

David Sugden, Chairman of the Passive Fire Protection Federation, on passive fire protection in schools.

Compartmentation: the best weapon against fire in schools

There are around 1500 serious fires in schools every year. School fires, accidental or deliberate, cost over £80 million in insured damages. Eighty percent of major fires in schools are arson. Approximately 20 schools every week fall victim to an arson attack and 90,000 school children have their education disrupted. These are shocking figures. Over the next 10 to 15 years the Government is planning to spend in the region of £2-3 billion a year on upgrading and refurbishing the entire UK school building stock in "the greatest school renewal programme in British history". Although the project is not on schedule at the moment it is possible that the promised increase in public spending will speed things up. The aim is that by 2015 all secondary schools in the UK will be rebuilt or refurbished; we should use the opportunity to make fire safety an integral part of this rebuilding process. One of the best ways to limit the damage caused by fire is passive fire protection.

Passive fire protection? What's that?

Passive fire protection (PFP) is built into the fabric of a building to protect it against fire. Compartmentation, the construction of a building as a series of modules which contain fire to its point of origin, is one of the most important and effective methods of passive fire protection. If fire can be contained then firefighters can concentrate on extinguishing it before it spreads, saving life and property. By the use of fire separating elements such as fire doors, seals, fire-resistant glass, partitions and ducting the spread of smoke and flames through the building can be limited. PFP allows the occupants to escape and the fire service to get in to fight the fire and get out safely. It also provides a stable platform for the operation of active measures such as sprinklers and smoke alarms. Active and passive measures work together in an integrated fire strategy.

Open-plan areas can make it difficult to contain fire

Schools can be particularly vulnerable to fire. Large open-plan areas can make it difficult to contain a fire and easy access to secluded areas at the back of the building give arsonists the chance to act. Fires are often started in public areas that are not sealed off in any way. Given the risk to life, the scale of the disruption and the amount of money involved it is important to minimise the effect of these fires. School premises managers need to use every weapon available to them - one of the best is well maintained passive fire protection. The risk of fire in schools is a fact of life, but its impact can be reduced. It is important that school premises managers are aware of the elements which make up the passive fire protection in school buildings and ensure that they are incorporated into the refurbishment now taking place.

Advice and information on the installation and maintenance of passive fire protection measures is available from the Passive Fire Protection Federation at www.pfpf.org.