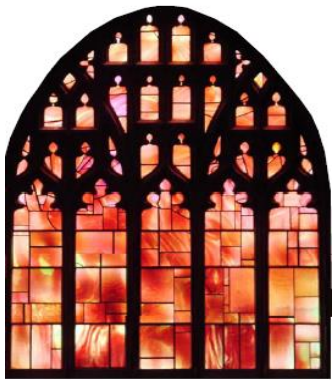
Protecting and Preserving your Church Windows



Church Window Protection

Regrettably, Church buildings are not immune from the vandalism that infects current society. The most vulnerable targets are often the windows: features of both architectural and symbolic significance. Their protection is often an unattractive but equally unavoidable consideration by PCCs. Quite apart from the comment on our society, fitting guards is unattractive because **all** forms of window protection will adversely affect the architectural character of the building.

Consequently it is important that window protection is designed and fitted in such a way that it may be removed at some future date without causing any lasting damage to the historic fabric (brick, stone, glass) of the Church building.

The appropriate advice should be obtained from the Church's Architect.

The need to protect windows

PCCs should be clear that the protection of windows is simply to prevent damage to the glass. It is ineffective in conserving heat, preventing draughts, offering weather protection or preventing break-ins. Vandalism of glass usually takes three forms: the throwing of bricks or stones, the shooting of airgun pellets, or hitting/hammering. Some PCCs may perceive a future risk to valuable and historic glass, requiring them to take pre-emptive action by installing window protection before any vandalism occurs.

Some Misconceptions

Many proposals for window protection sent to the DAC are based on misconceptions. They should not be fitted if the need is to:

a. **conserve heat.** In most Churches the amount of heat lost through windows is relatively small (most goes through the roof) and 'double glazing' will not significantly reduce heat loss and is unlikely ever to pay for itself.

b. **prevent draughts.** If members of the congregation complain about draughts from windows then modifications to the heating system (eg. Placing radiators under the window) or checking/repairing the lead canes are more likely to improve the situation.

c. **add weather protection.** If the window leaks it should be repaired, since it is likely that the lead canes or pointing is in need of attention.

d. **prevent break-ins.** Window protection is provided to protect the glass. Anyone intent on breaking into the building will not be deterred by window protection. Heavy metal grilles would be needed to protect against break-ins. These are likely to be unsightly and not meet with DAC approval

Types of Window Protection

There are three main types of protection and a PCC will need to give careful consideration to the nature of the vandalism and the architectural characteristics of the Church building before deciding on the most appropriate type.

Advice should be sought from the Church's architect.

Wire Guards *(DAC's preference)*

In most circumstances wire guards will have the least invasive impact on the exterior appearance of a Church building and in the majority of cases good quality wire guards will be preferred, rather than glass or plastic sheet.

Wire guards can be either galvanised and black powder coated, or stainless steel. The latter are more expensive but are thinner and will last longer.

Wire guards do not drastically alter the external appearance of the building and they can be easily lifted off to maintain or clean the glass. However, they possess the disadvantages of being seen from inside the Church, especially if the existing window consists of clear or lightly coloured glass, and they do not protect against air gun pellets or sharp objects being pushed through the guard.

Polycarbonate Sheet

Various types of plastic sheet (usually polycarbonate) are available. They do not affect the appearance of the window when viewed from inside and they protect against most types of missiles.

However, they disfigure the appearance of the exterior of the Church building by creating a reflective plane closer to the outside wall, rather than the traditional appearance of deepset, non-reflective leaded lights; they are flexible and create disturbing reflective movements; they are prone to scratching from wear and tear or from vandals; over time the older polycarbonate sheets may turn yellow from the effects of ultra violet light and become opaque.

Toughened Glass

This is generally regarded as a better, although more expensive material than plastic sheet. Guards made of this material have the same advantages as plastic sheet: they do not affect the appearance of the window when viewed from inside and they protect against most types of missile, but they also do not yellow or scratch, are not flexible and consequently do not produce

disturbing reflective movements, and they cannot be set on fire or scorched. However, they still produce a reflective plate glass appearance and can destroy the architectural concept of deep-set, non-reflective windows created by small panes of leaded lights.

Fitting Guards

The following criteria should be considered when fitting window protection:

- All guards should be fitted within window tracery and mullions and not taken over stone surfaces.
- They should be fitted with stainless steel, or non-ferrous fittings and screws.
- All fittings should allow for the removal of the guard for maintenance.
- Wherever possible the fixings should be screwed into joints in the stonework or brickwork, with plugged holes to match the stonework.
- Both wire and plastic guards should be fitted 50mm away from the existing glass to allow them to deflect without damaging the Church window.
- Glass guards may be fitted closer than 50mm to existing glass.
- An air gap of at least 5mm should be provided between the edges of glass or plastic sheet and the window surround to enable air circulation and avoid condensation.
- It may be possible to heat treat glass sheet to give a less reflective rippled effect.
- The plate glass appearance of both plastic and glass sheets can be reduced by the introduction of horizontal joints (for example at the position of saddle bars).

Need for a Faculty

The installation of any type of window guard will require a Faculty, even if guards have been fitted in the past. **PCCs should consult their architect before deciding on the type of guard** appropriate to their building and the DAC will also be pleased to give advice.