

Protecting Our Heritage

Your guide to fire protection of historic buildings

Fire threatens all buildings and its effects can be disastrous. In the case of historic buildings, the loss of property that forms part of a cultural resource is irreplaceable and the architectural and historical integrity can be destroyed forever. Traditionally fire protection of historic buildings has been largely based on structural fire protection, for example:

- Fire resisting walls, floors and ceilings
- Fire doors (with self-closing devices)

Alternative protection may be achieved by adopting a fire engineering approach. This could see a relaxation of traditional protection measures. An example of this approach is the provision of a sprinkler system, which could result in less requirement for traditional fire doors. Sprinklers provide an efficient, reliable and economic protection system.

- Sprinkler heads are intrusive? Modern heads lie flush with the ceiling, beneath a barely visible cover plate, coloured to blend in with surrounding décor
- False activation could affect the building? The likelihood of this is considered to be 1:16 million
- Water damage will be considerable and widespread? Sprinkler heads operate independently at up to 60 litres per minute. The Fire and Rescue Service will extinguish a fire using up to 1000 litres per minute from each hose
- Fire controlled? Sprinkler system in around 2 minutes, Fire and Rescue Service attendance up to 8 minutes

Partial systems may be used to cover higher risk areas of the building. Pre-action sprinkler systems remain dry until both smoke detection and sprinkler head are activated, virtually eliminating the chance of accidental discharge of water. In all historic buildings a fire risk assessment should be carried out with prevention being the primary consideration.

“ Sprinklers -
A firefighter
in every room,
24/7 ”

