

British Automatic Fire Sprinkler Association

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Welsh Government Sprinkler Pilot Project

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Protecting people, property and the environment

The Domestic Fire Safety (Wales) Measure 2011

- The Measure requires the provision of automatic fire suppression systems (such as a fire sprinkler system) compulsory in all new and converted 'residential' properties and enables Welsh Ministers to introduce regulations setting out the requirements for such systems.



Background

- The 'frame-work' legislation was passed in Feb 2011
- However, further regulations were required to bring the 'Measure' into operation
- Jan 2012 Building Regulations were devolved to Wales

Background

- October 2012:** Domestic Fire Safety Measure Working Group established to advise Welsh Government
- October & November 2012, February & March 2013:** Working Group Meetings
- March – June 2013:** Public consultation
- 22nd October 2013:** New regulations before National Assembly, voted on and Commencement Order No 1 issued

Implementing the Domestic Fire Safety (Wales) Measure 2011

30 April 2014:

- for care homes (as defined in the Care Standards Act 2000), children's residential homes, hospices, halls of residence, boarding houses and hostels other than hostels intended for temporary accommodation for leisure purposes.

1 January 2016:

- for houses and flats (including sheltered houses and sheltered flats).

Welsh Cost Benefit Analysis

Assumptions:

- The value of a statistical life used is £1,620,000, and for a fire injury is £19,960

Note:

- In USA the figure is x 3!
- In Norway x 2!

Welsh Cost Benefit Analysis

Assumptions:

- Cost of installing sprinklers £3,075 per house, and £879 per flat. Annual maintenance costs £96 per house/flat
- However, this assumes that a stored water supply will be necessary i.e. a tank and pump

But this may not always be the case –
especially for ‘new build’ properties!

The scope of the new regulations

- The regulations will apply to new and converted:
 - Houses (including sheltered houses and shared houses);
 - Flats (including sheltered flats);
 - Care homes (as defined in Care Standards Act 2000);
 - Children’s residential homes (which might be organised as a single household);
 - Hospices;
 - Boarding houses;
 - Residential colleges and educational halls of residence;
 - Hostels other than hostels intended for temporary accommodation.

Houses in Multiple Occupation (HMOs)?

The scope of the new regulations

- The regulations do **not** apply to:
 - Hospitals;
 - Schools;
 - Hotels.

The new regulations will **not** apply to prisons or to residential caravans.

The scope of the new regulations

- The new regulations will apply when:
 - New building work creates a new residence or residences;
 - A change of use occurs to convert an existing building into a new residence or residences.
 - But they will not apply to premises when structural alterations or refurbishment is being carried out.

New Approved Documents 'B'



- New 'Welsh' Approved Document B Vol 2 issued. This replaces the 2006 edition (incorporating the 2010 amendments) and will only be applicable in Wales.
- Prior to January 2016 new Volumes' 1 & 2 to be issued.
- These documents broadly follow the current 'England & Wales' documents but reflect the changes brought about by the new regulations.
- This is NOT a re-write of the Approved Documents!

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Sprinkler Standards

- Approved Documents to refer to BS 9251 as being the main standard;
- Where residences fall outside the scope of BS 9251 then the relevant standard will be BS EN 12845;
- However, the guidance will retain the flexibility to refer in the future to other full British Standards or other appropriate technical standards for other fire suppression systems.

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Pilot Programme

- ❑ Minister for Housing and Regeneration Carl Sargeant announced a Welsh Government funded pilot programme for the design and installation of fire sprinklers in social housing
- ❑ Scope of the project is to undertake research to monitor and record the learning experiences in relation to the design and installation of sprinkler systems including the water supply.
- ❑ First in depth study of its kind covering the range of properties and sites
- ❑ Minister wants a comprehensive insight into the whole process of installing sprinkler systems in Wales

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Pilot Programme

- ❑ Over 175 installations, with a mix of development scale, development type and geography
- ❑ Involves 8 Registered Social landlords (RSL's) and 1 private major house builder
- ❑ 12 schemes in 10 local authority areas in Wales



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Taylor Wimpey - Newport

Pilot Programme

BRE as consultants to the Welsh Government prepared a detailed monitoring strategy that covers:

- Design and installation
- Costs and cost savings
- Water supply issues
- Application of statutory guidance
- Experience of key stakeholders, including the Building Control Body
- Building Control bodies treating pilot study as “live projects”

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Pilot Programme

BRE monitoring commenced in December 2014, includes on site inspections, interviews, on line questionnaires

- First project commenced on site January 2015
- An interim report will be published autumn 2015
- Final report will be published in spring 2016

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Findings to date?

- Varying costs
- Project management - early involvement with sprinkler designer and other service installation designers to prevent installation problems
- Communication – key with all stakeholders
- Water authority – cross communication has led to increased costs and wrong specification, so early engagement is essential
- Installations are quick if all communication is good

Findings to date?

- Low number of registered domestic sprinkler installers in Wales
- Creating innovation i.e. mains pumps
- No issues with supply of materials
- New BS 9251: 2014 standard used for all schemes
- Schemes are mostly direct mains or 'booster' pump apart from some flats which are communal tank and pump

Training

- ❑ BAFSA recently announced a recognised qualification in the installation of fire sprinklers (Swansea and Manchester)
- ❑ Neath Port Talbot College has commenced an up-skilling training scheme for plumbers for the installation of domestic automatic fire sprinklers
- ❑ Training available for Building Control Surveyors and other interested parties (1 day course on installation and inspection, will include workshop practical session)
- ❑ Following the completion of the Pilot Study events BRE and the Welsh Government will be undertaking feedback events in North and South Wales

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QUESTIONS?

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