

# 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 1<sup>st</sup> January 2016 or Approved Inspector Initial Notice or Initial Building Notice dated before 1<sup>st</sup> January 2016 and construction starts on site before 1<sup>st</sup> January 2017.*

### 2. Fire Sprinkler System Design

The fire sprinkler system must be designed and installed in accordance with BS 9251:2014 (Fire Sprinkler Systems for Domestic and Residential Occupancies - Code of Practice) or BS 8458:2015 (Fixed Fire Protection Systems – Residential and Domestic Water mist Systems – Code of Practice for Design and Installation).

Please note that Dŵr Cymru Welsh Water does not design domestic fire sprinkler systems & accordingly the responsibility for design rests with developers, installers or domestic fire sprinkler system designers. Dwr Cymru Welsh Water will not offer any view on the efficiency, appropriateness or compliance of a fire sprinkler system in relation to any Building Control Regulations, British Standards or Codes of Practice.

Dŵr Cymru Welsh Water will be required to ensure that the proposed domestic fire sprinkler system is compliant with the Water Supply (Water Fittings) Regulations 1999 and accordingly we will undertake inspection of the fire sprinkler installation to ensure compliance with these regulations.

### 3. Water Supply Pressure/Flow

Dŵr Cymru Welsh Water is unable to provide any guarantee regarding pressures and flows in the water supply distribution system due to a range of circumstances which are beyond our control (for example, low or temporarily reduced pressure/flow may be caused by high customer demand, bursts or leaking mains/services and private supply pipes. Water supply networks are subject to fluctuating operational pressures and a minimum operational pressure of 1.5 Bar in accordance with regulatory Level of Service requirements which should be a consideration in the design of the fire sprinkler system.

### 4. Application for a Water Supply

A new water connection application form must be submitted which must clearly state if the proposed installation is for individual dwelling(s) or multiple dwellings –i.e. a communal fire sprinkler system.

### 5. Single Dwellings

A 32mm metered connection will be provided for each dwelling requiring a combined domestic water/fire sprinkler system.

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### 6. Residential Flats, Apartments and Multiple-Occupancy Premises.

Numerous options are available for fire sprinkler systems within premises of this nature dependent upon the proposed structural layout design of the premises – i.e. single unit or communal systems. Requests for water supply connections for dedicated fire sprinkler systems or combined domestic water/fire sprinkler systems greater than 63mm should be submitted using our application form for Large Diameter and Fire Sprinkler connections.

### 7. Metered Charges.

Water used by domestic fire sprinklers for firefighting purposes will not incur charges. A rebate will be made for any water used for such purposes. Water supply connections for dedicated fire sprinkler systems will not be metered.

### Frequently Asked Questions

**Q.** Can a private pump be incorporated within the fire sprinkler system to boost water pressure for the fire supply?

**A.** Yes, subject to 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 within a maximum of 100mm of the branch connection point of the fire sprinkler supply with the domestic water supply pipework to prevent backflow or backsiphonage 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.

### 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](mailto:info@bafsa.org.uk)  
Web [www.bafsa.org.uk](http://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](mailto:info@firesprinklers.org.uk)  
Web [www.firesprinklers.org.uk](http://www.firesprinklers.org.uk)