

Imagine you wake up in the middle of the night to the muffled sound of a fire alarm on the other side of the house. You leap out of bed, check the doorknob, and open the door to see that half of your home is feeding a blazing inferno. You manage to crawl under the smoke to the front door, luckily avoiding carbon monoxide poisoning, and call 911. By the time a fire truck arrives, you have already watched the roof cave in on top of your irreplaceable possessions. The firefighters are unable to procure enough water to curb the blaze which now engulfs the entire house. Come morning, your home and all of your worldly possessions are reduced to a smoking pile of rubble. This nightmarish scenario is a sobering reality for thousands of Americans every year.

Luckily, this tragic occurrence can be easily avoided with the installation of automatic residential fire sprinklers. These life-saving devices can stop a small fire at its source, before it spreads to the rest of the house and becomes difficult, if not impossible, to contain. While fire alarms are invaluable for keeping people safe in the event of an emergency, they are powerless to slow an inferno's advance. Automatic sprinklers, in conjunction with fire alarms, can keep your family and your property safe from a burgeoning inferno.

Many choose not to install the sprinklers when building a home, believing them to be too expensive. In reality however, they cost a mere \$1.50 or less on average per square foot of new construction, or roughly of 1% of the total construction costs of a house, according to the United States Fire Administration. This initial investment can pay large dividends in the long run. Even if the sprinklers never have to put out a fire, they are worth a five to fifteen percent reduction in home owners' insurance premiums, thus saving money over the years while providing priceless protection and peace-of-mind

(USFA). Of course, if the sprinklers do get the opportunity to stop a fire in its tracks, insurance money is not the only thing they will save.

Many homeowners choose not to install automatic sprinklers for fear that they will cause more problems than they solve. There is a common misperception that the cost of water damage from the sprinklers exceeds that of a fire. Many do not realize, however, that the sprinklers are independent of each other, and trigger individually rather than as a group. In fact, only one or two sprinkler heads in a wet pipe system are activated in 81% of house fires, according to the National Fire Protection Association. This specific targeting of the source of fire limits any water damage to a small area, and the cost of water damage in a small area is significantly less than the cost of smoke damage and water damage from fire hoses.

When homeowners think about the possibility of a house fire, they are often so worried about property loss that they largely ignore the possibility of serious injury or death. Eight of every ten fire deaths occur in the home, according to the Home Fire Sprinkler Coalition, most of which can be avoided with the outfitting of automatic sprinkler heads. Sprinklers reduce the chance of dying in a house fire by fifty to sixty-seven percent. This number jumps to eighty-two percent when the sprinklers are paired with fire alarms, according to the NFPA. If these numbers aren't convincing enough, there is no record of a fire claiming more than two lives in any building, residential or commercial, with automatic sprinklers installed.

The city of Scottsdale, Arizona saw the immense benefits of these sprinklers and took advantage of them. In 1985 the city, plagued by drought-fueled house fires, passed an ordinance requiring that all commercial or multiple family homes be retrofitted with

automatic sprinklers, and that all single family homes built after 1986 have systems installed during construction. In 2001 the city released a report detailing the changes the sprinklers had made, and the results were shocking. During the fifteen year study, 199 sprinkler systems were activated. In 92% of these deployments, only one or two sprinkler heads were used, indicating that the fires were stopped at their source. Furthermore, excluding one incident where the sprinkler system failed, the average cost of damage was a mere \$2,276, compared to the average \$45,019 in damage for buildings without sprinklers in the city. Most importantly, thirteen lives were saved by the installation of automatic sprinkler systems. This small-scale test of in-home fire prevention systems proved to be an overwhelming success, and has prompted many other cities to pass similar ordinances (USFA).

There is no reason not to outfit homes with automatic fire sprinklers. The cost is not prohibitive, they are extremely effective at preventing the growth of fires while minimizing water damage, and most importantly, they save lives. Homeowners have the choice. They can gamble all of their possessions, hoping that they never have a house fire, or they can invest in these automatic sprinklers and sleep easy at night.

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