TRURO DIOCESAN ADVISORY COMMITTEE

THE PROTECTION OF CHURCH WINDOWS

1. ***GENERAL PRINCIPLES***

The main purpose of window guards is to protect the windows against the effects of casual vandalism. Whilst window guards may deter burglars, they will not prevent deliberate criminal entry.

Decisions on the installation of window guards must take into consideration the general context of the historic church fabric and the glass that is to be protected. All guards compromise the architecture of the church, and the window, to a greater or lesser extent. Any system of protection must show the greatest regard for the architecture, and do as little harm as possible to the church fabric both in the long and the short term. A conservation principle is that the process should be 'reversible'.

2. ***WIRE GUARDS***

Wire guards provide a useful solution to the problem of vandalism, and the following points should be taken into account.

(a) If they are not regularly maintained, copper or galvanised metal guards can rust, resulting in serious staining to the stonework. Such staining can be irreversible. Stainless steel wire guards, when secured with stainless steel fittings and screws, generally eliminate the problem of staining.

(b) Wire guards should not be fitted over the mullions and tracery of multi-light windows, but should be fitted into each light and section separately. Appropriate high quality fixings should be used, such as stainless steel, together with washers and spacers.

(c) The grey or silver finish of galvanised guards looks out of context on the exterior of a place of worship. Generally such guards do not have as long a life as stainless steel guards, and they rust far more quickly. Initially, stainless steel guards look very bright, but eventually dull with age, and against some stonework give a pleasing external appearance. The external appearance of both galvanised and stainless steel guards are greatly improved aesthetically if they are black powder-coated. The Council for the Care of Churches and English Heritage state that powdercoated guards (a high temperature manufacturing process, British Specification RAL 9005) are the most appropriate solution to window protection.

(d) All wire guards are visible from the interior of the church. They create the appearance of a 'cage' to plain or tinted windows, and compromise all but the most heavily painted stained glass windows with a grid of unwanted lines. The colours of a window may determine whether plain or powder-coated guards are more appropriate in a given situation.

(e) The initial cost of stainless steel guards is higher than those of galvanised guards and powder-coating increases the cost again, however such cost implications need to be weighed against the longevity of stainless steel over galvanised guards.

(f) As a guide, the thicknesses or gauge of window guards are usually 5mm diameter for the frame, 2 mm diameter for the wire, and a clearance of 10mm between the wires.

3. ***POLYCARBONATE GUARDS***

Polycarbonate guards are sometimes considered, and whilst they have uses on secular, modern buildings, and appear to have a cost-benefit for the PCC, they are not suitable for churches. They can cause practical problems, and compromise the aesthetics of the building. Practical experience in the past has shown that when fitted in large sheets which cover both windows and mullions such guards are difficult to remove for maintenance and access. If the polycarbonate is only 4mm thick there is the risk of buckling and light distortion. Often poor quality fittings of aluminium are used to fit these guards and, together with the unventilated cavities that are produced when such guards are sealed into the walls or frames, they cause problems for both the fabric of the building and the glazing that is being protected.

Some of the problems can be overcome by using 6 mms thick polycarbonate; cutting each guard to the shape of each window component; using unpolished stainless steel brackets with stainless steel fittings; ensuring the absolute need for a free flow of air; and allowing for expansion of the polycarbonate sheet with temperature in the design.

The practical and aesthetic problems can be summarised as:

(a) The reflection of light gives the building an unpleasant external 'blind' look.
(b) With time polycarbonate becomes opaque, thus spoiling the external aesthetic appearance still further. The transmission of light to the interior is seriously diminished and the appearance of stained glass is compromised.

(c) Polycarbonate sheeting can be scratched or disfigured with graffiti, resulting in expensive replacement costs.

(d) Unlike wire guards, the long-term properties of polycarbonate are unknown. It is not as sound an investment as stainless steel guards which have a proven life of at least 100 years.

For these reasons, Truro Diocesan Advisory Committee, together with the majority of other Diocesan Advisory Committees do not approve of their use in historic churches. This view is supported by both the Council for the Care of Churches and English Heritage.

4. ***THE OPTION OF NOT INSTALLING WINDOW GUARDS***

As this is a very sensitive area, each case must be taken on its own merits. The locality of some churches may be safe enough to render guards unnecessary; whilst in many other localities guards are essential. The cost of protecting plain or tinted leaded lights might be more expensive than allowing for the cost of the occasional repair. Advice on the relative artistic and historic merits of the stained glass in a church must be sought if the protection of windows has to be prioritised for cost reasons. Reducing the threat of vandalism involves pastoral and local concerns, which are beyond the scope of this paper.

5. ***FINANCE***

If cost is a concern, please remember that it may be possible to obtain grant-aid for the installation of window guards. This is especially so in the case of historically important windows.

6. ***RECORDING***
Whether guards are fitted or not, it is essential that every church should have a thorough record of its stained glass, preferably in the form of coloured slides or on a computer database using a digital camera with a good zoom lens.

7. ***CONCLUSIONS***
No form of window guard is perfect, and in an ideal world the most acceptable solution would be unguarded windows in churches set in the context of a local community where vandalism was not a problem. If guards are deemed to be necessary, the preferred options of the Truro Diocesan Advisory Committee are in order of preference, either

(a) Stainless steel wire guards, preferably black powder-coated, or

(b) Galvanised wire guards, preferably black powder-coated.

Both of these options are dependent upon any existing guards; "like for like to match existing", is usually preferable.

Only in the most exceptional circumstances will polycarbonate guards be recommended.