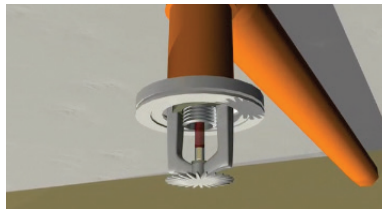
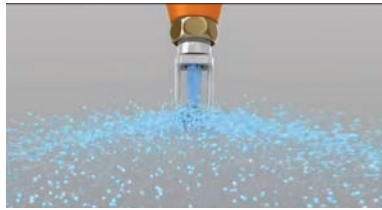

What builders need to know about home fire sprinklers



Supplement to *Builder Magazine*, December 2014



“ I’m a REALTOR[®], and a mother,
and I love to sell
sprinklered homes,
especially to buyers with kids.”

Litsa Lekatsos, Broker, RE/MAX Suburban, Glen Ellyn, IL



“Like most moms, my children come first. And their safety is always top of mind. That’s why I’m so glad our family lives in a home protected by fire sprinklers. There’s nothing more comforting than knowing sprinklers are there for my family, 24 hours a day.

When I show a sprinklered home, added value and peace of mind are usually the first things I point out. Buyers always ask if all the sprinklers go off at once. When I explain that only the sprinkler closest to the fire activates, stopping the

fire from becoming deadly, they want them. It’s nice to sell a beautiful home, but it’s even better to sell a safe one.”

BUYERS ARE ASKING FOR HOME FIRE SPRINKLERS

Sprinklered homes are growing in popularity. According to a 2014 Harris Poll[®] conducted on behalf of the Home Fire Sprinkler Coalition, 78% of U.S. homeowners say home fire sprinklers provide the ultimate protection for residents. And 74% say they’d be more likely to buy a home with fire sprinklers than one without.



©2014 Home Fire Sprinkler Coalition

The nonprofit Home Fire Sprinkler Coalition (HFSC) has free information online to help you market sprinklered homes with confidence at HomeFireSprinkler.org

Understanding the dangers of modern



When compared to their older counterparts, today's popular homebuilding materials offer a more economical and environmentally-friendly way of crafting new dwellings. A potentially lesser-known fact is the dramatic way these products respond to fire.

Take, for instance, engineered lumber, a structural member made of wood fibers and materials bonded with adhesive or other methods that is used as a composite joist or beam. Engineered lumber is a member of the "lightweight construction" family of products, which have been thoroughly examined in recent years to address the question: How do homes using this increasingly popular building material react to fire?

In 2008, Underwriters Laboratories (UL) conducted a study comparing traditional wood materials found in older homes with lightweight construction. The UL report, "Structural Stability of Engineered Lumber in Fire Conditions," indicated that the lightweight construction assembly collapsed in six minutes versus the 18-and-a-half minutes it took for the "legacy materials" to collapse.

The National Research Council Canada (NRC) also examined how fire impacts unprotected floor assemblies. In its research, NRC concluded that lightweight assemblies reached structural failure 35-60% faster than solid wood assemblies. A 2012 report from the Fire Protection Research Foundation also underscored the danger of engineered lumber during a fire, labeling its rapid structural failure under fire conditions a "high" level of concern.

"Like most things in the modern era, construction materials are becoming more streamlined, efficient, and lightweight," says Robert Solomon of the National Fire Protection Association (NFPA). "The unintended consequence is that these new techniques and materials bring new fire safety challenges."

Construction materials aren't the only things in homes that are burning quicker than their older counterparts. Modern furnishings in many households are made with synthetic materials—upholstery stuffed with combustible polyurethane foam, for example—that burn quicker than "legacy" furnishings made of leather,

Living with sprinklers



Sprinklers are now required in all new homes in California, Maryland, and the District of Columbia. California State Fire Marshal Tonya Hoover explains how sprinklers work - and says sprinklers often put a fire out before the fire department arrives.

[www.homefiresprinkler.org/ Hoover](http://www.homefiresprinkler.org/Hoover)

building materials and furnishings

Photo: Shutterstock



fire sprinklers impact fire spread. In all tests, sprinklers kept conditions tenable and helped prevent the structural failure and collapse witnessed during its previous study.

Since home fire sprinklers can douse a fire or control it until the fire department arrives, all U.S. model building codes have made sprinkler installation a requirement in new, one- and two-family homes. Mounting research confirms that sprinklers save property, protect lives, and benefit the environment.

“Fire sprinklers are doable in one- and two-family dwellings,” says Tim Travers, one of NFPA’s regional sprinkler special-



ists. “They do not delay construction, they are not high cost, they can be done easily and simply, and they save lives.”

Watch a presentation on the fire dangers of lightweight construction and modern furnishings at www.firesprinklerinitiative.org/lightweight.

Free copies of the reports mentioned in this story are available at www.firesprinklerinitiative.org/research.

wool, and cotton. UL studies have confirmed that rooms filled with synthetic furniture that are set on fire reach dangerous temperatures quicker than similar rooms filled with legacy furnishings.

In 2013, NFPA reported that fires involving these items accounted for the largest share of fire deaths of any first item ignited in U.S. homes.

“Among the concepts to draw on to make sure that ‘efficient’ can ultimately be equated with ‘safe’ are developing robust test procedures to determine the susceptibility that upholstered furniture has to a flaming ignition source, continuing to understand the behavior of engineered lumber in unpredictable fire scenarios, and making sure that first responders are trained to identify the reaction of buildings to these relatively new hazards,” says Mr. Solomon.

A proven method for reducing fire’s impact at home, says Mr. Solomon, is home fire sprinklers. In 2012, NRC issued another report, “Fire Performance of Protected Floor/Ceiling Assemblies and Impact on Tenability,” which evaluated how home

Easy Being Green

The environmental benefits of home fire sprinklers

The notion that home fire sprinklers are water wasters that deluge homes is pure myth. Leaks and accidental activations are incredibly rare. During most home fires, only one sprinkler—the one closest to the fire—activates. When compared with the water used from sprinklers to control a home fire, firefighters typically use 10 times more during their suppression efforts.

Research confirms that sprinklers play a significant role in reducing water use and greenhouse gas emissions during house fires. A 2010 study conducted by FM Global and the Home Fire Sprinkler Coalition investigated the environmental impact of burning two identical structures, one with sprinklers and one without. Researchers quantified air and water pollutants as well as water released from sprinklers and firefighter hoses.

The study concluded that a sprinklered home can reduce water usage to fight a fire by upwards of 90%. In addition, greenhouse gases released from burning buildings are reduced by 98% and fire damage is reduced by 97% when sprinklers are present.

Read “The Environmental Impact of Automatic Fire Sprinklers”
www.firesprinklerinitiative.org/environment.

Does your sales force have the facts?

If you're marketing homes protected by sprinklers, you've got a great selling feature

Home fire sprinklers are being installed in thousands of new one- and two-family homes each year throughout the country. This trend is the result of communities upgrading codes, passing ordinances, and homeowners requesting fire sprinklers as an option.

Your sales force and real estate agents already know how to market homes to homebuyers. But even seasoned sales professionals need some basic information to sell a home protected by fire sprinklers.

Because sprinklers protect the home 24 hours a day, automatically, they are a boon for reaching out to today's safety-conscious homebuyers. Sprinklers save lives and protect the homes you build by controlling or extinguishing fires fast, limiting the spread of deadly heat and toxic smoke.

The virtual sprinklered house



Get a behind-the-walls look at home fire sprinklers in this interactive video series. Find out why sprinklers are needed, how they work, and how you can save development costs when you build with sprinklers.

www.homefiresprinkler.org/virtual

The biggest myth is that all sprinklers go off at once when a fire breaks out or that smoke from burned toast can set off a sprinkler. Each sprinkler has a heat-sensitive element. That element breaks, releasing the water when the temperature reaches between 135-165 °F. Smoke, cooking vapors, or steam cannot cause the sprinkler to activate.

In a home with sprinklers:

- Only the sprinkler closest to the fire activates
- Water from the sprinkler contains or extinguishes fire
- Residents have time to safely escape
- Surrounding rooms are protected from fire, heat, and smoke damage

In a home without sprinklers:

- Flames grow and spread
- Heat and toxic gases spread room to room
- In as few as three minutes, the fire becomes deadly
- Flashover occurs and gases and combustible materials burst into flames

Make sprinklers a selling point

There are several types of sprinklers made for homes; some are installed on walls and others in ceilings. They can even be concealed by a plate. Home fire sprinklers are much smaller and lower-profile than the types of sprinklers used in commercial properties. In many rooms, only one sprinkler is needed to protect the space; larger rooms may need two sprinklers. Sprinklers typically cover an area up to 12 x 12 feet, with an extended fire sprinkler covering up to a 20 x 20 foot area.

According to a recent Harris Poll®, when homeowners are educated on the dangers of today's fire and the life-saving benefits of sprinklers, they will be more inclined to ask for them. Be sure to promote the benefits of living in a home protected by sprinklers, just as you would a security system, central air, custom kitchen, or master suite, in listing materials, advertising, open houses, virtual tours, and other presentations.

Maintenance is a snap

Sprinklers require very little maintenance. It's essential to keep the water valve turned on, so a simple visual inspection should be done routinely to ensure it's open. (Keeping the valve padlocked in the "on" position is a good idea.) Pipes and sprinklers should be inspected occasionally to make sure nothing is obstructing them.

A water flow test, a simple test that can be done by the homeowner or a fire sprinkler contractor, should also be done on a regular basis.

Contact a local sprinkler contractor or your local fire department to answer questions for prospective buyers and home inspectors. Your sales force can also visit www.HomeFire-Sprinkler.org for information, videos, and other resources on home fire sprinklers.

Home fire sprinkler trade-ups: good for developers, homeowners, and communities

Trade-ups can increase fire safety, control municipal operating expenses, and lower construction costs. The best time to take advantage of the trade-up concept for subdivision development savings is prior to submitting subdivision plans. When proper subdivision and development options are provided, development costs can be reduced. Sprinklered developments provide an excellent opportunity to provide increased fire safety.

The cost of developing raw land into an approved building site can be significantly reduced through trade-ups. These options are only applicable if all the buildings in the development will have built-in automatic fire protection.

Including fire sprinklers in all new construction is a win-win decision. The community has additional fire protection without higher taxes or increased insurance rates. The developer can reduce land development costs, while the builder can reduce construction costs. And the buyer benefits from increased life and property protection at a lower cost.

Trade-up options

- **Street width reduction:** Traffic lanes may be narrowed, substantially reducing the amount of pavement in every linear foot of street in the development.
- **Longer dead-end streets:** Dead-end streets may be increased in length, allowing additional building lots to be accessed.
- **Tee turnarounds permitted:** The permitted use of tee turnarounds in sprinklered developments can create at least one additional lot per cul-de-sac.
- **Increased street grades and building setbacks:** Steeper street grades and building locations further from paved access for fire vehicles may be permitted.
- **Additional units permitted:** Although the actual percentage may vary, increases up to 20 percent are not uncommon.
- **Expansion of existing water supply may not be needed:** Required fire flows for fully sprinklered developments can be greatly reduced compared to non-sprinklered developments.

- **Increased hydrant spacing:** Supply mains may be reduced and hydrant spacing can be increased.

Over time, communities with fully sprinklered developments should see a decrease in fire death rates and property loss.

Another option to explore is building code alternatives, which might include a reduction in fire-rated partitioning requirements between the living spaces of the home and other spaces, such as an attached garage. Fire sprinkler trade-ups and code alternatives can substantially offset the cost of fire sprinkler installation.

Incentives

Communities across the country are offering incentives for homes protected with fire sprinklers:

- New Jersey has a law that eliminates the standby fees for stand-alone fire service water lines of two inches or less.
- Altamonte Springs, FL, allows a 40% credit against the water connection charge for residences with sprinklers.
- Scottsdale, AZ, and other communities allow reduced fire hydrant spacing requirements.

The bottom line is that home fire sprinklers are good for residents, the fire service, and communities. In addition to their life-safety and property-protection benefits, fire sprinklers reduce local infrastructure costs and provide environmental benefits.

Building a safer Habitat home



Two Habitat for Humanity homes being built in Hanover, MA, are being outfitted with home fire sprinklers. Watch a short video that illustrates that sprinkler installations can be done easily and do not delay construction.

www.nfpa.org/habitat

10 things builders need to know about home fire sprinklers

Whether or not your state or community currently requires sprinklers, here's what you need to know about this life-saving technology.



The 2015 International Residential Code (IRC) is the third edition of the code that requires the installation of fire sprinklers in all new one- and two-family homes.

California, Maryland, and the District of Columbia, as well as hundreds of other jurisdictions across the United States, have adopted the IRC sprinkler requirements.



Visit HFSC's web site HomeFireSprinkler.org. You'll find a three-dimensional animated installation for builders, a range of videos for you and your customers, and many other resources. It's all free!

- 1 RESIDENTIAL REQUIREMENTS.** Installation is governed by NFPA 13D, *Standard for the Installation of Sprinkler Systems in One- and Two-Family Dwellings and Manufactured Homes*. Fire sprinklers are life safety systems; therefore installation is required only in living areas. The standard requires at least 10 minutes of sprinkler water flow on the fire.
- 2 WATER SUPPLY.** Home fire sprinklers are commonly supplied via the household water main. If water pressure is low, a tank supplies the system. Both water supply methods achieve the water flow requirement of NFPA 13D.
- 3 INSTALLATION.** Sprinkler piping is installed behind the walls and ceiling, just like plumbing. Modern sprinkler piping can be made of chloro-polyvinyl chloride (CPVC) or cross-linked polyethylene (PEX), a cost-effective, lightweight material. In unfinished basements and multi-purpose systems (where the same pipe is used for domestic water and sprinklers), copper pipe is often used. Fire sprinklers are fitted along the piping according to a unique hydraulic design for the structure.
- 4 TYPES OF SPRINKLERS.** Home fire sprinklers are small and inconspicuous. There are recessed and pendent designs. Concealed sprinklers are also available, and many manufacturers offer custom colors.
- 5 HEAT-ACTIVATION.** All home fire sprinklers operate in response to the high temperature of a fire, usually between 135-165 °F. Smoke or a smoke alarm signal cannot operate a fire sprinkler. Each sprinkler reacts to nearby high heat individually. Unlike movie special effects, fire sprinklers do not flow water simultaneously unless multiple sprinklers are exposed to their activation temperature.
- 6 HOW SPRINKLERS WORK.** The sprinkler nearest a fire will operate automatically while the fire is still small, controlling or extinguishing it (often before the fire department arrives). That fast response limits the spread of flames, heat, and poisonous smoke. In 90% of home fires, just one sprinkler is needed to control the fire.
- 7 MAINTENANCE.** NFPA 13D recommends little maintenance. Homeowners should periodically test the pump (if present) and visually verify that all valves are open and that the storage tank (if present) is full. The water flow device and monitoring service (if present) should also be tested periodically. Year-round, the homeowner should look at sprinklers and visible pipes to make sure nothing is blocking or hanging from them.
- 8 COST.** A national study* shows that the cost of installing home fire sprinklers to the builder is \$1.35 per sprinklered square foot for new construction.
- 9 INCENTIVES.** Many municipalities offer homebuilder incentives to install sprinklers, such as allowing more residential units, longer dead ends, reduced street width, tee turnarounds, increased hydrant spacing, and many other benefits that save money and increase builder profits.
- 10 WORKING WITH CONTRACTORS.** The Home Fire Sprinkler Coalition recommends selecting an experienced residential contractor knowledgeable and trained in NFPA 13D systems.

*www.nfpa.org/sprinklercost

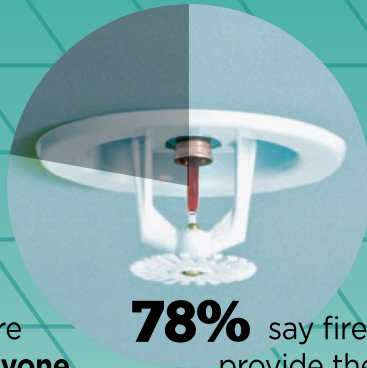
Who wants home fire sprinklers? Your customers do!

In a new national Harris Poll survey,* homeowners demonstrated improved awareness about the benefits of home fire sprinklers. And while there is a need for ongoing education to overcome common myths about sprinklers,

74% of homeowners say they are more likely to buy a home with fire sprinklers than without them.



98% understand fire can **happen to anyone**, no matter the age of the home.

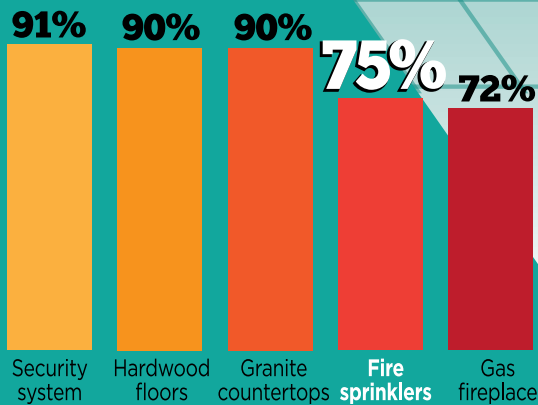


78% say fire sprinklers provide the **ultimate fire protection** in the home.



70% say a sprinklered home has **more value** than a home without sprinklers.

Homeowners rated how desirable these features are in their new home...



"Home fire sprinklers are the only **life-saving** feature that respond quickly to reduce the heat, flames, and smoke from a fire, giving families valuable time to escape. Sprinklers also protect property from destruction by fire."



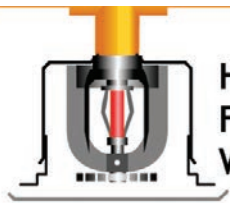
* 2014 Harris Poll® conducted on behalf of the Home Fire Sprinkler Coalition

Homebuilder is on a mission to debunk

Gold Seal Homes, founded in 1989, has built the majority of the residences in the Canadian town of Carstairs, Alberta, and recently celebrated the construction of its 325th home. Murray Pound, Gold Seal's president, and a former volunteer firefighter, relishes that accomplishment, but he's more pleased that every home built since the summer of 2008 is safeguarded by sprinklers.

How did your time with the fire service impact your opinion on sprinklers?

I responded to a house fire in 1999 that was directly across the street from the home I was living in. The house was a total loss. Every night for a year, I'd come home and see the burned carcass of this house. This is when I first started investigating fire sprinklers. I'd been told by the homebuilding industry that sprinklers were too expensive, too difficult to install, that customers didn't want them, that there would be accidental discharges, and that insurance companies charge more to insure these homes. It wasn't until I attended a conference that I realized we'd made a big mistake.



How Home Fire Sprinklers Work

Home fire sprinklers are technologically very advanced, but the basic way they work is very simple. Fire sprinklers have no moving parts and act simply as a water plug that releases at a particular temperature. Watch a short video that explains how home fire sprinklers work.

www.homefiresprinkler.org/HowSprinklersWork

What did you discover?

There was an education session on dispelling the myths of fire sprinklers. Within a month, we'd decided to move forward with fire sprinklers in all of our homes. Within four months of the conference, we opened up our first home with fire sprinklers. One hundred percent of our homes have been sprinklered ever since.

What's your take on the industry's opinion that sprinklers are expensive and make houses unaffordable?

I haven't had many customers since 2008 say, "No, I don't want to spend the money [on sprinklers]." Secondly, I've had previous clients ask me, "Why the heck didn't you do this in my home? I would have paid the money."

Have these installations affected your bottom line?

I don't think we make any more money because of the sprinklers, but it's increased our visibility and trustworthiness. People maybe feel there's more goodwill over and above another builder. I've noticed there's a more relaxed atmosphere with our new clients. They already trust a lot of things we say, and we don't have to overcome that initial get-to-know-you phase.

What about the other concerns of homebuilders—difficult installation, accidental sprinkler discharge, and higher insurance rates?

Accidental discharges are a widely spread myth, and many builders still don't realize that sprinklers are not deluge systems—



they are activated by heat, not smoke. Regarding higher insurance rates, more and more insurance companies are recognizing the potential cost savings associated with sprinklers.

What about the issue that sprinkler installation should be a matter of consumer choice?

Unfortunately, sprinklers aren't promoted as vigorously as granite countertops and fireplaces. If the builders or builders associations were promoting and educating the buyers on the importance of sprinklers, I think it's reasonable to say that

sprinkler myths

This story appeared in the January/February 2012 edition of NFPA Journal®. For more information on home fire sprinklers, visit www.firesprinklerinitiative.org. Photo: Courtesy of Gold Seal Homes



the homebuyers could make their own choices. Given the proper information, a large majority of our customers would choose fire sprinklers.

What's your motivation for continuing to promote sprinklers?

What's going to happen someday is that there's apt to be a fire in a Gold Seal home. That fire's going to get extinguished. We will have saved this customer's house. These sprinklers will be in the home and protecting people long after I'm gone. That's the legacy of our company.

From a builder who knows

"We believe today's homes are built to be safe. But we also understand how devastating a fire can be. One of our relatives lost their entire home to a fire caused by a candle. The fire spread quickly and they were lucky to get out. Even with that experience, we never thought about fire sprinklers in single-family homes until we were required to install them in an entire development. At first we were concerned about the added cost and what they would look like. Once the development was complete, the sprinklers increased the value of the home and our buyers' insurance rates were lower. The sprinklers are concealed, so you really don't notice them. If we build another house for ourselves, we plan to protect it with home fire sprinklers."

- Bill and Janet Hall, Goad & Hall Builders, Pleasant View, TN

Dollars and sense

Increased demand, cheaper materials, and trade-ups drive down the cost of home fire sprinklers



Anne Mazzola of Las Vegas survived a fire thanks to sprinklers in her Las Vegas home. Watch her story at www.nfpa.org/mazzola

One of the most persistent myths about home fire sprinklers relates to cost. Sprinkler ordinances have been adopted by several hundred communities across the United States – and sprinklers are required in all new homes in California, Maryland, and the District of Columbia. However, misinformation regarding the price associated with installation often creates a potential barrier to broader adoption.

In reality, the cost of installing sprinklers in new construction is minimal – and dropping. “The cost to homebuilders, in dollars per sprinklered square foot, averages about \$1.35,” says Lorraine Carli of the National Fire Protection Association. That figure includes all associated costs including design, installation, permits, additional equipment, and water meter fees.

The cost of sprinklers is actually down from \$1.61 per sprinklered square foot in 2008, according to a recent study¹ that looked at installation scenarios in 51 homes across 17 communities in North America. The report considered several factors that can affect cost, including local code requirements, piping material, water supply, fees, home type (custom vs. tract), and foundation type.

While the cost of installing sprinklers can be impacted by local ordinances and amendments to national codes, (ie. adding requirements for sprinklers in garages or attics), the report found significantly lower costs in the two states that require sprinklers. In fact, in some parts of

The cost of home fire sprinklers is about what homebuyers might pay for an upgrade in carpeting, a paving stone driveway, or a whirlpool bath.

California, the cost is lower than \$1 per square foot.

Sprinkler installation requirements are also proven to have no measurable impact on the pace of housing construction or home prices relative to comparable nearby communities without sprinkler ordinances².

Another reason that sprinklers have become so affordable is the low cost of plastic piping, typically CPVC or PEX. Special glue secures the plastic pipe connections, reducing the problems of sweating copper joints or threading steel pipe. Most home sprinklers operate off the household water main and use plastic piping installed behind walls and ceilings in finished areas.

As a builder, you can also take advantage of the many trade-ups associated with installing sprinklers (i.e. street width reduction, increased hydrant spacing) and reduce your costs even further.

Offer your buyers a safer home

In the event of a fire, sprinklers often extinguish the flames before the local fire department arrives on the scene. According to the Home Fire Sprinkler Coalition, the average fire loss in a home with sprinklers is \$2,166 vs. \$45,019 in a home without sprinklers.

Your customers may also qualify for a tax rebate and a discount on the fire portion of their homeowner’s insurance policy.



Florida homebuilder Sam Davis has installed sprinklers in dozens of homes.

Sam Davis, a homebuilder in Florida, believes strongly in the value of sprinklers. Over the years, he’s installed sprinklers in dozens of homes and takes every opportunity to educate his clients about how sprinklers can protect their families from fire.

“Fire sprinklers do save property, but their main function is to save lives,” he says. “Homeowners can spend a fortune on appliances, cabinets and granite countertops but those things do nothing to protect their families against a fire. I hope it never happens, but I’m waiting for the day when I get a call from a homeowner who tells me that their sprinklers activated and saved someone’s life. Home fire sprinklers are well worth the investment.”

Las Vegas homeowner Anne Mazzola agrees. She and her husband were home while a work crew was putting sealant on their living room floor. The sealant product ignited and sparked an intense fire. “I heard an explosion and when I came out of the bedroom, I saw enormous red and orange flames and black smoke. It was surreal, larger than life.”

“Suddenly, the sprinklers in the living room activated and extinguished the flames,” she says. “And then the fire was out. Just like that. No one even had to think. Not only did the sprinklers save our lives, but those sprinklers going off in the zones where they were needed saved our house. Having home fire sprinklers is a no-brainer.”

NOT ALL SPRINKLERS CAN SAVE YOUR LIFE.



HOME FIRE SPRINKLERS,
HOWEVER, SAVE LIVES
AND PROPERTY

Fire sprinklers reduce civilian fire deaths by **80%**
and reduce direct property damage per fire by **70%**.

Get the facts at

www.firesprinklerinitiative.org



FIRE SPRINKLER INITIATIVE®
Bringing Safety Home



>
Princella Lee-Bridges

“FACES OF FIRE”

A Desert Storm veteran and operating room nurse attempted to rescue her daughter from their burning home. Her daughter escaped uninjured, but Princella was severely burned on 49 percent of her body.

“For me, the burns I suffered not only led to physical impacts, but also the loss of a marriage, and the loss of a career I loved. How does the cost of installing sprinklers measure up to all of that?”

Read more about
the stories behind all
our Faces of Fire @
[www.firesprinkler
initiative.org/faces](http://www.firesprinklerinitiative.org/faces)

TAKE ACTION TO REQUIRE HOME
FIRE SPRINKLERS IN YOUR STATE.



A project of the National Fire Protection Association funded by a Federal Emergency Management Agency Fire Prevention and Safety Grant.

The truth about home fire sprinklers

Fires in the home pose one of the biggest threats to the people of your community. In 2013, U.S. fire departments responded to an estimated 1,240,000 fires. These fires caused 3,240 civilian deaths. Of those deaths, 83% occurred in the home, the very place people feel most safe.

All national model safety codes include fire sprinklers as a minimum safety requirement for new home construction. Homes built without sprinklers lack a crucial element of fire protection.

Because sprinklers have been around for so long, the evidence is clear that they are a proven way to protect lives and property against fires at home – responding quickly and effectively to the presence of a nearby fire, and requiring minimal maintenance by homeowners.

Fast Facts

- In 2013, there was a civilian fire death every 2 hours and 42 minutes in the United States.
- The risk of dying in a home fire decreases by about 80% if sprinklers are present.
- Home fire sprinklers reduce direct property damage by about 70%.
- The cost of installation averages \$1.35 per sprinklered square foot for new construction.

MYTH: “A smoke alarm provides enough protection.”

FACT: Smoke alarms alert occupants to the presence of danger, but do nothing to extinguish the fire. In a fire, sprinklers can control and may even extinguish a fire in less time than it would take the fire department to arrive.

MYTH: “Newer homes are safer homes.”

FACT: In a fire, lightweight construction materials, used in many modern homes, burn quicker and fail faster. New homes often contain modern furnishings made of synthetic materials which, in a fire, can create a highly toxic environment, greater fuel load, and faster fire propagation.

MYTH: “Home fire sprinklers often leak or activate accidentally.”

FACT: Leaks are very rare, and are no more likely than leaks from a home’s plumbing system. A sprinkler is calibrated to activate when it senses a significant heat change. They don’t operate in response to smoke, cooking vapors, steam, or the sound of a smoke alarm.

MYTH: “When a fire occurs, every sprinkler will activate and everything in the house will be ruined.”

FACT: In the event of a fire, typically only the sprinkler closest to the fire will activate, spraying water directly on the fire, leaving the rest of the house dry and secure. Roughly 85% of the time, just one sprinkler operates.

MYTH: “Sprinklers are unattractive and will ruin the aesthetics of the home.”

FACT: New home fire sprinkler models are very unobtrusive, can be mounted flush with walls or ceilings, and can be concealed behind decorative covers.

MYTH: “Sprinklers are not practical in colder climates, as the pipes will freeze and cause water damage.”

FACT: With proper installation, sprinklers will not freeze. NFPA 13D, *Standard for the Installation of Sprinkler Systems in One- and Two-Family Dwellings and Manufactured Homes*, includes guidelines on proper insulation to prevent pipes from freezing.

MYTH: “The water damage caused by sprinklers will be more extensive than fire damage.”

FACT: In a fire, sprinklers quickly control heat and smoke. Any water damage from the sprinkler will be much less severe than the damage caused by water from firefighting hose lines. Fire departments use up to 10 times as much water to extinguish a home fire as fire sprinklers would use to extinguish the same fire.

Free information about home fire sprinklers



The Fire Sprinkler Initiative (FSI), a project of the National Fire Protection Association, aims to increase the number of new, one- and two-family homes protected by sprinklers. The FSI website offers free research and resources to help advocates promote the fact that sprinklers are necessary in new construction.
www.firesprinklerinitiative.org



The Home Fire Sprinkler Coalition (HFSC) is a leading resource for accurate, noncommercial information and materials about home fire sprinklers for consumers, the fire service, builders, and other professionals. HFSC offers free educational materials about sprinklers and how they provide affordable protection to your community.
www.homefiresprinkler.org

