

## Dispelling the Myths

### **Sprinklers are expensive to install.**

**NOT SO** - sprinkler systems are surprisingly economical to install, accounting for approximately 3% of the cost of a new building. An initial investment can minimise disruption and actually save schools money in the long term. Maintenance costs are minimal and insurance discounts will be granted.

### **When there is a fire all the sprinkler heads go off at once.**

**NOT SO** - the fire triggers sprinkler heads individually, therefore only the head(s) adjacent to the fire operates

### **Water damage can be as great as fire damage.**

**NOT SO** - typically a sprinkler discharges 60 litres per minute. A fire fighter's hose discharges in excess of 600 litres per minute. In general, a sprinkler system will use less than 5% of the water used by the fire service.

### **Sprinkler systems are susceptible to vandalism.**

**NOT SO** - sprinkler heads can be fitted above open grid ceilings making them inaccessible, or behind protective plates that fit flush to the ceiling. Experience to date in some 50 plus schools within 14 Local Education Authorities has not produced one case of vandalism and importantly, not one significant fire loss despite many of them being in schools within challenging areas

### **Sprinklers can go off accidentally.**

**NOT SO** - records show that the chances of a defective head are approximately 16,000,000 to 1; slightly longer than a chance of winning the Lottery. This includes all type of defects including cosmetic defects, therefore the actual chance of an accidental discharge is considerably less.

## Conclusion

The effectiveness of automatic fire sprinklers has now been acknowledged by the Local Government Association ([www.lga.gov.uk](http://www.lga.gov.uk)) via the production of a series of toolkits for Local Authorities on this matter. The relevant toolkits are:

- **Automatic Fire Sprinklers – A Guide for Local Authorities**

- **Automatic Fire Sprinklers – A Guide for Schools**

Also, the British Automatic Sprinkler Association in partnership with Zurich Municipal Insurance, Royal & Sun Alliance and the National Fire Sprinkler Network has produced a document called:

- **Joint Code of Practice – For the Installation of Automatic Fire Sprinkler Systems in Schools**

There is a clear business case to be made for the installation of sprinklers in all schools, particularly “new build” and “refurbishment” projects. Sprinklers will mitigate the damage, usually to the room of origin, which is particularly relevant as the majority of school fires occur “out of hours”. Many Local Education Authorities are now installing sprinklers in their premises having been convinced of the business case for such installations. Sprinklers may allow design freedoms, creating efficiencies elsewhere in the school. Sprinklered schools will experience substantially cheaper insurance rates.

**The only completely reliable fire prevention and protection measure that is available to combat school fires is the installation of a sprinkler system.**

For further information, please contact us.

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# School Fires

Is your school for  
Learning or  
Burning?



## School Fire Losses Soar

The annual cost of arson attacks on schools has more than doubled in the last 10 years and has now reached a record figure of £100,000,000. On average, there will be 3 school fires each day in the United Kingdom. 75% of these fires are started deliberately; and more than 33% are lit during the daytime, by pupils in areas such as toilets and cloakrooms.

**This heightens concerns for the safety of all staff and pupils in the school.**

Figures show that the number of large fires causing significant damage to schools has increased by more than half (55%) over the last year. The related costs incurred as a result of school fires have increased by more than 170% over the last 10 years.

It is the belief of Merseyside Fire & Rescue Service and Zurich Municipal, the largest insurer of schools, that these large fires would not have developed to such devastating proportions if schools were fitted with sprinkler systems.

Despite campaigns by Zurich Municipal, the Local



Government Association and the Fire Service only 150 out of 28,000 schools in the UK are fitted with sprinklers. Zurich Municipal is now renewing its call for automatic fire sprinklers to be

included at the earliest opportunity of the design stage for all new or refurbished schools in light of the fact that the problem still needs to be addressed.

A large school fire devastates. In 2003 there were 42 large fires in school premises, each of which accounted for over £100,000 worth of damage. This is compared to the figure for 2002 when there were 27 large fires in schools. The aftermath of a school fire lingers for years. The associated long-term disruption that follows puts staff and pupils under stress and imposes large financial, educational and administrative costs. It is a price that your school cannot afford to pay.

## Merseyside Perspective

School fires are all too common, and Merseyside is no exception to this. In the 2 years from April 2002 to April 2004 Merseyside Fire & Rescue Service attended 62 fires in school buildings.



The ultimate arson reduction tool is an automatic fire sprinkler system. Sprinklers can be considered to be a combined detection / suppression system. A suitably installed sprinkler system will prevent the fire from spreading, and also will control, if not extinguish, the fire in the earliest stage of development. Any damage is limited to the room of origin and the school is capable of quickly returning to normality after the fire.

Fire sprinklers should be installed in ALL new schools, schools assessed as being high risk and those undergoing major refurbishment to provide the optimum level of protection in the event of a fire occurring.

Sprinklers are extremely cost effective when incorporated in the initial planning of new and refurbished schools, and once installed the maintenance costs are negligible. Schools that are fitted with sprinklers will also attract substantial reductions in insurance premiums.

## What can Sprinklers Achieve

- Sprinklers will detect a fire in its earliest stage of development.
- Sprinklers will provide a rapid response to any fire situation
- Sprinklers will control, if not extinguish, the fire
- Sprinklers will limit the amount of fire damage, usually to the room of origin
- Sprinklers will keep to a minimum, the disruption to the school-learning programme
- Sprinklers will maintain a survivable atmosphere in the event of a fire
- Sprinklers will sound an alarm in the event of a fire
- Sprinklers will limit the amount of water damage
- Sprinklers will protect the environment by reducing the amount of airborne and water run-off pollution
- Sprinklers will allow design freedoms at the planning stage i.e. increased compartment sizes and travel distances
- Sprinklers, when installed, will attract substantial reductions of up to 75% of the insurance premiums, with the potential for any excess to be completely removed.
- New PFI schools will not be insured unless a sprinkler system is installed
- Sprinklers will increase fire fighter safety