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Memorandum

To: All Members of the House of Representatives

From: Lou Biacchi, Director of Government Affairs

Subject: Information regarding sprinklers

Date: June 8, 2009

I'm writing today to provide you with information regarding residential fire sprinklers in Pennsylvania. Included with this memo is a copy of PBA's "Sprinkler and UCC in PA" paper, giving details on why we do not believe sprinklers should be mandated in Pennsylvania.

PBA, in coordination with the Pennsylvania State Association of Township Supervisors, is drafting legislation which addresses our members' serious concern over this proposed mandate. I will continue to keep you informed on this issue.

Please contact me at 979-8321 if you have any questions.

Action necessary by General Assembly on fire sprinklers: Model and state building code processes are flawed

Introduction

The Uniform Construction Code Act was enacted by the General Assembly in 1999 to establish a consistent building code and regulations throughout the commonwealth. As currently approved by the model residential building code development governing body – the International Code Council – fire sprinklers will be required by January 1, 2010 in all new townhouses, and by 2011 in all new single-family and duplex homes built in Pennsylvania. Several groups have raised concerns about these new sprinkler requirements, including serious questions about flaws in the processes by which sprinklers were approved for inclusion in the state's Uniform Construction Code. This paper examines the shortcomings of those processes.

The sprinkler vote on the model building code

During building code hearings in September 2008, the International Code Council reviewed hundreds of proposed code changes, as they do regularly. One dramatic change that resulted is that the 2009 International Residential Code (IRC) will require sprinklers in new townhomes, and one- and two-family residences, as of January 1, 2010 and January 1, 2011, respectively. In contrast, in the 2006 IRC, residential sprinkler system provisions were located in Appendix P, as an *option* for communities that wanted to require them. Yet, when presented with this option, less than .5 percent of Pennsylvania's 2,562 local municipalities have ever opted to require fire sprinklers in new residential construction – a telling statistic.

Abusing the traditional code development process

The ICC process of adopting code changes drew criticism in September 2008 during the final action hearings following obvious irregularities in the voting process.

Construction and safety experts participating in the ICC code development process meet twice every three years to consider and vote on proposals to update the code. During the day of Saturday, September 20, the vote counts for code changes being considered varied from 140 to 220 total votes cast. Saturday evening, however, saw the arrival of hundreds of fire services representatives at the ICC registration desk, and that pattern continued into Sunday morning. By the time sprinkler code mandates were heard (RB-64 and RB-66), the total vote counts were 1,752 and 1,690, respectively. Following a lunch break and the exodus of the participants representing fire services, the total vote count on changes being considered returned to under 250.

This influx of voters, conveniently arriving at the hearings just in time for the fire sprinkler votes, was orchestrated for the sole purpose of mandating fire sprinklers, a clear divergence from the thoughtful and methodical process used by experts to debate code changes in the past.

Many of the additional voters were provided travel and lodging funding by interested third parties, including the sprinkler industry, which expects a \$3 billion dollar jump in annual revenue if this code provision is put in place nationwide.

The mass participation of fire service personnel in the two key votes regarding mandatory fire sprinklers was effective in delivering a two-thirds majority vote needed by sprinkler advocates. This two-thirds majority was required to override the prior IRC Building and Energy Code Development Committee vote that had previously determined sprinklers should remain an *option* for municipalities under Appendix P of the code. In essence, the decision over sprinklers was taken out of the hands of construction experts to be dictated by special interests, a development that runs counter to the underlying philosophy guiding the work of the ICC.

ICC voter eligibility questioned

Upon review after the September codes hearing, it became clear the ICC failed to properly verify the eligibility of many of the voters. A review of records from the Pennsylvania Department of State showed that 24 percent of Pennsylvania registered ICC-member voting representatives were, in fact, ineligible to vote by not meeting the requirements of the ICC bylaws. It appears this was the case nationwide and may have proved the difference in the outcome of these votes.

The controversy surrounding these particular code changes is still being investigated by the ICC and others. There is compelling evidence that special interests dictated the outcome of these code changes, which will allow some of these special interests to reap millions, if not billions, of dollars in revenues due to this revision to the code. Although an appeal filed to the ICC by the National Association of Home Builders has been rejected, the ICC, in response, has formed a task force to address these shortcomings and has proposed policy and bylaw changes to protect the integrity of the process. Unfortunately, these remedies come too late to undo the vote to mandate sprinklers.

The sprinkler vote in Pennsylvania

In years past, Pennsylvania has automatically adopted the ICC's new version of the residential construction code as written by the model code development body. This process, however, proved ineffective. Some provisions included in the model building code in years past were deemed inappropriate for use in Pennsylvania. A recent example is a requirement for anchor bolts deemed appropriate only for states with severe weather conditions and subsequently struck from Pennsylvania's UCC by the state legislature. In fact, other instances like this one led the General Assembly to amend the state's building code by legislation nine times in six years. A better process had to be found.

New in 2009, an opportunity was provided to exclude new or revised ICC building code provisions deemed inappropriate for use in Pennsylvania by a newly formed UCC Review and Advisory Council. This council was charged with reviewing ICC code

updates and making recommendations to the state's Department of Labor and Industry on the reasonableness of those code changes for application in the commonwealth. The council was given the authority to exclude proposed ICC code provisions from the state's UCC based upon:

- Their potential impact on the public health, safety and welfare;
- Their economic reasonableness and financial impact;
- Their technical feasibility; and
- Other provisions contained in section 102 of the state's UCC.

The council was given this responsibility by the state legislature to ensure that codes ill suited for Pennsylvania would not be blindly incorporated into the state's building code. It was fully expected that the council would not simply rubber stamp the ICC model building codes for use in Pennsylvania.

Unfortunately, the initial meetings of the council suggest it is not functioning as was intended by legislators. Also, the council was hindered by the short timeframe available for discussion of code issues before its report was due to the Department of Labor and Industry. The council had weekly meetings in April, with a requirement that its review of all new or revised 2009 ICC code provisions be completed by May 1. This condensed meeting schedule worked against a thorough understanding of the council's charge and led to rushed deliberations for such a complex assignment.

Resistance to question ICC code provisions

During the April meetings of the council, the Pennsylvania Builders Association offered 17 recommended exclusions of new building code provisions as defined by the ICC but deemed inappropriate for Pennsylvania. Not a single one of these recommendations was accepted by the council. In fact, a total of 24 code exclusions were proposed to the council by various parties, and none were accepted. As the council proceedings progressed, it became apparent a majority of council members interpreted their responsibility as protecting the integrity of the ICC code standards rather than reviewing their reasonableness for use in Pennsylvania, as directed by the legislature.

The decision on mandated vs. optional sprinklers

This situation became especially apparent during the debate over mandated fire sprinklers in new residential construction. Testimony was heard from a number of interested parties throughout a day-long meeting on April 22. Backed by documented scientific evidence, several groups raised concerns about the reasonableness of fire sprinklers for use in Pennsylvania, including such points as:

- A National Fire Protection Association study from January 2008 titled "Home Smoke Alarms" determined that residents have a 99.45 percent chance of surviving a reported house fire when working smoke alarms are present. Confirming this statistic, the National Association of Home Builders reviewed fire fatality data specific to Pennsylvania and found that a home's occupants have a 99.7 percent chance of surviving a fire in residential structures with operating smoke alarms.

- The installation and annual maintenance of sprinklers will significantly drive up the cost of new homes and townhomes – even more so in rural areas relying on well water and not public water systems. Almost one-third (nearly a million) of Pennsylvania's residents who live in single-family homes in rural areas rely on private water wells.
- Some Pennsylvania townships without public water, like Longswamp Township in northern Berks County, are already expressing their concerns about the feasibility of sprinkler in their localities and whether they will meet necessary flow requirements as they deal with issues like well moratoriums due to contamination and low water tables.
- In an August 2006 survey, when people were asked if fire sprinklers should be required in new homes, 89 percent said that smoke alarms already do an adequate job of protecting them in their homes.

Despite these rational arguments, and others, the clear resistance on the council to consider excluding new ICC model building code provisions played heavily into the final council vote to keep mandated fire sprinklers in the state's UCC for 2010. This decision, and others, by the council indicate it is not fulfilling the role intended by the state's legislature to ensure that only ICC model code provisions that are appropriate for application in Pennsylvania be incorporated into the state's building code.

Additionally, it's worth noting that the final vote to include mandated sprinklers in the state's Uniform Construction Code revealed a split reflecting different perspectives on the consumer impact of this decision. Voting in opposition to mandated sprinklers on behalf of consumers, who will ultimately pay for them, were representatives of the building and remodeling industries, modular and manufactured housing, municipal governments, boroughs, third-class cities, and a building code official. Those voting to mandate fire sprinklers were architects, engineers, other code officials, and a city of Philadelphia representative. This divergence among council members also led to parliamentary maneuvering to keep some local government representatives from voting because they were participating in an April 22 meeting by phone rather than in person. The following week they attended the council meeting in person to ensure their votes would be counted, but mandated sprinklers were still approved.

Conclusion

Mandating fire sprinklers in all one-and-two family homes and townhomes built in Pennsylvania is excessive, and PBA believes the installation of residential fire sprinklers should remain a *consumer choice*. These code changes should be excluded from adoption in Pennsylvania for the following reasons:

The economic reasonableness of residential sprinklers is not apparent. Fire sprinklers add thousands of dollars to the cost of building a home. Sprinklers require on-going maintenance that is burdensome and expensive to the home owner.

There are still too many technical issues surrounding the feasibility of fire sprinklers in Pennsylvania. One-third of homes in Pennsylvania are currently on private wells, which often struggle to provide adequate volume and pressure for normal domestic uses in a home, let alone a sprinkler system. Furthermore, rural municipalities not on public water are extremely concerned about how they will meet the flow requirements.

The IRC already addresses the public's health, safety and welfare without the need to include sprinkler mandates. It has numerous provisions in the code that have a proven track record of significantly reducing fire-related injuries and deaths. Fire deaths have declined 58 percent from 1979 to 2003 due to these fire-protection features. Furthermore, *89 percent of consumers* said that smoke detectors already do an adequate job of protecting them in their homes.

Placing a code requirement on installing sprinklers in new home construction simply does not address the real threat of home fires – older, existing housing stock. Studies show that the vast majority of home fires occur in older homes that were built under much less stringent codes or no codes at all. Far more lives would be saved by educating citizens on the real life-saving benefits of having working smoke alarms in their homes.

Finally, mandated sprinkler requirements do not meet the purpose of the Uniform Construction Code as a reasonable minimum standard to provide for public health, safety and welfare. It is estimated that the cost per life saved by requiring sprinkler systems in new homes is an astonishing \$83.5 million. There is a finite amount of financial resources available. We must use them most wisely.

For all these reasons, PBA and other interested parties contend that fire sprinklers are best made available as a *consumer option*. However, in the spirit of compromise, we are proposing a legislative solution that would give municipalities the option of mandating sprinklers for residential construction in their local jurisdictions. We believe this is the optimal solution that makes sprinklers available for those communities that desire them but does not force an undue burden on local governments and consumers that would prefer freedom of choice.

