



Places of worship risk review

In his column this month, the FPA's Adair Lewis provides an analysis of the latest figures relating to large-loss fires at religious premises

A FEW years ago, places of worship were readily accessible for times of contemplation or to say prayers. It is a sad reflection of our times that most are now kept locked and have grilles on the exterior to protect stained-glass windows and other ornate features.

These measures are to protect the premises against theft and criminal damage, and reduce the incidence of deliberate fire setting. Statistics reveal that 47.2% of fires in religious buildings are the result of arson and a further 8.3% are of unknown origin. A proportion of the latter will also have been due to arson and so we can, with great sadness, be confident that over 50% of fires in religious premises are started deliberately. Many of the fires are lit to destroy evidence of another crime, normally theft, involving precious items in the form of chalices and plates or icons and similar valuable artwork. The presence of candles, ghee lamps and the means of making fire for the ceremonies are also a factor in the occurrence of arson.

It is not surprising that 56.3% of all fires in religious buildings occur between 6pm and 6am, principally in the hours of darkness. The few problems relating to fighting these fires that were reported by the fire and rescue service involved difficulty in access, although it is not known if this was difficulty in access to the area for firefighting vehicles or access to the building itself.

Places of all faiths where people congregate need to have a fire risk assessment undertaken in compliance with the Regulatory Reform (Fire Safety) Order 2005 (or equivalent legislation in Scotland and Northern Ireland). All upholstered furniture and furnishings should comply with the Furniture and Furnishings (Fire) (Safety) Regulations 1988.

Fire hazards

In addition to the potential fire hazards present in most commercial businesses, there are others associated with places of worship, especially at times of festivals and ceremonies. These include:

- use of open flames, such as candles and ghee lamps
- deliberate fire raising
- lighting, projection and audio equipment
- electrical fire hazards from poorly maintained equipment and installations
- lightning strikes on tall structures such as spires
- heaters and boilers
- introduction of potential ignition sources, stages and combustible decorations at times of festivals
- combustible materials used in the construction of the building

Sector Main Category: Religious**Sub Category: Church/Chapel**

Religious fires account for 2.4% of all large-loss fires.

Church/Chapel fires account for 1.1% of all large-loss fires and: 86.5% of all Religious fires.

Causation	Accidental	Deliberate	Unknown
Religious	44.4%	47.2%	8.3%
Church/Chapel	41.9%	48.4%	9.7%

Time of fire	Midnight - 6am	6am - Midday	Midday - 6pm	6pm - Midnight
Religious	37.5%	21.9%	21.9%	18.5%
Church/Chapel	37.0%	25.9%	18.5%	18.5%

Impedances	Access	Acetylene	Inadequate Water Supply	Resources
Religious	100.0%	0.0%	0.0%	0.0%
Church/Chapel	100.0%	0.0%	0.0%	0.0%

3 Religious fires of 37 had impedances, 0 of these had more than one impedance.

3 Church/Chapel fires of 32 had impedances, 0 of these had more than one impedance.

- social activities, including cooking, in halls and ancillary buildings or areas
- obstructed or inadequate access routes for firefighting vehicles
- inadequate water supplies for firefighting

Addressing the problems

Give careful consideration to the likelihood of deliberate fire setting at the time of the fire risk assessment and implement suitable security measures to reduce the possibility of such an event. These measures may include providing locks complying with BS 3621, installing security lighting and introducing a high quality CCTV system to monitor the outside of the premises. Deny intruders access to the roof and ensure that all windows and doors are shut and secured when the property is vacated.

You should also review the fire risk assessment whenever there are significant changes to the potential sources of ignition and combustible materials present, the number of people expected to be in the building or the activities being carried out.

Minimise the use of open flames, restrict their use to essential ceremonies and do not leave lighters or matches available to intruders. In addition, investigate the properties of decorative materials being used and potential sources of ignition that may be present during festivals and similar events. Plan to keep these hazards apart.

Also eliminate hot work and ensure that electrical installations are designed, installed and periodically tested by a competent electrician in accordance. Portable electrical equipment should also be inspected and tested at least in accordance with HS(G) 107 and/or the IET Code of Practice for in-service inspection and testing of electrical equipment.

Ensure that lightning protection is suitably designed, installed, commissioned and maintained by competent engineers.

Investigate the properties of decorative materials being used and potential sources of ignition that may be present during festivals and similar events. Plan to keep these hazards apart. You should also minimise the spread of fire by effective fire compartmentation between the main meeting area and those used for ancillary and social purposes.

Protect the building by an automatic fire detection and alarm (AFD) system designed to take into account the need for property protection. The system should be installed by an organisation certificated by an independent UKAS accredited third party certification body. You should also engage an accredited alarm receiving centre to monitor the AFD system.

Give serious consideration to the implementation of a water sprinkler installation when a new building is at the design stage. There should also be a suitable number of appropriate portable fire extinguishers on the premises.

Advise visitors who are parking nearby to ensure that street hydrants and approach roads for fire and rescue service vehicles are not obstructed.

Liaise with the local fire and rescue service in order to ensure that there is suitable access and also that water supplies in the area are adequate for firefighting purposes.

An effective emergency plan must be in place to ensure the resilience of the facility. One way of approaching this is to complete the ROBUST business continuity and incident management planning software, available free from <https://robust.riscauthority.co.uk/> ■

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These statistics are based on information supplied by loss adjusters to the FPA on a voluntary basis and not all insurers conducting business in the UK contribute to this dataset. They represent only sums paid out where the total loss is in excess of £100k and are deficient of losses under £100K, deductibles, underinsurance, uninsured, self-insured and captively insured components, which may be significant. In a year, total losses captured typically account for 50% of the ABI declared annual fire loss figure – which is similarly deficient of the same components (except the £100k threshold).