

Dŵr Cymru Welsh Water - Domestic Fire Sprinklers Guidelines for Developers

And Frequently Asked Questions

1. Introduction

The Welsh Government has implemented the Domestic Fire Safety (Wales) Measure, which was passed by the National Assembly during February 2011. The following statement was issued:-

From April 2014, the regulations will apply to high-risk properties such as care homes, new and converted student halls of residence, boarding houses and certain hostels and from January 2016 to all new and converted houses and flats. This phasing will allow the house building industry to gain experience and skills, and gives the sector the opportunity to innovate and reduce the costs of installing sprinklers. The approach will continue to set Wales apart as a leader in promoting fire safety.

*Certain transitional arrangements are in force and you **may** not have to comply with the new law in January 2016 if you have Unconditional Building Regulation "Full Plans" approval notice dated before 1st January 2016 (or 30th April 2014 for 'high risk') or Approved Inspector Initial Notice or Initial Building Notice dated before 1st January 2016 (or 30th April 2014 for 'high risk') and construction starts on site before 1st January 2017 (or 30th April 2015 for 'high risk').*

2. Pressure and Flow

Dŵr Cymru Welsh Water is unable to provide any guarantee as to minimum pressures and flows in the distribution system due to a range of circumstances which are beyond our control (for example, low or temporarily reduced pressure or flow may be caused by high demands, bursts or leaking mains or leaks on private supply pipes).

3. Sprinkler System Design

Dŵr Cymru will be required to vet the proposed domestic fire sprinkler system design as part of our Water Regulations obligations to ensure that they meet the national requirements for the design, composition and maintenance of water fixtures and fittings. Our Water Regulations Officers will carry out an inspection of the internal pipe work for the fire sprinkler system. However please note that Dŵr Cymru does not design domestic fire sprinkler systems – the responsibility for design rests with developers, installers or domestic fire sprinkler system designers, and our Officers will not offer any view on the efficacy or appropriateness of any sprinkler system.

The fire sprinkler system should be in accordance with BS 9251:2014 (Fire Sprinkler Systems for Domestic and Residential Occupancies - Code of Practice).

4. Application for a Supply

A new water connection application form must be completed which should clearly state that a connection is required for both a domestic supply and a domestic fire sprinkler supply.

5. Single Buildings/Dwellings

A 32mm connection will be required to accommodate this request. This will be installed using a boundary box with a 32mm full flow plug.

6. Multi-occupancy Premises

a. Under 7 dwellings

Arrangements will be carried out in the same way as for single buildings/dwellings.

b. 7 or more dwellings

A separate fire main may need to be installed which may be supplied direct from mains or indirect from storage depending upon the developer's domestic water and fire sprinkler requirements. Numerous installation options may be required for premises of this nature and accordingly a site specific water supply connection arrangement will be provided.

7. Charges

The 32mm connection to include a domestic fire sprinkler supply will be metered. Currently we do not have a meter to accommodate a domestic supply and a domestic fire sprinkler supply. Water charges will be levied on an Assessed Measured Charge basis until a meter is fitted.

- *The assessed measured charge is based on the number of occupants and the assumption that 95% of the water is discharged to the sewer.*

This charge will remain in force until a meter is fitted to the 32mm supply. Once fitted, charges will be measured and charged on a consumption basis. We plan to install an internal open channel meter when one becomes available.

Water used by domestic fire sprinklers for firefighting will not incur charges. When the supply is metered, a rebate will be made for any water used for such purposes.

8. Frequently Asked Questions

Q. Can a pump be installed to the DCWW water main to boost water pressure for the fire supply?

A. Yes, following notification of the pump specification details and written approval from DCWW which will confirm compliance with the Water Supply (Water Fittings) Regulations 1991.

Q. Where is the check valve located?

A. The check valve must be located at the branch connection point of the fire sprinkler supply with the domestic water supply pipework to prevent backflow or back siphonage of any stagnant water into the domestic water supply or the DCWW water supply network.

Q. Whose responsibility is it to maintain the check valve?

A. Maintenance of the check valve is the responsibility of the owner of the system.

9. Further Information

Further information on domestic / residential fire sprinkler systems can be obtained from;

BAFSA (British Automatic Fire Sprinkler Association)

Richmond House

Broad Street

Ely

CB7 4AH

Tel 01353 659187

Fax 1353666619

Email info@bafsa.org.uk

Web 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

Email info@firesprinklers.org.uk

Web www.firesprinklers.org.uk

Alternatively, you can contact DCWW Developer Services

DCWW Developer Services

Linea

Fortran Road

St Mellons

Cardiff

CF3 0LT

Tel 0800 9172652

Email developer.services@Dŵrcymru.com