

Residential Sprinklers, Coming to a Community Near You  
Fire Prevention Applications Monthly Column

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As fire professionals, we continually strive to improve the level of safety for our customers and fellow fire professionals. Fire professionals who have the task of suppression look for ways to improve the level of safety when they are called to fight a fire. This may range from improving firefighter safety through the use of the latest personal protection equipment, conducting pre-incident surveys of the occupancies in their districts and risking their lives for another. Those professionals assigned to fire prevention, look to improve safety to citizens and fire fighters through fire and life safety education, fire protection engineering, fire inspections, and code enforcement.

But we must ask, are we really making an impact? What can be done to actually improve firefighter safety, decrease fire deaths and improve the overall level of fire protection in the community which we serve?

Let us look at the big picture and link it to our community. Where are most of the people dying from fire? The answer is the same year after year. They are dying in their homes. According to the National Fire Protection Association, over 80% of fire deaths in this country continue to occur in residential occupancies. I think most would find this to be true in their community as well. Ok, so how does preventing fire deaths and injury in the home equate to improving fire fighter safety?

The solution has been available for over 20 years and is taking hold in many communities. The fact is it's now addressed in model building codes. The answer is residential sprinklers. Installing residential sprinklers greatly improve the chance of an occupant's surviving a fire in their home and increases firefighter safety. According to the Firefighter Life Safety Summit Initial Report produced by FEMA in April of 2004, "Strengthen the advocacy for the enforcement of codes and the installation of home automatic sprinklers" is one of the sixteen recommended initiatives to reduce firefighter injuries and fatalities by 50% in ten years.

Unfortunately it generally takes local ordinances to mandate the installation of residential sprinklers. It was not until the 2006 edition of NFPA 5000, Building Construction and Safety Code ? and NFPA 101 Life Safety Code ? that the installation of automatic sprinklers in single-family homes was addressed in a model building code or the life safety code. Scottsdale, Arizona and Prince Georges County, Maryland both have been pioneers in this area. Scottsdale, Arizona has learned over the past 15 years of fire sprinklering single family homes that:

Average cost of fire in a home that has sprinklers was \$2,166.00.  
Average cost of fire in a home without sprinklers was \$45,019.00.  
There were 49 fires in single-family homes with fire sprinkler systems.  
There were NO deaths in the homes that had sprinklers where 13 people died in homes without sprinklers.

The time has come for all of us as professional to step up and work to require automatic sprinklers in single family homes!

So How do we (not I) get a Residential Sprinkler Ordinance?

The first step is beginning a coalition or better yet continuing a coalition for residential sprinklers. The reason I say continue is because there are many organizations already there to help your begin.

The Homefire Sprinkler Coalition  
The Home Safety Council  
Residential Fire Safety Institute

In Illinois, residential sprinklers are becoming common in many Chicago Suburbs. As of this date 37 communities have passed ordinances requiring residential sprinklers in single-family homes. Fire departments, building department and elected officials from different communities actually assist each other in the passing of their residential sprinkler ordinances. Fire officials have learned from each other how to successfully pass a residential sprinkler ordinance. One of the greatest reasons for the success of residential sprinklers in northern Illinois is the ability to provide educational material and technical assistance to communities through the Northern Illinois Fire Sprinkler Advisory Board. The Northern Illinois Chapter of the National Fire Sprinkler Association (NFSA) is dedicated to educating and informing the Chicago area communities of the vital role sprinkler systems play in fire protection. The Northern Illinois Fire Sprinkler Advisory Board has been instrumental in providing resources for fire departments seeking information about residential sprinklers. They even visit the fire department and help the Chief with their presentations. (See Northern Illinois Fire Sprinkler Advisory Board for more information which includes a list of residential sprinkler communities.)

#### Continually Providing Accurate Educational Material is Paramount

Education about providing sprinkler protection in single-family homes begins long before an ordinance is presented to the elected officials for approval. Fire Chiefs and Fire Marshals must educate elected officials, building officials, realtors and yes, even fire fighters about the benefits of residential sprinklers. Residential sprinklers are life safety devices. They are life safety devices for the occupants as well as the fire fighters. Residential sprinklers not only look significantly different than the sprinklers found in industrial occupancies, they are not found in the same places. They won't be found in attics, bathrooms and combustible concealed spaces. The required sprinkler water demand for residential sprinklers is substantially less. (These are just a few of the many benefits. We encourage you to visit the websites above and begin gathering your facts.)

#### Build Your Sprinkler Coalition Internally within Your Own Organization First

Before you go public with residential sprinklers, you must have your internal coalition established. Nothing is worse than having folks in your own organization not on the same page. Get the elected officials and building departments on board early. They need to be provided with the facts. Include actual costs for your area. The need for residential sprinklers must be linked to your community. Collect and present facts for residential fire deaths in your community. Identify any gains for the fire department operations that can be achieved with residential sprinklers. Items such as limited staffing for response, long response times to growing areas or limited water supplies are just a few operation concerns that can be addressed with residential sprinklers

Seeing is believing! If you are looking for an educational tool at your next fire department open house, conduct a side-by-side demonstration of the benefits of automatic sprinklers. If possible, construct two rooms, one room with sprinklers and one without. Start a small fire in the corner of the room and compare the two fires. Use this as a means to discuss how the fire department suppresses the fire and why we do what we do. Then explain how the sprinkler has activated and what actions the fire department takes.

Citizens, elected officials and even fire fighters will be amazed at how quick the residential sprinkler activates. The amount of fire in the unsprinklered room will astonish the on lookers.

#### Be Prepared for Opposition

Residential sprinklers can and likely will receive opposition. You must be prepared with the facts! Be prepared to address the cost issue with actual costs. Many communities have off set the cost with tax incentives, reduced permits, reduced tap on fees and a number of building code trade ups!

Once the Ordinance is Passed - Keep It.

Residential sprinkler communities have learned that it is better to not amend NFPA 13D to the point you amend yourself right out of the ordinance! When the need arises to amend NFPA 13D, make sure the need is tailored to your community. For example, is there really a need to amend 13D and not permit the use of plastic sprinkler pipe?

Once the homeowner moves in, make sure you have a way to communicate with them. Keep the homes with residential sprinklers in a data base so you can mail them information about residential sprinklers. Many communities conduct fire safety education presentations to the new homeowner right after the closing of

their property. They just bought a home with sprinklers, now what? A DVD "Living with Sprinklers is available for free at Home Fire Sprinkler Coalition

Make sure your local realtors understand the benefits of sprinklers it can be a big selling point for them!

Passing an ordinance for residential sprinklers may not be an easy task. It takes work. However, what if your community did this 20 years ago? How many homes would be protected by sprinklers today? Getting people to see the need for smoke detectors and begin installing them was not easy either. Granted there are still those that need to be reached but requiring smoke detectors have become the norm in homes. Now it is time to press on to the next generation of home fire protection.

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