BS 9251:2020

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Protecting people, property and the environment

Why Install Automatic Fire Sprinklers?

- Sprinkler systems have demonstrated their value in protecting life and property in industrial and commercial applications for many years.
- The advent of sprinklers that operate at an earlier stage in the development of a fire, plus the recognition that the largest numbers of deaths from fire occur in the home, have led to the introduction of sprinkler systems specifically designed for domestic and residential occupancies.
- A correctly designed and installed sprinkler system can detect and control a fire at an early stage of development and activate an alarm.

- Sprinkler systems can also assist firefighters in carrying out search and rescue operations by limiting fire development, which significantly reduces the risks to Firefighters.
- The British Standard covers design, installation, components, water supplies, maintenance and testing of residential sprinkler systems installed for the purpose of reducing risk to life and minimizing the spread of fire.
- **Provided you follow the guidance and recommendations contained in it and use competent, certificated designers and installers**

What is BS 9251:2020?

- This British Standard gives recommendations for the design, installation, components, water supplies and backflow protection, commissioning, maintenance and testing of fire sprinkler systems installed for life safety purposes in residential and domestic premises.
- This British Standard supersedes BS 9251:2014, which will be. withdrawn.
- As a code of practice, this British Standard takes the form of guidance and recommendations.
- It should not be quoted as if it were a specification.

Design Considerations

- The sprinkler system should be designed by a competent sprinkler designer in accordance with the British Standard and a component manufacturer's instructions.
- Full hydraulic calculations should be carried out for each system to determine the required pressure and flow, which in turn determines the required water supply
- The sprinkler system should be designed to facilitate easy maintenance.

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Installation

- It has been assumed in the preparation of this British Standard that the execution of its provisions will be entrusted to appropriately qualified and experienced people.
- Third Party Certified Installers will have appropriately qualified designers and experienced trained fitters.
- The companies will have been certified by LPCB, FIRAS or IFCC, they will also be audited on a regular basis.
- The three certification bodies are also independently audited by UKAS.

Components

- All pipes and fittings should be supplied, stored, handled, used and installed in accordance with the relevant British Standard or other nationally recognized standard, appropriate for the particular material used.
- All valves should be supplied, stored, handled, used and installed in accordance with the relevant British Standard, or other nationally recognized standard.
- All systems should have at least one sprinkler alarm initiating device.
- Precautions must be taken to ensure that the system is frost protected

Water Supplies

- The design should identify water supply requirements (pressure, flow and duration) for the sprinkler system.
- Sprinkler systems should be connected to a reliable supply, for example:
- mains pressure only; or
- mains water supply boosted by a pump;
- stored water supply:
- pump supplied from a water tank;
- regulated pressurized vessel; or
- gravity-fed stored water system.

Commissioning

- Sprinkler pipework should be clearly identified as such.

- A leakage, hydraulic and alarm test should be carried out.

- On satisfactory completion of the commissioning tests, a compliance certificate should be issued by the competent person in accordance with 6.3.3a), which attests that the sprinkler system has been designed, installed and commissioned in accordance with this British Standard.

Maintenance

- The System should have regular visual inspections as specified by the installer or manufacturer
- The system should have a full test and inspection on an annual basis or when recommended by the manufacturer of installer.
- The results of all tests should be recorded in the systems log book.
- Every system must have data label with all the required information regarding the system.
- The occupier must be given an instruction booklet for the system, which specifies the dos and don’ts of the system

Thank You For Your Time

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