasing number of claims are now being made against the church authorities by both members of the public and church workers and volunteers who have suffered an accident in a church or the church's grounds.

In the last decade there has been a considerable amount of health and safety litigation placed upon the statute book and new regulations have built upon the Health and Safety at Work Act 1974. Safety Regulations place a duty on persons who control premises to ensure that they are safe, and that a safe means of access and egress are maintained: any equipment or materials used must be safe and where there are hazards they must be eliminated or controlled to minimise the risk. Suitable risk assessments have to be undertaken.

The Health and Safety Executive (HSE) publish guidance for charity and voluntary workers in their booklet HSG 192. In this publication it is stated:

'The HSE considers it good practice for a volunteer user to provide the same level of health and safety protection as they would in an employer/employee relationship, irrespective of whether there are strict legal duties.

'HSE considers also it to be good practice for a volunteer user to provide the same level of health and safety information, instruction and training as they would in an employer/employee relationship' .

Churches are not exempt from Health and safety legislation.

## **LIGHTNING PROTECTION AND YOUR CHURCH**

It was in the early 1900s that many churches were fitted with 'tower only' systems of protection which have been moderately successful in carrying out the required task of diverting the electrostatic lightning discharge safely to earth. Today such systems might still be able to meet that objective, but current knowledge encapsulated into BSI codes of practice will indicate that they may not meet modern requirements. You should have your lightning protection system checked every two years or so to ensure that the Church is properly protected.

This requires a proper Risk Assessment of the location, the building and its current usage. The general view is that most churches would benefit from a lightning protection system.

The general strategy that is applied to this matter is that:

- As part of a risk assessment Strategy such an installation serves to enhance the protection of the building for future generations to enjoy and should help to reduce claims costs in the long term;
- When designing suitable installations it is essential to apply the principles of minimum intervention and reversibility wherever possible. If conductor systems are not carefully thought about, they can be architecturally intrusive.

### ***Test and Inspection Requirements***

A lightning protection system, which is not in good working order, is a danger because the air terminals can attract a lightning strike without providing for a resistance path to earth through which to safely discharge the lightning current. This can result in serious side flashes, which can cause considerable damage to the structure. Regular visual inspection of the network of tapes should be carried out, particularly after any contract works have been carried out on the roof or tower. Any obvious break in the conductor tapes should be reported immediately.

It is definitely inadvisable to leave the period between tests and inspections for longer than three years. Contrary to expectations such tests are not particularly expensive being around £80 +/- 15% at current prices. The request for inspection and test should insist that the contractor is NFMS (National Federation of Master Steeplejacks and Lightning Conductor Engineers) registered and that the work is carried out to BS6651 and BS7430. The contractor should be instructed that the test certificate and report should be in accordance with appendix 23.2 of the NFMS Code.

### ***Background and reasoning for system installation***

In the eighteenth century Benjamin Franklin fitted a lightning conductor to his house. From then on our knowledge about the behaviour of lightning moved from being a matter of observation to being one of practical interpretation.

Since the fifteenth century many learned men have written about the effects of lightning. Quantification on how to deal with strikes did not really emerge until the late nineteenth or early twentieth centuries. The first British Standard Code of Practice came in 1943 but it was in the 1970s that a major attempt was made to bring together and analyse a wide range of material from many countries. Most of the content of current national and draft international standards is based on that endeavour, although there have been further advances in thinking and technology since then, some of which is still the subject of continuing research.

In the late 1800s and early 1900s, churches were much in the headlines for being struck by lightning. In 1909 a short but lucid book entitled 'Lightning and the Churches' listed some 240 incidents of strike damage to churches between 1899 and 1908! It is therefore not a new phenomenon. It is, however, something that we all hope will not happen to us. But, Churches continue to be struck by lightning and some are completely destroyed by the resultant fire. Clearly the application of good quality lightning protection is something that should not be ignored.

## **SKILLED VOLUNTEER LABOUR AND CHURCH REPAIRS**

With the increasing cost of repairs and growing demands upon the parish purse Parishes often ask for advice about members of local congregations carrying out some or all of church repairs. This note is prepared to clarify and list the implications of work being done by volunteers, what may be done, and the things that must be taken into account before letting anyone carry out church repairs. Standards of repair are clearly crucial to the future of the building: a poorly executed repair could easily lead to expensive repairs in later years. Voluntary labour should only be used if Standards are equal to, or better than those of a contractor experienced in work on historic buildings.

Repairs undertaken using the wrong materials or methods can seriously damage the building and lead to much more costly repairs later on. The proper Specification will outline the standards required and these must be adhered to. For instance, electrical work must be done to Institute of Electrical Engineers' (CIEE) standards, and only by an electrician registered with the National Inspection Council for Electrical Contractors (NICEIC) or the Electrical Contractors Association (CECA).

### ***Doing it yourself***

Many parishes have a whole range of expertise within their membership and it is good that their skills and talents should be used. If people are willing to give their time and care on a voluntary basis it is vital that the following is taken into account:

- Indemnity -when architects, surveyors, lawyers and other professionals give their services it is absolutely essential to make sure that they are fully covered by their professional insurances should something go wrong. This has happened and, if it does, it can be very serious and embarrassing for all concerned.
- Insurance -your normal cover under your church insurance policy almost certainly does not protect people doing repair work. It is vital that you should be properly covered both for those doing the work and for third parties, and for the insurance cover of the building during repair work. Consult your church's insurers.
- Health and Safety at work – the need for safety precautions applies as much to churches as to everyone else. It is important to ensure that those who give their services are given the necessary support and equipment to be able to work without risk to themselves or to others. For example, this may mean proper scaffolding rather than ladders for high level work. If an accident occurs and this care has not been taken you might find yourselves in serious trouble.

## **PARISH CHECK LIST**

### **The well equipped Parish Priest's 'helper' !**

On accepting the Parish Priest's kind invitation to keep an eye on the Parish buildings, the Parishioner should make sure that he or she has a watertight pair of wellies, a strong raincoat, a pair of binoculars, a set of church keys, a notebook and pen and a stout heart. With these, he or she can tackle anything, especially spotting trouble before it starts.

### ***The enemy***

Rising damp, blocked drains and gutters, poor ventilation, faulty wiring, insecure windows and doors, the unserviced boiler, the slipped slate and crumbling stonework all pose a serious threat to our intrepid parishioner and can lead to expensive repairs if not treated quickly. Water is probably the greatest single cause of damage to buildings. Second is poor ventilation, followed by faulty electrical wiring (which is the cause of most fires) and poor security that lets thieves and vandals in.

A regular walk around the building in your care (at least once a month), occasionally in the rain to spot blocked gutters and drains, armed with binoculars to spot the slipped slate or the elder tree growing half way up the tower can do wonders. Notice it, note it and get help to put it right!

### ***A check list***

The following check list may help:

- Drains and gutter -should be cleared at least once a year when leaves are down. Paying someone to do this may cost £ 100 if cannot do it yourself. Failure to keep them clear. will lead to several thousands of pounds in repairs.
- Ventilation -good ventilation is important especially between services, to reduce internal condensation
- Slipped slates and damaged tiles -look out for them especially after a storm and for internal tell-tale damp patches.
- Insecure doors and windows are an invitation to thieves.
- Church grounds care -not just the grass but also broken glass, dead limbs on trees that may need surgery.
- The boiler should be serviced annually and started up occasionally during the summer to make sure that it works when it is needed.
- Churchyard walls and fences -a stitch in time can save large bills.
- Valley gutters may be out of sight and out of mind but they need regular clearing of leaves and snow.
- Fire extinguishers need annual maintenance.
- Graphite locks -dry locks bend keys. Oil can attract dirt and may end m clogging the lock.
- Spring clean -an annual event in both church and churchyard can prevent the accumulation of clutter and debris.
- Clean tower roof and belfry -jackdaws and pigeons love bell towers -check screens for holes
- Beetles and dry rot - watch for tell tale dust (woodworm), dropping (mice), droppings that look like mice droppings (death-watch beetles) and growths on walls and woodwork (which may be dry rot).

**Make sure you have help.**

**Your job is to look for trouble but seek the help of others to help put matters right.**