



Home Fire Sprinklers

A Factsheet on Effective Home Fire Protection

Fire sprinklers are becoming more popular in single family homes. Studies indicate that the installation of residential fire sprinkler systems could save thousands of lives and eliminate hundreds of millions of dollars in property losses.

Improved technology, better materials, and more attractive, more affordable installations have all contributed to a more widespread acceptance of home fire sprinklers. These life- and property-saving systems are a good investment for new homebuyers.

How Sprinklers Work

A residential fire sprinkler system is simply a series of pipes tied into your home's domestic water system. Heat-activated sprinkler heads are spaced throughout the home, their location depending on the specific design and layout of the house.

The heads typically have a small link or a glass tube inside, and when temperatures at the sprinkler head rise to approximately 165 degrees, the link will melt or the glass will shatter, activating the sprinkler head. Contrary to popular belief, the heads are not designed to all go off simultaneously. Only the ones in the path of the fire that are heated to the activation point will open and spray water.

Residential sprinkler systems should be installed by an experienced, licensed installation contractor, and need to meet NFPA standards as well as all local building codes.

Cost & Appearance

One common misconception about a residential system is that it's too expensive to be practical. However, with the rise in popularity of these systems, prices have become much more affordable. A typical system, completely installed by a professional contractor, runs in the neighborhood of \$1.00 per square foot of living space if installed when the house is being built (retrofits are somewhat higher). And, depending on the insurance company, part of the installation cost may be offset through savings in homeowner's insurance premiums.

Advances in sprinkler technology have given rise to a new generation of heads that blend into the home's décor with very low or covered profiles. Individual heads are also sized to the rooms they serve, allowing for the use of small, less obtrusive heads in some areas.

Myth and Facts

MYTH: Sprinklers may go off accidentally.

FACT: Loss records show that the probability of a sprinkler discharging accidentally due to a manufacturing defect is only 1 in 16 million sprinklers per year in service.

MYTH: Sprinklers heads will leak.

FACT: Sprinkler systems are under the same pressure as the plumbing system but are tested at 2-3 times higher pressure during installation.

MYTH: If one sprinkler head goes off, they all go off.

FACT: Sprinkler heads are designed to react to temperatures in each room individually. Normally, only the sprinkler over the fire will activate.

MYTH: Sprinklers cause water damage.

FACT: Tests show that damage caused by water in a sprinklered fire is substantially less than damage caused by fire department hose streams in an identical unsprinklered fire and far less than damage caused by a fire which escapes early detection and suppression.

MYTH: Residential sprinklers don't save lives.

FACT: The evidence on this point is overwhelming. There has not been a single residential fire fatality in a residence with a sprinkler system in communities that have been studied.

For More Information

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