

## Value of Residential Sprinkler Systems

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Please feel free to contact us if you have questions or comments regarding this information or any other MTAS website material.

Sincerely,

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## Value of Residential Sprinkler Systems

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### **Reducing Costs**

Studies by the Federal Emergency Management Agency's United States Fire Administration indicate that installing residential fire sprinkler systems could have saved thousands of lives, prevented a large portion of injuries, and eliminated hundreds of millions of dollars in property losses. "Automatic sprinkler systems were the first and still are the foremost forms of automatic fire suppression system used throughout the world. With over 100 years of operating history and a 95 percent plus success record, these systems represent one of the most readily available means for effective fire suppression for a wide range of different occupancies. The success story for automatic sprinkler system in confining, controlling, and extinguishing developing fires in structures has been a phenomenon." [3]

Using quick response sprinklers and approved piping, homes can be built or even retrofitted to include low-cost automatic sprinkler systems connected to the domestic water supply, lowering insurance rates by 5 to 15 percent. At present, the cost of a home sprinkler system is approximately \$1 to \$1.50 per square foot in new construction amounting to about 1 percent of total building cost. More than 270 communities [4] now have residential sprinkler laws. The use of residential sprinkler systems and smoke detectors remains the key to reducing the overall fire death toll, which amounts to 83 percent [5] of all fire deaths.

"A study based on 15 years of data from Scottsdale, Arizona, categorized fire damage in two types of homes — those with and those without sprinkler systems. Property loss due to a fire in a residential home with a sprinkler system was \$2,166 compared to \$45,019 in the home without a sprinkler system. A 12-year study of Prince George's County, Maryland, reported fire damage in the home with sprinkler system amounted to \$3,429 and, without, \$326,752." [6]

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[3] Water Supply Systems and Evaluation Methods, Dr. Harry E. Hickey.

[4] Residential Fire Safety Institute.

[5] Ibid.

[6] Economic Analysis of Residential Fire Sprinkler Systems by Hayden Brown.

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