



**THE CHIEF  
FIRE OFFICERS  
ASSOCIATION**

The professional voice of the  
UK fire and rescue service

9-11 Pebble Close  
Amington, Tamworth  
Staffordshire  
B77 4RD

Telephone +44 (0)1827 302300  
Fax +44 (0)1827 302399  
[www.cfoa.org.uk](http://www.cfoa.org.uk)

DFS 9

## Legislation Committee No.1

### Response to the consultation on the Proposed Domestic Fire Safety (Wales) Measure

Chief Fire Officers Association

Claire Griffiths  
Deputy Committee Clerk  
Legislation Office  
National Assembly for Wales  
Cardiff Bay  
CF99 1NA

19<sup>th</sup> August 2010

Dear Claire,

#### **Re - Response from the Chief Fire Officers Association on the Proposed Domestic Fire Safety (Wales) Measure**

- The Chief Fire Officers Association is the professional voice of the UK Fire and Rescue Services covering all Fire and Rescue Services within the United Kingdom.
- Membership of the Chief Fire Officers Association includes Chief Fire Officers and Senior Management teams from across all UK Fire and Rescue Services.
- The Chief Fire Officers Association is pleased to provide full support for the proposed measure by Ann Jones on domestic fire safety.
- The Chief Fire Officers Association believe that this measure, if adopted in Wales, will significantly reduce the loss of life and incidents of serious injury caused by fires in the home in Wales; support sustainability in the home and in the community; support all Welsh Assembly environmental friendly policies and practices; save millions of pounds for the economy of Wales.

This response will now deal with the consultation questions in order.

- 1      *Is there a need for proposed Measure to deliver the aim of reducing the incidence of death and injury from fires in newly created residences in Wales?***

Yes

- 2      *Do you think the key provisions within the proposed Measure will help deliver the above aim?***

Yes

***In answer to (a) to (e)***

CFOA are content that the sections contained in the Explanatory Memorandum provided alongside this measure, explain satisfactorily the issues that you raise in your questions.

**3      *What are the practical implications of the proposed Measure, in particular do you think there are any potential barriers to implementing the provisions contained in the proposed Measure?***

CFOA believe there are many myths that surround sprinkler systems, in general people do not understand how a sprinkler system works and indeed how safe they are from being activated accidentally. CFOA is content that section 3.19 of the Explanatory Memorandum gives a broad explanation of how a sprinkler system operates, but do advise that there would need to be some form of education process for house builders and potential house purchasers and other people that would benefit from this measure so that this opportunity does not act as a barrier.

**4      *What are the financial implications of the proposed Measure, if any?***

The capital cost of installing sprinklers would initially increase the cost of building and supplying, however, this cost would drop significantly as sprinklers become more common place and indeed competition enters the market place for the supply and installation of these systems.

Maintenance costs which at the moment vary are also likely to drop as it would become far more economically viable to maintain sprinklers by companies when surveying multiple residences due to increased use.

Water companies may act as a barrier in that the provision of water to the sprinkler system and their services could be provided more economically.

**5      *Additional Comments***

Sprinklers have been incorporated in buildings for some considerable time and were originally seen and developed as a means of reducing fire losses to property and contents. Over recent years there has been a growing recognition of their use as a means of contributing to life safety which is now recognised in current UK guidance to the Building Regulations<sup>1</sup>.

Evidence gathered worldwide shows that while sprinklers are primarily intended to contain or control fires, in a number of cases people in the room of origin of a fire have survived as a result of the effectiveness of the sprinkler system. There are no cases on record where multiple fire deaths have occurred in buildings with working sprinkler systems. The evidence also shows that no lives have been lost in the UK due to fire in buildings fitted with domestic sprinkler systems.

Firefighters often use 10 times more water from hoses to do the same job as a sprinkler does alone. Moreover, where a sprinkler system has been installed:

- I. Fire deaths have been almost eliminated
- II. Fire injuries reduced by 80%
- III. Significant improvement in firefighter safety achieved
- IV. Property damage reduced by over 80%

The average time taken for the fire and rescue service to reach an incident and be in a position to intervene is 10 minutes. Most people will have succumbed to the effects of fire within the first five minutes; a sprinkler will activate within the first three minutes and have the fire controlled by the fifth minute.

---

<sup>1</sup> Department for Communities and Local Government, Approved Document B (Fire safety) – Volume 1: Dwelling houses (2006 Edition)  
<http://www.planningportal.gov.uk/england/professionals/en/1115314683674.html>

Smoke damage is a major cause of loss in fires. In serious cases smoke is the main cause of death. Sprinklers wash the larger particles out of smoke reducing its density and toxicity. In addition the water cools the smoke making it less harmful.

The elderly in society are recognised as being at greater risk from fire than others. Consequently, as the population ages, as it will to unprecedented levels in the coming years, levels of vulnerability will also increase and the current approaches to reducing risk of death and injury will become less effective than they have been to date. In addition, care in the community is likely to be an ongoing public policy position, simply because the nation will not be able to afford to accommodate increasing numbers of elderly and infirm people in residential care or nursing homes, where the need for sprinklers has been recommended. Consequently, individual private dwellings will need to have enhanced levels of protection if we are going to prevent significant increases in the numbers of fire related casualties occurring in the future.

In other parts of the world where the fitting of fire sprinkler systems has become a statutory requirement there have been dramatic reductions in the number of deaths caused by domestic fires. For example in the city of Vancouver where byelaws have been introduced, in 1972-1974 the number of deaths per 100,000 population was just under 7 per year. By the period 1992-1998 the number of deaths per 100,000 population had fallen to 0.6, as a result of the mandatory sprinkler regulations<sup>2</sup>.

If you require any further information, please do not hesitate to contact Chris Enness.

Yours sincerely

Chris Enness

---

<sup>2</sup> Building Research Establishment, Effectiveness of sprinklers in residential premises, February 2004  
[http://www.bre.co.uk/filelibrary/pdf/rpts/partb/sprinkler\\_section3.pdf](http://www.bre.co.uk/filelibrary/pdf/rpts/partb/sprinkler_section3.pdf)