Installation of Domestic Fire Sprinkler Systems



Domestic fire sprinklers are increasingly being used across the UK in both new and existing homes to reduce loss of life and injury, as well as property damage, in the event of a fire. However, it is essential that the plumbing arrangements of the sprinkler system are installed correctly to ensure they will function when required, and to prevent cross-contamination with the drinking water supply. Any domestic sprinkler system fitted in our area of supply must meet the following specification.

Company pipework and metering specifications

For residential properties, our policy is to install meters which are no larger than 25mm in size. If a sprinkler system is being installed, we will use a particular type of 25mm meter which will allow a flow rate of up to 120 litres per minute (lpm). Our preferred location for water meters is at the property boundary.

The communication pipe, which connects the water main to the principal stopcock, is our responsibility. If specifically requested in relation to the installation of a sprinkler system, we will install a 32mm polyethylene communication pipe. We will provide a quotation for this work on request.

The remaining pipework downstream of the principal stopcock is the responsibility of the property owner and is referred to as the supply pipe. There is no restriction on the size of the supply pipe, although it needs to be appropriate for the anticipated consumption in the property. All pipework downstream of the principal stopcock must comply with the Water Supply (Water Fittings) Regulations 1999.

Some water supplies are shared by a number of properties, known as a common supply. If a sprinkler system is to be installed at a property

which has a common supply, we will require a new and separate water supply to be laid.

Water supply pressure

We do not guarantee any pressure greater than the statutory minimum of 10 metres/head (or one bar) and a flow rate of 9 litres/minute at the boundary of the property. However, we can provide an indication of the typical operating pressure in the vicinity of the property on request. It will be for the installer to determine whether this is adequate and suitable. Pressure can vary dependent upon the time of day and year.

We <u>cannot guarantee</u> an uninterrupted water supply. From time to time mains are depressurised for essential maintenance or to repair bursts. If there is any doubt concerning the reliability of the mains water supply for the operation of the sprinkler system, then a dedicated storage and pump system should be installed.

The following pages show the typical layout of sprinkler systems that are:

- i) directly supplied from the SES
 Water network;
- ii) supplied in to a tank that the sprinkler system is supplied from.

Please contact our Water Regulations team for more details at:

waterregulations@seswater.co.uk.

Wate F fact sheet

For further information contact the Water Regulations team at SES Water. London Road, Redhill RH1 1LJ Email: waterregulations@seswater.co.uk

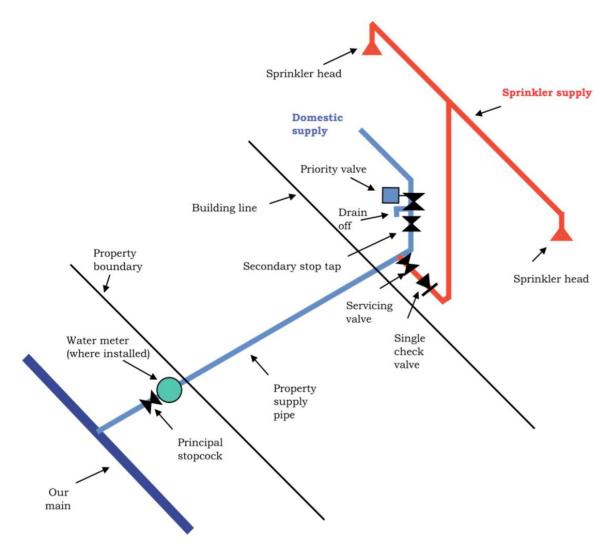
Installation of Domestic Fire Sprinkler Systems



Sprinkler supply specification

A direct feed sprinkler system should be connected into the domestic supply as shown below. All systems are subject to an inspection by us for compliance with the Water Supply (Water Fittings) Regulations 1999.

The connection to the sprinkler supply must be made within the property and the servicing valve made accessible. A single check valve must be installed on the sprinkler supply to prevent the risk of backflow from stagnant water contaminating the domestic water supply. The pipe should be white with red bands so it can be easily distinguished from any other pipework. No other fittings should be connected to this supply other than the valves and sprinkler heads.



[Example of a direct feed sprinkler schematic]

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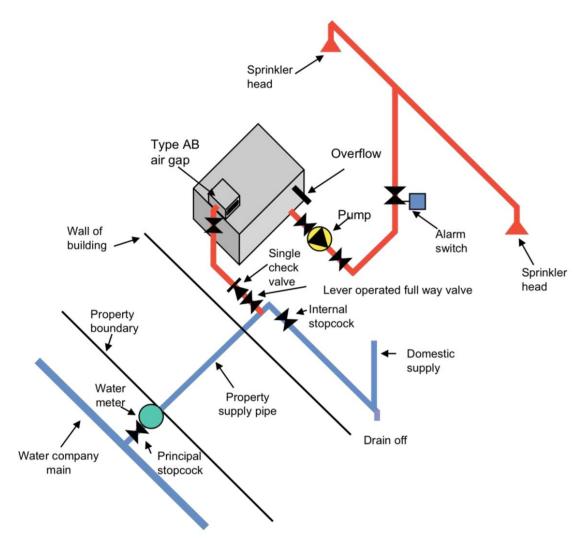
Installation of Domestic Fire Sprinkler Systems



Sprinkler supply specification – storage and pumped systems

A sprinkler system comprising dedicated storage and pumps should be connected into the domestic supply as shown below. All systems are subject to an inspection by us for compliance with the Water Supply (Water Fittings) Regulations 1999.

The connection to the sprinkler supply should be made within the property and the servicing valve must be accessible. A single check valve must be installed on the sprinkler supply to prevent backflow of stagnant water contaminating the domestic supply. The pipe should be white with red bands so it can be easily distinguished from any other pipework. No other fittings should be connected to this supply other than the valves and sprinkler heads



[Example of a tank feed sprinkler schematic]

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