

**APPENDIX 1****BUILDING DESIGNATED FOR CONSERVATION**

- 1** Buildings or other private heritage buildings /monuments /sites which are designated for conservation as classified under the National Heritage Fund Act 2003 shall comply with this appendix.

Consultation between the architects, the planning authority and the fire authority should take place, where possible at a pre-planning stage, in order to identify any interventions required to satisfy the fire regulations. Fire safety design solutions should impact as little as possible on the important spaces, elements and fabric of the Protected Structure, and alterations which impact on important fabric should be readily reversible.

**2** **Principles**

Because of the importance of preserving the architectural character of a Protected Structure, imaginative compromises between active and passive fire protection measures will often have to be made. Active provisions are those which come into action on detection of fire, such as fire suppression systems, while passive provisions relate to the protection against fire provided by the fabric and construction of a building, such as floor and walls. Alternative approaches based on fire safety engineering may also be employed to satisfy the requirements of the appendix.

**3** **Means of Escape in Case of Fire**

When dealing with the safe escape of occupants from a Protected Structure, compensating measures are allowed. These measures include all or some of the following:

- enhanced levels of life safety protection by automatic fire detection and alarm systems;
- enhanced smoke-control measures;
- pressurisation of stairway enclosures;
- protection to escape routes from places of special fire risk;
- enhanced performance of fire doors;

Additional structural fire-protection measures such as increased levels of compartmentation of the building

Special requirements for providing means of escape for people with disabilities may also have to be considered.

**4** **Fire-Protected Lobbies and Corridors**

The architect should explore all other solutions and compensatory measures as alternatives where enhanced fire protection has to be provided to lobbies and corridors in circumstances where the fire resistances of such structures need to be improved.



## **5 Upgrading Walls, Floors and Ceilings**

The fire resistance of existing timber walls or floors may require to be upgraded. This can be achieved by the addition of fire-resisting layers above, beneath or between existing studs or floor joists. The voids between studs or joists can also be filled with flame-resisting materials. There are a number of proprietary methods which have been developed for upgrading the fire resistance of floors which may be appropriate. Upgrading works should not involve loss or damage to important plasterwork on walls and ceilings or of historic floors.

## **6 Upgrading Staircases**

The removal or replacement of important staircases or parts of staircases should generally not be permitted. Alternative methods of meeting the requirements of fire-safety enhancement should be provided.

## **7 Upgrading Doors**

Where the historic door is located within a thick wall, it may be acceptable to incorporate an appropriate fire-resisting door within the same structural opening whilst leaving the original door in place.

As a last resort, where a door cannot be brought up to required standards without unacceptable alteration, it may be appropriate that it be recorded and tagged before being carefully dismantled and safely stored in the building for possible reinstatement at a later date and an appropriate replacement door fitted.

Added elements of ironmongery required for fire protection, such as door closers, hold-open devices and the like, should be visually acceptable for the location.

## **8 Concealed spaces**

The presence of concealed voids or openings within the structure of an old building can make compartments ineffective. There may be interconnecting spaces behind paneling or wall linings or between floor or ceiling joists or there may be undivided roof spaces.

It may be possible to deal with many of these concealed spaces by unobtrusively subdividing them. Other situations will require a careful balance of other fire-protection measures in order to provide an acceptable solution.

## **9 Fire detection and alarm systems**

A fire-detection and alarm system is an essential part of the fire-safety strategy for all buildings. The early detection of fire is of great benefit in reducing damage and danger to both life and property. Automatic detection systems can detect the presence of fire from smoke, heat or infra-red/ ultra violet radiation and other emissions. Some buildings may require a different form of detection system for different locations.



The character of an important interior can be harmed by the inappropriate design or intrusive location of a detection system and its associated wiring, for example, smoke detectors mounted on a decorative ceiling. Where a detection or alarm system is proposed for the interior of a protected structure, the installation should as far as practicable be carried out without damaging the fabric and appearance of the structure. The detection system chosen should be appropriate to the location in addition to satisfying fire safety legislation.

## **10 Fire suppression**

Proposals may be made to install fire suppression systems, including hose reels or sprinklers. These systems together with their associated drainage can be difficult to conceal and their use in protected structures, particularly those with high-quality interior work, is often inappropriate. They may be considered acceptable in protected structures where they can be installed in concealed locations as part of major refurbishment works.

## **11 Lighting and signing of escape routes**

The need for the lighting and signing of escape routes should be carefully considered so as to reduce the impact on the character of the interior while clearly defining the routes. In certain sensitive interiors, the promoter may be required to install specially designed fittings that suit the location while fulfilling fire-safety requirements

## **12 Fire-Safety Plan & Risk Assessment**

The owners and occupiers of Protected Structures should be encouraged to take steps to prevent their building becoming endangered by fire. This might include the preparation of a regularly monitored fire-safety plan.

A fire risk assessment for the Protected Structure should be carried out, and will be most useful if it is done before preparing a detailed planning application.

Common causes of fire in Protected Structures include electrical faults, building or renovation work, arson and accidental fire from hearths, smoking, kitchens and the like. Many of these causes can be eliminated or minimized by the adoption of operational procedures, such as: banning smoking in or around buildings or adjacent to flammable material such as thatch; prohibiting the use of “hot work” procedures during refurbishment work; and avoiding the storage of combustible materials within the building