



RESIDENTIAL FIRE SPRINKLER SYSTEM FACTS

Some homeowners are reluctant to install sprinklers because they don't know the facts about their operation and/or are misled by anti-fire sprinkler groups. Currently, most single-family dwellings are not required to have fire sprinkler systems installed. However, the Urbandale Fire Department strongly encourages residents to install a fire sprinkler system in their home.

Myth: The water damage from sprinklers is worse than a fire.

Fact: A sprinkler activates during the early stages of a fire before it grows and spreads. A sprinkler will control or extinguish a fire with a tiny fraction of the water that would be used by fire department hoses. Only the sprinkler closest to the fire will activate spraying water directly on the fire, not the rest of the house.

Myth: Sprinklers go off accidentally, causing unnecessary water damage.

Fact: Accidental sprinkler discharge is extremely rare. And, despite the Hollywood "sight gags", burned toast and cigarette smoke will not trigger sprinkler operation. Each sprinkler works independently and only in response to the heat of the fire.

Myth: A smoke alarm provides enough protection.

Fact: Smoke alarms alert occupants to the presence of danger, but do nothing to extinguish the fire. Home fire sprinkler systems respond quickly to reduce heat, flames, and smoke from a fire, giving residents valuable time to get out safely. If you have a reported fire in your home, the risk of dying decreases by about 80 percent when sprinklers are present.

Myth: Fires are a problem exclusive to older homes.

Fact: The leading causes of fires in both old and new homes are directly related to human behavior, such as:

- cooking (both attended and unattended)
- heating fires (including space heaters)
- careless smoking
- children playing with matches and lighters

None of these are related to the structure age itself! In addition, the materials used in home construction today are prone to collapse sooner when exposed to fire. This gives occupants less time to escape and firefighters even less time to perform a rescue.

SPRINKLERS: A SAFE, SMART CHOICE

Fire sprinklers are mandatory in most public buildings, and people are now looking at the same level of protection for their homes. Home fire sprinklers save lives, reduce property loss and can even help cut homeowners' insurance premiums. Not only do home fire sprinklers dramatically reduce the risk of home fire deaths, they also decrease fire damage by as much as two-thirds when compared to homes without sprinklers.

Many communities across the U.S. are seeing impressive results from installing home fire

sprinklers in all new construction. In Scottsdale, AZ fire sprinklers have been required in all new homes since 1986. Today, more than half the homes in Scottsdale are protected with sprinklers. There have been no deaths in sprinklered homes, while 13 people died in homes without sprinklers. There was less fire damage in the homes with sprinklers. The average fire loss per sprinklered incident was \$2,166 compared to more than \$45,000 loss per fire in homes without fire sprinklers*. There are also 59 municipalities in the Chicago area that have residential fire sprinkler ordinances, and several in the Washington D.C. area.

Recent technology breakthroughs make fire sprinklers more affordable and easier to install in homes. With a variety of designs available, sprinklers blend into the interior decor with ease. And with the new technology, sprinkler systems usually operate off the domestic water supply. Sprinklers keep fires small. Because a fire sprinkler system reacts so quickly it can dramatically reduce the heat, flames and smoke produced in a fire. Home fire sprinkler systems control the fire with only a fraction of the water compared to when fire hoses are used. In a home without sprinklers, a fire department often arrives after the fire has grown to dangerous levels. At that point, a number of hose streams must be applied to the fire at approximately 125 gallons per minute for each hose. In sprinklered residences, a majority of the fires are contained by the operation of just one sprinkler head.

Home fire sprinkler systems often cost less per square foot than cabinet upgrades, new carpeting and many other “choices” in new home construction. A recent study conducted by the Fire Protection Research Foundation showed the average cost for a fire sprinkler system in a new home is \$1.61/square foot**. Fire sprinklers can also be installed in existing homes. When you consider the degree of built-in reliability and responsiveness that home fire sprinklers offer, the investment is a wise one.

If you have questions about residential fire sprinkler systems, please contact the Urbandale Fire Department at 515-278-3970. Additional information about fire sprinkler systems and fire safety can be viewed at:

www.homefiresprinkler.org (Home Fire Sprinkler Coalition)

www.usfa.dhs.gov (United States Fire Administration)

www.nfpa.org (National Fire Protection Association)

www.urbandale.org (City of Urbandale)

* A copy of this report can be obtained from the Urbandale Fire Dept.

** A copy of this study can be downloaded from www.nfpa.org or contact UFD for a copy.