

July 8, 2011

Mr. Mike Guigli  
Technical Director  
Massachusetts Department of Public Safety  
Board of Building Regulations and Standards  
One Ashburton Place, 13<sup>th</sup> Floor, Room 1301  
Boston, MA 02108

Re: IRC 2008 Edition, Section R313, Automatic Fire Sprinkler Systems

Dear Mike,

I would like to take a few minutes of your time to comment on the recent adoption of the IRC building codes by the state of Massachusetts and the upcoming public hearing regarding the proposed amendments. As you know, the issue of residential fire sprinkler systems has been discussed for many years, with strong arguments in favor and against, by well-intentioned interested parties.

While evaluating the issue, I found it helpful to understand the number of residential fire/smoke related deaths. According to various resources, this number is somewhere between 2,500 to 3,500 deaths per year in the United States. (In comparison, motor vehicles account for about 60,000 deaths; accidental falls for about 13,000 deaths; and drowning for about 4,000 deaths per year in this country.) These numbers, while not insignificant, remain low in relation to causes of death that have attracted less attention and debate. This leads me to believe there are other factors behind the hard push to make residential sprinklers mandatory in new construction.

Recognizing that “seconds save lives,” current building codes have been updated with occupant evacuation time as the focus, requiring the installation of smoke detectors inside bedrooms and outside of sleeping areas, combination carbon/smoke detectors on each living level, and heat detectors in garages and mechanical areas. These additions have proven beneficial and life-saving, as well as being relatively simple and inexpensive for homeowners to install.

A few years ago, while looking into residential sprinklers for a potential town-home project, we ran into a number of deterrents that ultimately resulted in us changing our design to avoid the installation. Some of these issues included:

- Local requirements for installation vary among town departments; for example, separately metered water service for sprinklers, as required by local water departments, falls under Board of Health jurisdiction.
- Additional precautions are needed for the installation of “wet” systems in cold months, particularly for empty-nester homeowners who are away during the winter.
- We found no real insurance discounts for sprinkler installation.
- Specialized installation requirements limit pricing competition; actual costs for installation from various quotes ran in the \$4-\$6/sf range (versus the commonly cited \$1-\$2 range).
- Twice-yearly testing of the sprinkler system, as mandated by town water department, would cost each household \$150 per test.

In light of building code revisions and increased use of smoke and carbon detectors, I believe that proposed residential sprinkler requirements are more property-saving than life-saving. Regardless, I would propose that any adoption of a residential sprinkler code resolve some of the above issues by: keeping codes consistent and uniform across town lines; authorizing any licensed plumber to install sprinklers in residential units up to four attached; and allowing the sprinkler water service to be drawn from the house side of the potable water supply, taking appropriate safety measures as outlined in NFPA 13D.

Thank you for allowing public comments and input on this issue.

Sincerely,

Rick Maranhas