

Fire Sprinkler Systems

Water Supplies to Domestic/Residential Fire Sprinkler Systems – Information Notes

This general information, based on BS9251:2005 'Sprinkler systems for domestic/residential occupancies', is a guide for housing developers or sprinkler installers who wish to install sprinkler systems in new or existing properties.

In addition to the protection already achieved by the appropriate building design and the installation of smoke and/or fire detectors, fire sprinkler systems can be an effective method of preventing the loss of life and reducing damage to property.

The purpose of this guide is to provide an approved set of design specifications for new connections and associated fire sprinkler systems.

General notes

Sembcorp Bournemouth Water (SBW) strongly advises careful consideration be given when designing any Fire Sprinkler System that relies directly on water mains pressure.

SBW cannot guarantee pressures and flows above certain minimum standards. Our minimum service standard for the supply of water is a pressure of 10 metres head or 1 bar at a flow of 9 litres per minute at the highway boundary of the property. Before proceeding with any installation, the designer or installer should always take this pressure into consideration. Pressures may well be experienced in excess of this level but they can vary depending on the season and the time of day. Also, the supply may be interrupted at any time for a variety of reasons.

It is strongly recommended that the water for all fire fighting installations for both new and existing properties should be provided from a storage cistern and booster pump. The siting of the pumping equipment is of vital importance. It should be located in such a way that it is unlikely to be affected by fire. It should also be easily accessible for maintenance and protected from frost and flooding.

SBW reserves the right to amend the distribution network in the future although it will maintain the guaranteed standards mentioned above. Should water pressures be changed at any time SBW will not be held liable for any failure of the fire sprinkler installation or for the consequences of not installing a storage based system.

Water meters

It is SBW policy not to meter the supply to a domestic fire sprinkler system, but a meter will be installed on the domestic supply. However, we reserve the right to install a water meter on the supply to the sprinkler system supply for monitoring purposes.

Responsibility

- It is the housing developer/sprinkler installer's responsibility to design and install the sprinkler system in accordance with the current nationally recognised standard, BS9251:2005 and comply with the Water Supply (Water Fittings) Regulations 1999 Schedule 2 - Requirements for water fittings.
www.legislation.gov.uk/ukxi/1999/1148/regulation/4/made
They should also fit the single check valve, stopcocks and chamber as indicated on the guidance diagrams. These would normally be installed on private land.
- It is the owner/occupier's responsibility to maintain the check valve and chamber and to ensure that the sprinkler system is serviced annually.

Guidance Diagrams of Typical and Acceptable Domestic/ Residential Sprinkler Systems

The guidance diagrams on this information sheet show four principal approaches. Variations on these may well be acceptable but must be agreed via discussion with SBW.

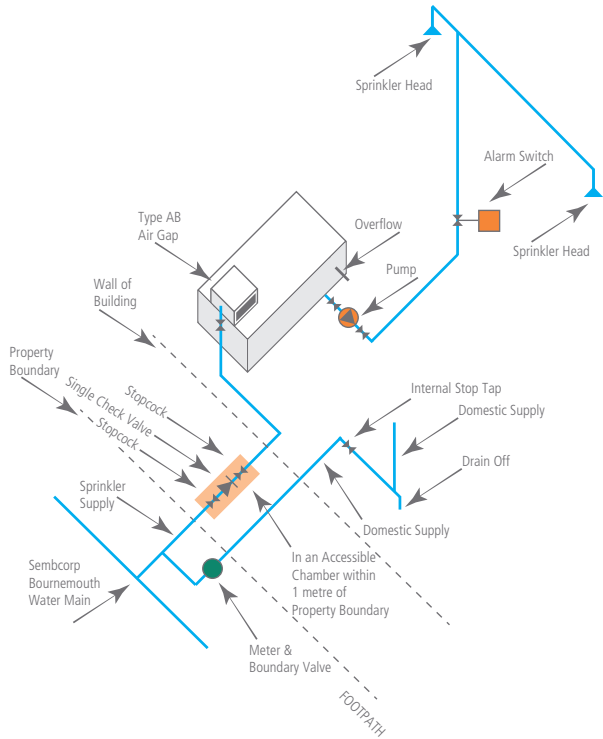


Fig 1 - Storage and Boosted Sprinkler Supply via Unmetered Branch Pipe

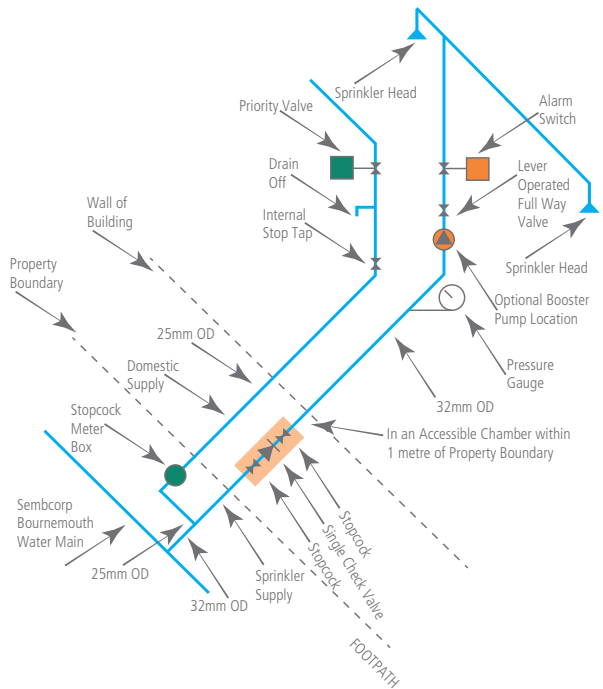


Fig 2 - Typical Mains Fed Sprinkler Installation for Domestic Property

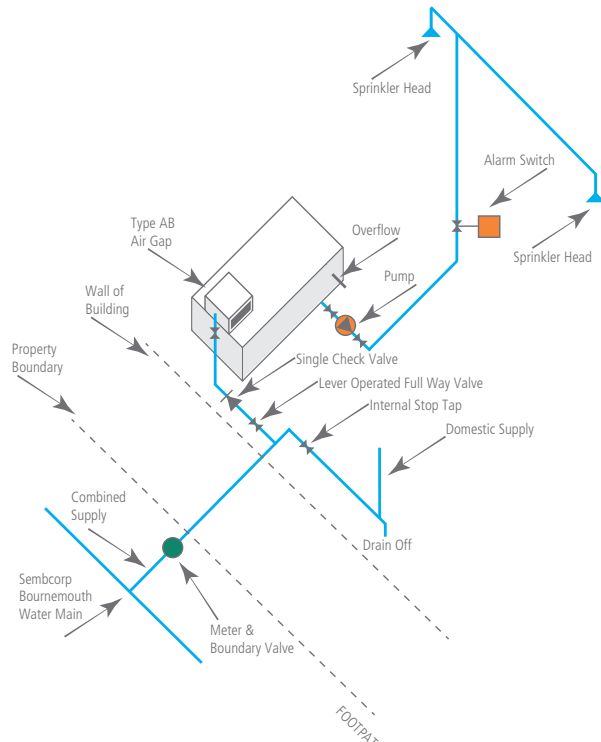


Fig 3 - Storage and Boosted Sprinkler Supply via a Single Metered Connection

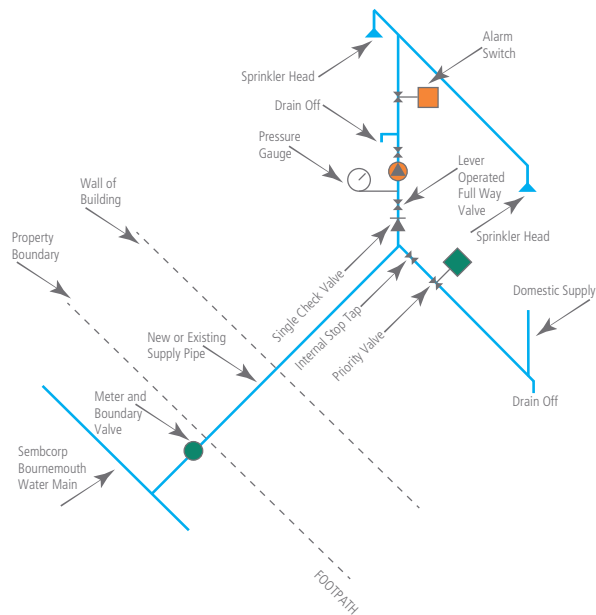


Fig 4 - Mains Fed Sprinkler Installation via a Single Metered Connection

Figures 2 & 4 only apply if you are unable to install a storage cistern and booster pump and propose a sprinkler system to be supplied via a direct connection from the water mains. The installation of a pump in this situation will be at the discretion of SBW under Water Regulation 5.1.

Notification

All fire sprinkler installations in new premises and alterations to sprinkler systems in existing commercial and industrial premises must be notified to our Water Regulations department. Notification must also be given where a system is installed in an existing domestic premises that incorporates a pump or booster drawing more than 12 litres per minute, connected directly or indirectly to a supply pipe.

The notification must include full drawings (showing pipe runs) and a fittings schedule. Installation work should not commence without the consent of the water supplier. Consent may be subject to conditions but it should not be withheld unreasonably. If no notice is given by Sembcorp Bournemouth Water within ten working days of receipt of the notification then consent is deemed to have been granted. However, this does not alter the obligation of the installer to comply with the regulatory requirements.

Further information on domestic/residential fire sprinkler systems and installers can be obtained via:

BAFSA (British Automatic Fire Sprinkler Association)

Richmond House
Broad Street
Ely CB7 4AH

Tel: 01353 659187
Fax: 01353 666619
Email: info@bafsa.org.uk
www.bafsa.org.uk

The Fire Sprinkler Association
Mill House
Mill Lane
Reading
Berkshire RG7 4JX

Tel: 0118 971 2322
Fax: 0118 971 3015
Email: info@firesprinklers.org.uk
www.firesprinklers.org.uk

Alternatively please contact Developer Services:

Developer Services
Sembcorp Bournemouth Water
Francis Avenue
Bournemouth BH11 8NX

Tel 01202 590059
Fax 01202 597031
Email developerservices@sembcorpbw.co.uk
www.sembcorpbw.co.uk

Sembcorp Bournemouth Water Ltd

REGISTRATION NO 02924312 (England and Wales)

REGISTERED OFFICE George Jessel House

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Fax 01202 597022

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