



# HOME SPRINKLER SYSTEMS

## SPRINKLER SYSTEMS IN INDUSTRY

Schools, office buildings, factories, and other commercial buildings have benefited from fire protection sprinkler systems for over a century. To protect investments in buildings and machinery, the textile mills in New England began using sprinkler systems over 100 years ago following a series of devastating fires which claimed many lives and destroyed entire businesses.

## SPRINKLERS IN HOMES

But what about our homes? Although we protect our businesses from fire, what actions do we take to protect our families, our homes, and our possessions from fire? Millions of Americans have installed smoke alarms in their homes in the past few decades, but a smoke alarm can only alert the occupants to a fire in the house...it cannot contain or extinguish a fire. Residential sprinkler systems can!

## WHAT ARE HOME FIRE SPRINKLER SYSTEMS?

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.

Sprinkler systems offer advantages to the homebuilder:

- A low-cost reliable safety option that would attract many buyers.
- Trade-offs between sprinklers and code requirements that can result in lower construction costs, more units per area of land, etc.

For homeowners, the advantages include assurance of a safer environment for their families, protection of their investment and irreplaceable family possessions, and may lower insurance rates 5 to 15%.

## ADVANTAGES OF NEWLY DESIGNED HOME SPRINKLER SYSTEMS

**Fast Response** Residential sprinklers, listed by Underwriters Laboratories, are now available. They are designed to respond to a fire much faster than currently available standard commercial and industrial sprinkler systems. The new home sprinklers react automatically to fires more quickly because of their improved sensitivity.

**Low Cost** At the present time, cost of a home sprinkler system is targeted at approximately \$1.00 to \$1.50 per square foot in new construction. It is hoped that the cost will decrease as the use of home fire protection grows. It is also possible to retrofit existing homes with sprinkler systems.

**Small Size** For residential systems, the sprinklers will be smaller than traditional, commercial, and industrial sprinklers, and can be aesthetically coordinated with any room decor.



**Minimal Installation Work** When homes are under construction or being remodeled, a home sprinkler system will require minimal extra piping and labor.

**Low Water Requirement** These systems will require less water than the systems installed in industrial or commercial establishments and can be connected to the domestic water supply.

**Piping Requirements** In addition to metallic pipe, the use of plastic pipe has brought down the cost of installation in new construction and the retrofit of existing dwellings.

Some notable successful applications of residential sprinklers and approved piping include: • Scottsdale, AZ • Cobb County, GA • Prince George's County, MD

## FIRE SPRINKLER MYTHS

**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. One study concluded that home sprinkler accidents are generally less likely and less severe than standard home plumbing mishaps. 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 fire.

**Myth: Sprinklers are ugly.**

**Fact:** Modern residential sprinklers are inconspicuous and can be mounted flush with walls or ceilings. Some sprinklers can even be concealed. And, just like regular plumbing, pipes can be hidden behind ceilings or walls.