

Building Control Solutions

Homeowner Guide 15

Domestic Sprinklers



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Fire safety - Be safe

Building Control Solutions together with Royal Berkshire Fire and Rescue Service believes that the installation of sprinklers in homes will save lives, prevent injuries and reduce damage to property if a fire occurs.

The Building Regulations recognise the use of sprinkler systems in residential properties in varying the provisions of Approved Document B. The system should be designed in accordance with BS:9251:2005.

Together with well-maintained and correctly positioned smoke alarms, fire actions plans and fire prevention awareness, installing sprinklers in our homes will reduce deaths and injuries by fire.

What is a domestic sprinkler system?

The most effective way to fight a fire is to discharge water onto the seat of the fire as quickly as possible; this is exactly what a sprinkler system will do! The domestic sprinkler system is a small network of water pipes, connected to a water supply. Each sprinkler head is an individual heat-sensing device, therefore during a fire only the heads affected by the heat operate.

Frequently asked questions

Do sprinklers go off accidentally?

Although possible, it is very rare. As long as a sprinkler is not exposed to freezing, overheating or mechanical damage there should not be any problems. A well-designed system will reduce this possibility.

What damage could the water do?

The system will deliver water to a fire when it is in its very early stages. Without the early action of the sprinklers, a fire can spread very quickly. The amount of water used by the Fire Service can be 10 times more than that delivered by the sprinklers and accordingly may cause greater damage. During a fire only the sprinkler(s) closest to the fire activate, triggered by the heat, limiting the amount of water needed to suppress it.

Will special tanks and pumps be needed?

In most cases they will operate from household water supplies. Only in areas where the water supply is poor, may a tank or pump be required.

Will I have unsightly pipes around my home?

Sprinklers can be designed to blend into décor. They are available in a wide range of colours and can be almost flush to the ceiling.

The pipes are hidden out of sight behind ceilings.

What about maintenance?

Like your plumbing and heating system, a sprinkler system will need looking after. If your sprinkler system has been properly installed to a recognised standard, i.e BS9251:2005 with a built in maintenance programme, it will be protected from freezing.

No system is foolproof and you may accept this very slight risk against improved fire safety.

Some additional facts.....

1. Fire sprinklers are by far the most efficient and effective safety devices known to man, having a better than 99% success rate in service worldwide.
2. Smoke detectors can only warn of a fire and depend on someone calling the Fire Service. As well as warning of a fire, sprinkler systems also act immediately to extinguish the fire—even if no one is present.
3. Over 50% of all fire casualties are either young or old, or physically or mentally incapacitated and cannot properly help themselves. Fire Sprinklers, even if they do not succeed in putting out the fire, will at the very least raise the alarm and greatly extend the time available for escape or rescue and assistance by the emergency services.
4. Fire in the home is responsible for over 75% of all fire-related deaths and injuries in the UK. Every day 2 people die and 50 are injured in fires in the UK. Your chance of experiencing a serious fire in your lifetime is around 1 in 5.
5. Residential Fire Sprinklers are NOT expensive, costing typically £1/sq.ft in new homes or about £1500 for a 3- bed house. This is less than 1% of the cost of an average new house, probably about the cost of carpeting, but designed to last at least 50 years.
6. Fire Sprinklers are very reliable. Records show that the chance of accidental operation from manufacturing defect is 1:16,000,000 (one in sixteen million), less than your chance of winning the lottery.
7. Houses that suffer major fires are seldom to be lived in afterwards and are often demolished. In contrast rooms protected by residential firesprinklers can often be back in use within a few hours, and the rest of the house is usually unaffected.
8. Modern Residential Sprinklers are small, neat and unobtrusive and visitors are seldom able to spot them – indeed concealed versions are now available. They all come in a variety of finishes and colours and can be made to match any décor.

For further guidance on the benefits of installing sprinkler systems, contact should be made with one of the following organisations:

Fire Sprinklers Association
www.firesprinklers.info

British Automatic Sprinkler Association Limited
www.basa.org.uk

Royal Berkshire Fire and Rescue
www.rbfrs.co.uk

Providing Guidance on other building control matters

Please consult our Building Control team prior to making an application. Our service is there to help if you are in any doubts over requirements or require further information.

This is one of a number of Homeowner Guides. Copies are available either through our website or by contacting our Building Control team.

Visit our Website

For a wealth of information including application forms, guidance on charges and latest news, why not visit our website at: www.bcsolutions.org.uk

Other Approvals

In addition to a Building Regulation approval you may also require Planning Permission in certain circumstances. Please contact the relevant authority's Development Control team for further advice.



Tel: 0300 790 0580
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