

Policy for the Supply of Water to Automatic Fire Sprinkler Systems

October 2014



South Staffs Water

incorporating



Contents

Introduction	3
Principles.....	3
Aims of the Policy	3
Roles and Responsibilities.....	4
Water Supply Arrangements for Fire Sprinklers	5
Information.....	6
Appeals and Redress.....	6
Links to other relevant information	6
Contact us	7
Appendix 1	8
Appendix 2	9

Introduction

The purpose of this document is to set out South Staffs Water's policy, vision and commitments to supporting the installation of fire sprinkler systems. This policy will require that installers carry out installations in accordance with The Water Supply (Water Fittings) Regulations 1999 (the Regulations) and be in accordance with the Company's terms and conditions within the areas we are responsible for supplying water. South Staffs Water has two distinct operating regions; the South Staffordshire region and the Cambridge region (see Appendix 1 for these supply areas).

This document describes the principles used to ensure compliance with the Regulations, our terms and conditions and how we will work with stakeholders to achieve its outcomes.

This document will be reviewed every five years, or as necessary as a result of changes to legislation or centrally issued guidance.

Principles

Automatic fire sprinkler systems can be fitted to new and existing premises.

Where properties have a fire sprinkler system installed, we cannot guarantee pressures and flows for the operation of the fire sprinkler system.

All installers must contact us prior to installation in line with the Regulations to confirm the current minimum and maximum pressures within the distribution main the fire sprinkler system is to be connected to. Flows based on two sprinkler heads at a rate of 60l/m will be entered into a network model to ascertain if there are any issues on the distribution network should the activation of a sprinkler occur. If the activation will cause an issue on the distribution network, an alternative design will need to be provided to us.

All fire sprinkler system installations must be notified to the [Water Regulations Department](#).

Aims of the Policy

We are committed to the following aims:

- Enforcement of the Regulations under Section 75 of the Water Act 1991.
- Providing a supply of water where available for use with fire sprinkler systems.
- Proactively engaging with stakeholders to maintain best practice as appropriate.
- Protecting water quality.

Roles and Responsibilities

South Staffs Water

- Respond to written enquiries regarding fire sprinkler systems within 10 working days of receipt.
- Respond to formal applications detailing connection charges within our levels of service detailed in our [New Supply Application](#) process.
- We will carry out Water Regulations Inspections and final connections if the application is completed correctly in line with our New Supply application process.
- Apply and enforce the Regulations where sprinkler systems have been unlawfully installed.
- Where appropriate or required, undertake a planned inspection of the installation to ensure compliance with the Regulations.
- Choose to undertake an inspection where the sprinkler system has been installed and self-certified by a nationally recognised water industry approved contractor in accordance with the terms and conditions of the appropriate scheme.
- Provide a new communication pipe and connection within our levels of service after payment of required charges and appropriate evidence of compliance with the Regulations has been confirmed.
- Install a controlling valve within the public highway where required which can be used for isolating both the domestic and fire sprinkler systems.

Those who require/apply for a sprinkler connection

- Notify our [Water Regulations Department](#) of the proposed installation of all fire sprinkler installations.
- When installing a domestic sprinkler system and there is a requirement to install a new communication pipe, you must send in a completed application form giving details of the proposed supply arrangements, drawings and the fittings schedule to ensure compliance with the Regulations.
- If it is proposed to use the existing supply and the connections will be made on premises, a Regulation 5 notification form in accordance with the Regulations must be submitted to us.
- Use a single point of connection to the water main for both the fire sprinkler system and the domestic water supply system.
- Arrange for all internal and external pipework and fittings to be installed by a Water Industry Approved plumber (as defined under Regulation 6 of the Regulations).
- Where a sprinkler system is not installed and certified by Water Industry Approved Plumber (as defined under Regulation 6 of the Regulations), arrange for an inspection of the water supply before we undertake any connection tasks where required.
- Ensure all water fittings relating to the fire sprinkler system including backflow prevention devices and valves remain within the property boundary and are installed so that they can be appropriately maintained, serviced and replaced.

- Request a replacement communication pipe (non-standard application) if the existing domestic communication pipe is not fit for purpose. The costs of replacing the communication pipe will be at your expense.
- If required replace/upgrade the supply pipe to the customer premises in line with the Regulations and our terms and conditions prior to a connection being made.
- Pay all connection charges prior to us undertaking any work.
- Ensure all the water fittings that are installed and used comply with the Regulations.
- Rectify any non-compliant water fittings identified within an agreed timescale.
- Ensure the occupier is aware of their responsibilities regarding maintenance and testing of the fire sprinkler system.
- Ensure the fire sprinkler system is designed, installed, maintained and used in accordance with all current regulatory and nationally recognised standards or guidelines BS9251 - Sprinkler systems for residential and domestic occupancies.

Water Supply Arrangements for Fire Sprinklers

The following provides details of the arrangements that can be used to give an adequate water supply to the fire sprinkler system (drawings are attached in [Appendix 2](#)):

Direct Mains Fed System

This system is directly supplied from the distribution system. The use of a priority demand valve can be used on the aforementioned systems. The use of a priority demand valve may not be appropriate if the domestic supply is part of a shared supply to more than one property. The constant supply of water cannot be guaranteed at any time.

Storage and Boosted Systems

This type of system relies upon a stored volume of water (a cistern) to meet the demands of the fire sprinkler system. All such cisterns must have appropriate backflow prevention arrangements at the inlet. The dedicated supply from any cistern will normally supply a booster.

Mains Fed Boosted System

This system allows for a booster to be connected directly to the distribution system. We will only consider the option of an in line booster if the pump to be used shuts down automatically on reduced suction pressure. This system can only be fitted following consultation on design specifications and approval of the proposed installation. Approval of this type of system is dependent on individual circumstance.

Meters

All new domestic properties connected to our distribution network are metered. It is not proposed to meter fire sprinkler systems subject to the location of the connection point and available position for a domestic meter. If cross connections into the fire sprinkler systems are identified or regular usage is identified outside of normal testing parameters a domestic meter will be installed. See [Appendix 2](#) for pipework layouts.

Communication Pipe

The maximum allowable communication pipe diameter for a fire sprinkler is 32mm external bore. Where a sprinkler is connected to a residential property that has a larger communication pipe due to its normal demand profile, the diameter of the communication pipe will not be increased above that which is currently in situ.

Information

If information is required on the connection, customers should initially address their enquiry to our Developer Services units. If a customer requires further information on sprinkler installations they should initially contact our Water Regulations unit.

Appeals and Redress

In the event that a customer disputes the decision made on the installation, the customer should address their appeal to the Network Performance Manager, South Staffs Water, Green Lane, Walsall, WS2 7PD and clearly state the reasons for their appeal.

Links to other relevant information

The Water Supply (Water Fittings) Regulations 1999 are published by Her Majesty's Stationery Office and are available to view or download from www.legislation.gov.uk

Other key links are:

- Guidelines for the Supply of Water to Fire Sprinkler Systems (www.water.org.uk/home/policy/publications/archive/industry-guidance/domestic-fire-sprinklers-e-bulletin-1/sprinkler-protocol-final.pdf).
- Water Regulations Advisory Scheme (WRAS) website (www.wras.co.uk)
- Water Industry Approved Plumbers Scheme (WIAPs) (www.wras.co.uk/plumbing_professionals)
- Watersafe - www.watersafe.org.uk
- South Staffs Water website – www.south-staffs-water.co.uk
- Cambridge Water website – www.cambridge-water.co.uk

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

BAFSA (British Automatic Fire Sprinkler Association)
Richmond House
Broad Street
Ely
CB7 4AH
Tel: 01353 659187
Email: info@bafsa.org.uk
Web: www.bafsa.org.uk

Contact us

South Staffs region:

Email: waterregulations@south-staffs-water.co.uk

Website: www.south-staffs-water.co.uk

New Supply Application: www.south-staffs-water.co.uk/your_business/new_connections.asp

Cambridge region:

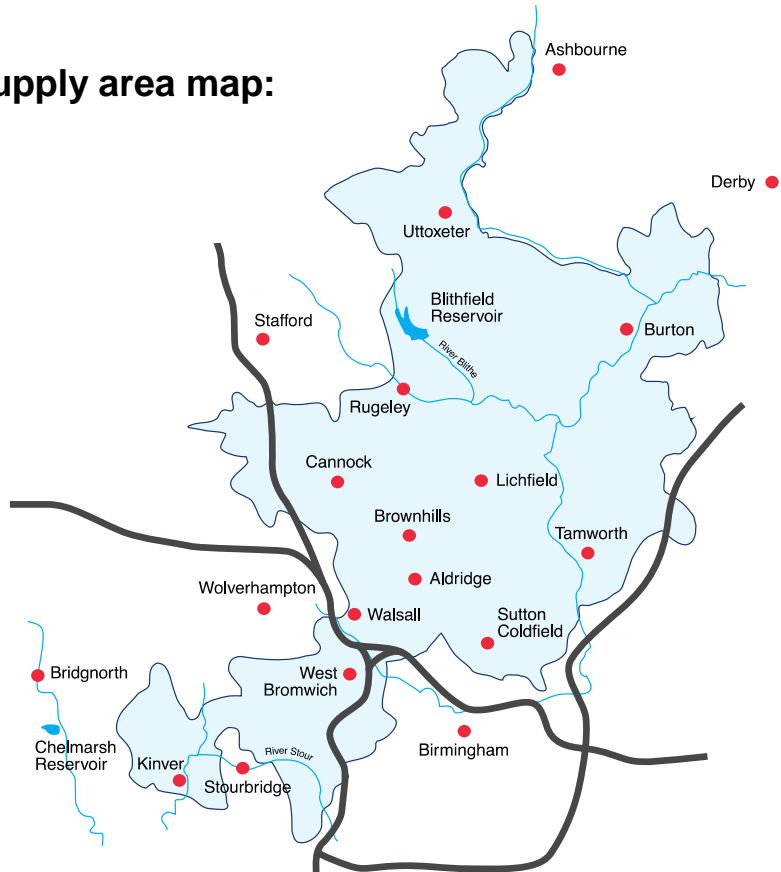
Email: waterregulations@cambridge-water.co.uk

Website: www.cambridge-water.co.uk

New Supply Application: <http://www.cambridge-water.co.uk/developers/get-connected>

Appendix 1

South Staffs Water supply area map:



Cambridge Water supply area map:



Appendix 2

Figure 1. Pipework Layout for Mains Fed Sprinkler Supply with Meter installed internally

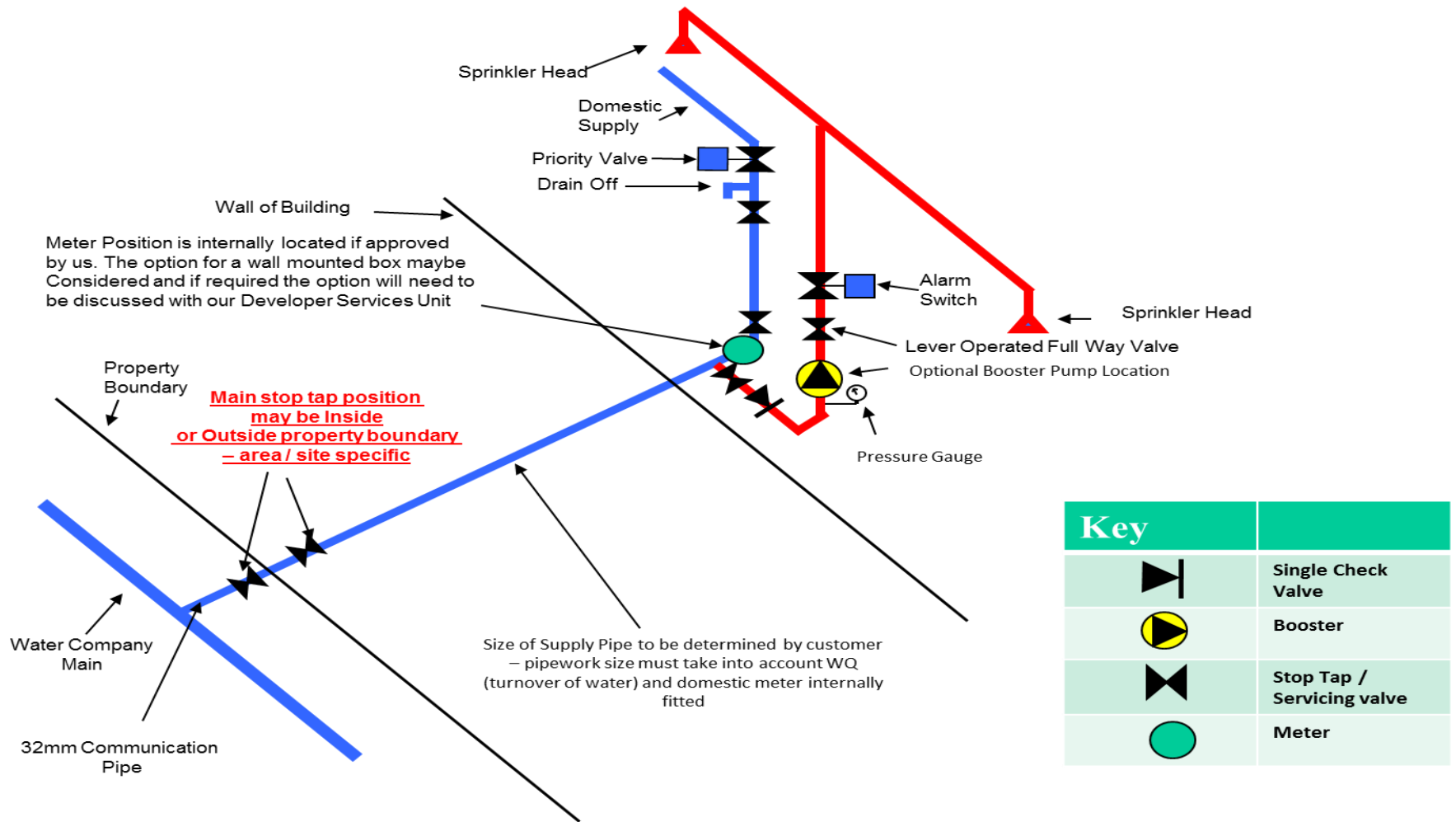


Figure 2 - Pipework Layout to a Storage & Boosted Sprinkler System

