

# ***SAFEGUARDING YOUR COMMUNITIES FROM FIRE***

## **Interesting facts**

- In the US 98 per cent of fires in sprinklered homes are extinguished with only one sprinkler head operating.
- Only the water suppression heads in the immediate vicinity of the fire actually operate.
- Automatic Water Suppression Systems do not cause 'false alarms' - they will only operate if there is an actual fire.
- Sprinkler and Water Mist system heads can be completely concealed.
- Integrated Domestic Plumbing and Fire Sprinkler systems do not use pumps or tanks, they are designed to simply use mains pressure if adequate.
- Buildings with an AWSS help to prevent firefighter deaths.

For further information please contact the Local Government Association at:  
Local Government House  
Smith Square,  
London SW1P 3HZ

or telephone **LGconnect**, for all your LGA queries on **020 7664 3131**

Fax: **020 7664 3030**

E:mail [info@lga.gov.uk](mailto:info@lga.gov.uk)

## **The benefits of automatic water suppression systems a quick guide for councillors**

There are few single events that regularly have such a distressing impact on whole communities as fire. Just one fire in a school, in a residential care home or in a flat used for social housing brings devastation long after the flames are put out. The benefits that automatic water suppression systems (AWSS), including sprinklers, can bring often far outweigh the initial outlay cost. They help save lives, protect property and prevent damage to the environment.

## Saving lives

AWSS help save lives. In 2006 there were 491 fire-related deaths in the UK - the majority in dwelling fires - and 13,800 injuries from fires. There are certain types of property, residents and areas that are far more at risk - if you are on a low income or live in a deprived area you are more likely to be a victim of fire.

## Protecting property and safeguarding assets

Losses from fires in buildings protected with sprinklers are estimated to be one tenth of those in unprotected buildings. AWSSs reduce property damage by controlling fires quickly and preventing fires becoming big enough to inflict significant damage. In the event of a fire, an AWSS will use significantly less water to extinguish a fire than a fire engine, reducing the potential for water damage.

## Preventing damage to the environment

Fire is a chemical reaction that results in physical changes. The chemical process creates toxic air and water pollution, leaves behind damaging residues that are expensive to dispose of, and totally destroys valuable building materials and other products. Most of the water pumped from a fire engine runs straight through the fire scene, picking up these pollutants on the way and then into the water system. Installing an AWSS has the additional benefit of increasing the sustainability and life expectancy of buildings.

## Advances in technology make installing AWSS increasingly affordable

Traditionally fire sprinkler or water mist systems have been stand alone installations. The future of widespread low cost installations may lie with a more integrated approach in the form of Integrated Domestic Plumbing and Fire Sprinkler Systems (IDP&FS). This new way of installing domestic plumbing systems incorporates a supply loop which directly feeds the sprinkler heads and supplies water to the rest of the house. This duality means the cost of installation is estimated at around £400 and is predicated to fall over time.

### What you can do – a three point plan

- Ensure your council is following the Department for Children, Schools and Families risk assessment tool and policy which expects almost all new build and major refurbished schools to be fitted with sprinkler systems.
- Ensure your council works with your local fire and rescue service and other partners to identify the most high risk buildings and most vulnerable groups.
- Ensure your council considers the installation of AWSSs in all new build and major refurbishment schemes for council owned buildings, focusing on those that house vulnerable people at the greatest risk of fire.

## Myths exploded

**Myth:** In a fire all the sprinkler heads go off together.

**Fact:** Only the head(s) of the AWSS directly affected by the fire is triggered.

**Myth:** Water from the sprinklers will cause more damage than the fire.

**Fact:** Typically the Fire and Rescue Service use as much as 100 - 1,000 times more water to put out a fire than is delivered by an AWSS head. Because a sprinkler attacks the blaze directly and immediately when it is small, it only needs to use a small amount of water to control the blaze. Firefighters, however quickly they respond, have to deal with bigger fires by the time they arrive on the scene.

**Myth:** A smoke detector/fire alarm will always provide enough protection.

**Fact:** Operational smoke detectors and fire alarms do save lives. However they do nothing to extinguish a growing fire, or to protect those most unlikely to be able to escape easily such as elderly people and young children.

**Myth:** Automatic Water Suppression Systems go off accidentally.

**Fact:** The odds of winning the lottery are greater than the odds of a sprinkler going off accidentally – approximately 1 in 16 million.

**PREVENTING**

**PROTECTING**

**RESPONDING**