

# Domestic fire sprinkler systems

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## Introduction

In 2011 Welsh Government introduced measures in Wales make it compulsory to install fire sprinklers to each new or converted dwelling. High risk properties such as care homes, boarding houses, hostels and halls of residence are required to be compliant by installing fire suppression systems, starting April 2014 with regulations extending to new and converted domestic dwellings in January 2016. Currently legislation for fire sprinklers in England has not been introduced, however, may form part of Local Authority Building Regulations, therefore, at the discretion of Local Authorities, developers and designers.

To accommodate legislation Hafren Dyfrdwy has introduced a policy which involves installing larger service connections to the mains network to assist with a higher flow demand. Hafren Dyfrdwy cannot guarantee pressures or flows, due to potential water supply interruptions and pressure/flow issues. Therefore, it will be the responsibility of system designers to ensure adequate and continuous flow to the sprinkler system. Hafren Dyfrdwy do not accept responsibility for fire system failures.

Please note: pumped systems fed directly from the mains network will require our approval.

## Hafren Dyfrdwy policy

Connection to the existing water mains, communication pipes and supply pipes for new domestic dwellings will be 32mm in diameter and applicable from April 2016. Developers / designers should make provisions for the same sized service pipe. Larger service connections for commercial or residential purposes will be scheme specific and can advise.

When the service pipe enters the property the supply will split after the indoor stop tap, one supply for domestic use will be internally metered the remaining supply for non-domestic use (fire sprinkler). Further information is available in our policy for Metering and Service Pipe connections.

## Charges

Hafren Dyfrdwy will not make any charge for water used for firefighting or testing purposes. Infrastructure charges will remain as the standard infrastructure charge.

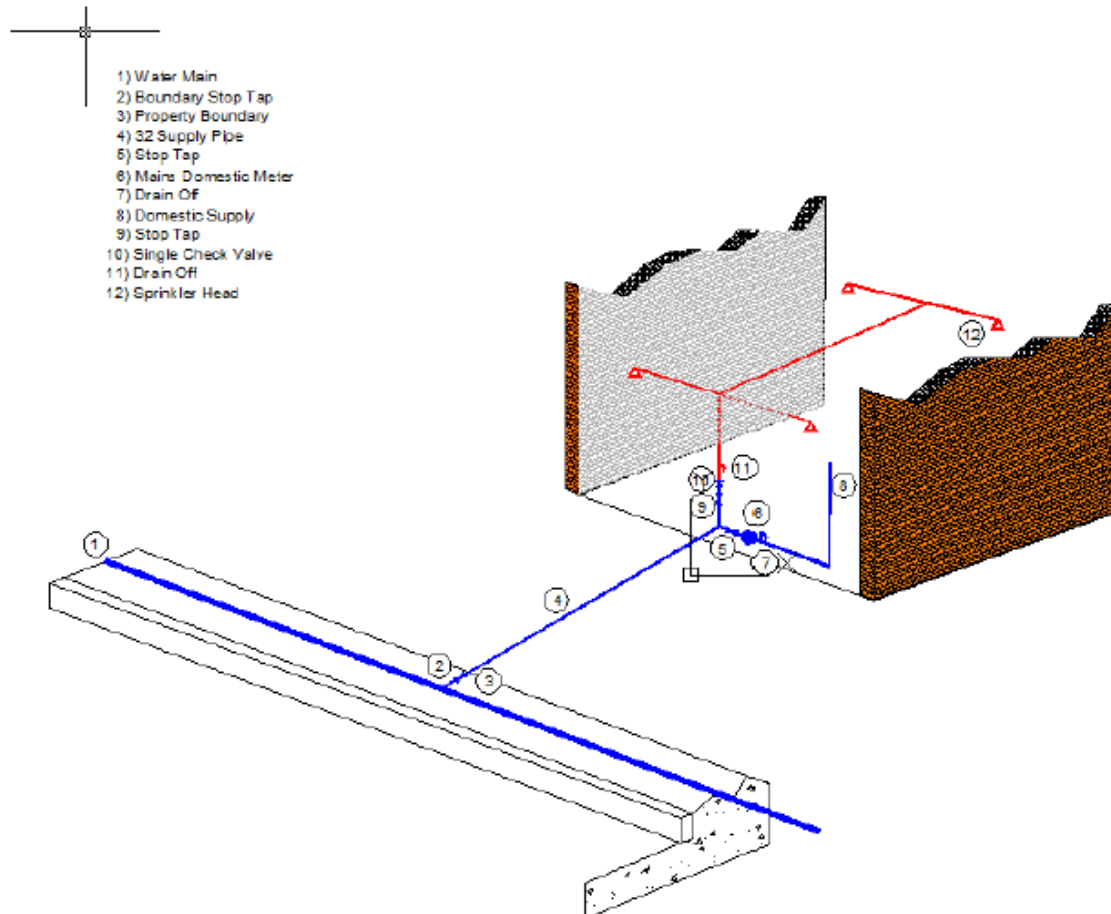
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# 1. Water supply options for domestic fire sprinklers

## Direct mains fed system

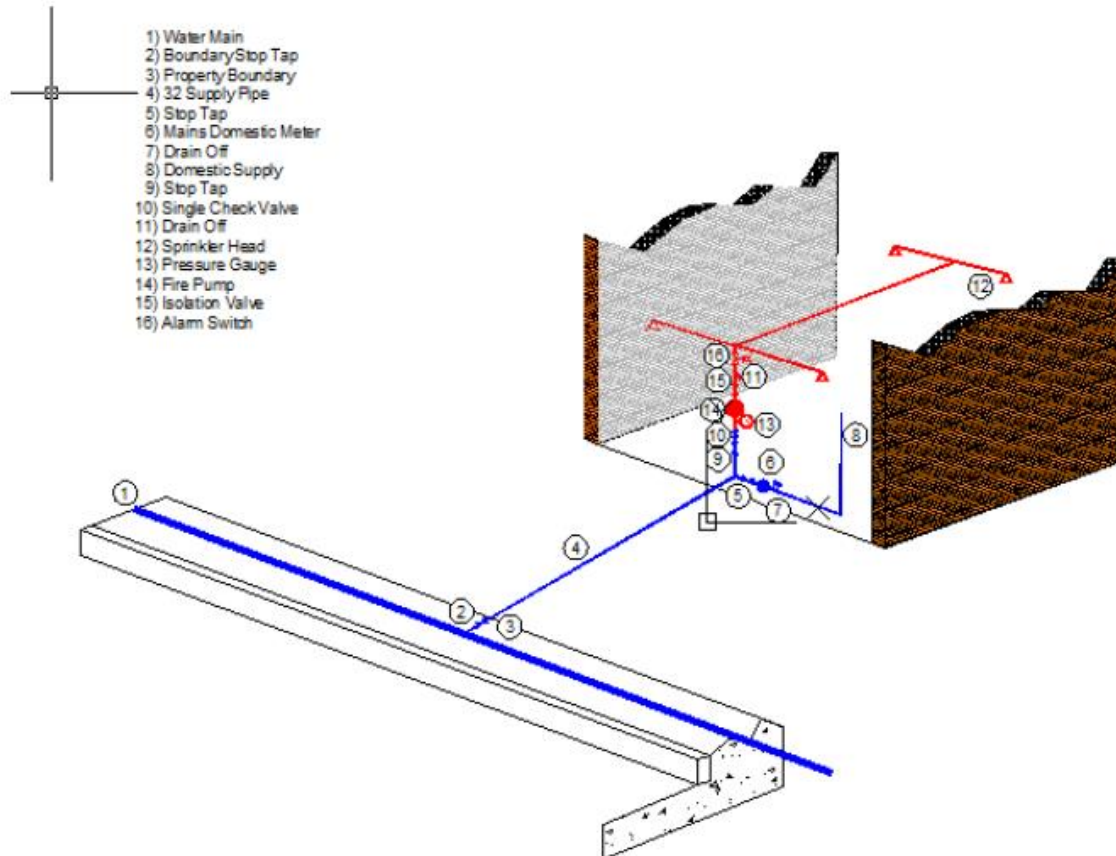
This system relies on mains pressure and where flow delivery is adequate to feed the sprinkler operating requirements directly.



## Direct boosted system

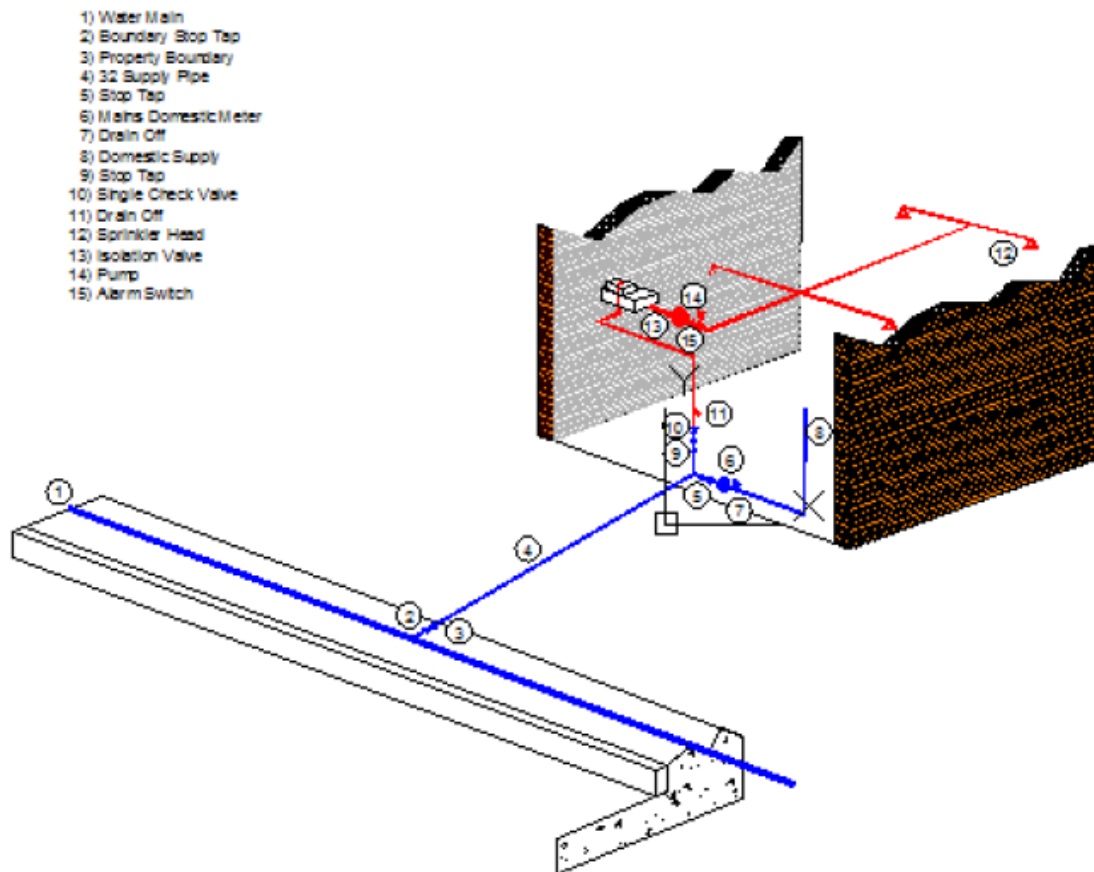
Pumped systems fed directly from the mains network will require approval from Hafren Dyfrdwy prior to installation.

This type of system can be fitted where there is inadequate flow and pressure to meet the system requirements. The booster pump may be installed in conjunction with a storage tank or directly fed from the water mains.



## Storage boosted system

This type of system relies upon a stored volume of water (a cistern) to meet the demands of the sprinkler system. All such storage cisterns must have appropriate backflow prevention arrangements at the inlet. The dedicated feed pipe from any storage cistern will usually feed a booster pump of an appropriate rating to meet the demand of the sprinkler system.



## 2. Provisions for the applicant/ installer

- Request a replacement or upgraded service pipe if domestic/residential sprinkler system is to be installed within an existing premise(s), and the existing service pipe is not able to deliver the required flow.
- Pay all connection charges before Hafren Dyfrdwy undertakes any work.
- Ensure that all water fittings are installed and used in compliance with the Water Supply (Water Fittings) Regulations 1999.
- Where a sprinkler system is not installed and certified by an approved contractor (as defined under Regulation 6, Water Supply (Water Fittings) Regulations 1999), arrange for an inspection of the water supply system before Hafren Dyfrdwy undertakes any connection tasks.
- Rectify, alter, or effectively remediate any non-compliant water fittings identified within any agreed timescale(s).
- Ensure the occupier is aware of their responsibilities regarding maintenance and testing of the domestic/residential sprinkler system.
- Ensure the domestic/residential sprinkler system is designed, installed and used in accordance with all current regulatory and nationally recognised standards or guidelines, BS 12845 or BS9251.
- The applicant/installer will:
  - Send in a completed application form giving details of the proposed supply arrangements for the domestic/residential sprinkler system.
  - Present a plan or diagram showing the proposed installation with the application form. This plan or diagram should include details, specifications or an associated schedule of water fittings that is proposed to be installed and used.
  - Use a single point of connection to Hafren Dyfrdwy's main for both domestic/residential sprinkler and domestic water supply systems.
  - Arrange for all internal and external pipe work and fittings to be installed by a 'competent' installer.
  - Ensure that all water fittings relating to the domestic/residential sprinkler system, including backflow prevention devices, and valves, remain within the property.

## 3. Provisions for Hafren Dyfrdwy

We will:

- Respond to enquiries regarding domestic/residential sprinkler system within 5 days of receipt.
- Respond to formal applications with connection charges and supporting information within our levels of service of 28 days of receiving completed application.
- Review and comment on formal applications giving consent, consent with conditions or refusing consent to install within our levels of service of 28 days of receiving completed application.
- Apply and enforce the Water Supply (Water Fittings) Regulations 1999 where sprinkler systems have been unlawfully installed.
- Undertake a planned inspection of the water supply system to ensure compliance with the Water Supply (Water Fittings) Regulations 1999.
- Choose to undertake an audit inspection where the sprinkler system has been installed and self certified by a nationally recognised approved contractor.
- Provide new service or upgrade to existing service within our levels of service of 21 days after payment of required charges and appropriate evidence of compliance with the Water Supply (Water Fittings) Regulations 1999 compliance has been confirmed.
- Install a controlling valve within the public highway which can be used for isolating both the domestic and fire sprinkler supplies if required.

## 4. Provisions for Hafren Dyfrdwy

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  
Fax: 01353 666619  
E-mail: [info@bafsa.org.uk](mailto:info@bafsa.org.uk)  
<https://www.bafsa.org.uk/>

The Fire Sprinkler Association  
Mill House  
Mill Lane  
Padworth  
Reading  
Berks  
RG7 4JX  
Tel: 0118 971 2322  
Fax: 0118 971 3015  
E-mail: [info@firesprinklers.org.uk](mailto:info@firesprinklers.org.uk)  
<http://www.firesprinklers.org.uk/>

Alternatively you can contact Developer Services by:  
Tel: 03306781481  
E-mail: [new.connections@hdcymru.co.uk](mailto:new.connections@hdcymru.co.uk)