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CHIEF KEVIN C. ROBINSON
CHAIRMAN

July 1, 2014

Brian Gale, Chairman
Board of Building Regulations and Standards
One Ashburton Place, Room 1301
Boston, Massachusetts 02108

Re: Comments on Draft White Paper Titled “The Cost and Effectiveness for Health, Safety, and Security of Fire Alarm Systems and Fire Sprinkler Systems in 3 to 6 Unit Residential Buildings

Dear Chairman Gale:

I am writing to you as Chairman of the Massachusetts Board of Fire Prevention Regulations (“BFPR”) in reference to the above stated draft white paper to convey the concerns of this Board, as expressed and confirmed by unanimous vote at its June 5, 2014 meeting.

The BFPR has the sole statutory authority to promulgate a comprehensive Massachusetts statewide fire safety code. The BFPR, which consists of 14 members, 13 of which are appointed by the Governor, represents a diverse and broad range of disciplines which focus on matters relating to fire safety and fire prevention.

Although the BFPR doesn’t typically make public comment on such matters, the Board determined that this draft document and its potential regressive impact on the prevention of fires and the safety of the residents of the Commonwealth was too great to ignore. We believe for us to remain silent, would be a disservice to the population we are sworn to serve. This Board takes issue with the overall conclusions of the document that essentially blames the deficit in Massachusetts of 3 to 6 unit residential buildings on costs associated with fire protection systems. While we understand the balance between cost and benefits, we believe the draft document falls woefully short of a full and impartial consideration of all the life safety and property conservation benefits of fire protection systems, including the indirect benefits of early detection and suppression of fire.

Some of these benefits are outlined in the response comments submitted by James Shannon, President and CEO of the National Fire Protection Association which states, in part:

- *“Sprinkler system operation. The white paper (p.9) states that a sprinkler system “spreads water over the flame, which attenuates, but not necessarily extinguishes the fire.” The report fails to describe the results and benefits of fire sprinkler activation, which include the following:”*
- *“The fire is typically controlled or extinguished by the activation of one or two heads. Fire, smoke and water damage is minimized, and the building is often restored to full use within just a few hours.”*
- *“In the absence of a fire sprinkler system, the fire grows in intensity until the arrival of the fire department. The fire department initially applies water to the area of the fire at a rate of 100 to 150 gallons per minute, while a residential sprinkler head applies water directly on the fire at a rate of 18 to 25 gallons per minute.”*
- *“Most importantly, occupants can safely escape the building because the fire has been controlled during its earliest stages.”*
- *“Based on 2006-2010 structure fires reported to U.S. municipal fire departments, when compared to structure fires in homes with no automatic extinguishing equipment present, analysis of home structure fires with wet pipe sprinklers showed:”*
- *“An **83%** reduction in **civilian deaths** per 1,000 home structure fires (from 7.3 to 1.3 deaths per 1,000 fires) and”*
- *“A **69%** reduction in **property damage** per 1,000 home structure fires (from \$20 thousand per 1,000 fires to \$6 thousand per 1,000 fires)”*

“These benefits can and should be included in the white paper”

The draft white paper totally ignores the many indirect benefits to early detection and suppression. Besides the obvious preservation of human life, the cost savings realized by early detection and suppression including reduced medical costs, reduced property loss, reduced loss of housing due to fire, and the safety of our Commonwealth’s firefighters. When fully considered, the cost of detection and suppression systems in residential housing is small as compared to the costs associated with the catastrophic effects of fire.

Of particular note is section 7 of the draft entitled “Property Loss Due to Fires in MA.” This has been marked as “reserved” and offers no information. Clearly the document is incomplete and misleading without the consideration of property loss due to fire, and ignores significant benefits of early detection and suppression of fires as provided by the subject systems in minimizing property losses.

The BFPR supports the position stated by State Fire Marshal Stephen D. Coan and Kevin A. Gallagher from the Fire Chief’s Association of Massachusetts in their April 3, 2014 comments to the draft white paper, which states in part:

“It is inaccurate and misleading to state or imply that other strategies can achieve comparably large fire safety benefits at lower cost. Section 6 is a collection of statistics on fatal fires and their victims. However, none of these statistics have any direct implications for the question of whether any particular safety strategy is effective or cost-effective.”

“The report states that there are options to produce less costly but equally safe homes when the body of the report contains no detailed descriptions of any such alternatives, let alone evidence that they produce equal safety. In fact, there is a considerable body of evaluative evidence on alternative safety programs and requirements. However, none of them deliver such safety benefits comparable in magnitude to sprinklers, and many of them are not within the scope of the BBRS to implement in any case. “

In conclusion, the BFPR applauds the efforts of the BBRS Staff in continuing to review and update current building regulations to ensure the safety of our residents. However, it is our unanimous position that this draft white paper, as it exists today is incomplete, misleading and could have long term adverse effects on the safety of the public we are all sworn to serve. We urge the BBRS to not publish this document in its current form, as its conclusions are contrary to the national trend and would result in the Commonwealth taking a significant retreat from a proven and time tested method to reduce loss of life, property, and danger to responding firefighters in the event of a fire.

Very truly yours,



Kevin C. Robinson, Chairman
Board of Fire Prevention Regulations

KCR/ml

CC: The Honorable, Governor Deval Patrick
The Honorable James E. Timilty, Chairman, Joint Committee on Public Safety and Homeland Security
The Honorable Harold P. Naughton, Jr., Chairman, Joint Committee on Public Safety and Homeland Security
Andrea J. Cabral, Secretary, Executive Office of Public Safety and Security
Thomas Gatzunis, Commissioner, Department of Public Safety
Robert M. Carasitti, P.E., Chair FPPF Committee
Chief John J. Grant Jr., President, Fire Chief’s Association of Massachusetts