

## **Residential Sprinklers: Just the Facts**

For several years now special interests have been pushing to have residential fire sprinklers mandated in every new home in America. In 2008 these special interests were finally successful in getting residential fire sprinklers mandated in the coming version of the national building code (IRC 2009). Unless state legislation is passed to opt out of this provision of the national building code, every new house built in SC after July 2011 will be mandated to have a fire sprinkler. The Home Builders Association has, and does support government incentives for fire suppression equipment, but opposes fire sprinkler mandates for one & two family homes. **The decision to install fire sprinklers should be made by consumers! Why:**

1. **Consumers rarely request that residential sprinklers be installed in their homes.** There is no law that prevents home owners from installing fire sprinklers in their home, and home builders are more than willing to install them. However, very few homes have them installed. Why is this? It is because consumers see sprinklers as expensive and unnecessary. Mandating residential sprinklers is putting a financial burden on home owners that they clearly do not want! The National Fire Protection Association recently reported that the **chances of surviving a home fire where working fire alarms are present is 99.45%,** so fire sprinklers will have minimal success in reducing fire fatalities.
2. **Choice: Individuals, not government, should determine level of protection.** Each home owner has to decide how much protection he wants for his family. It is like insurance: you can buy minimal coverage or maximum coverage depending on the needs of your family. The government doesn't mandate maximum insurance coverage for houses and it shouldn't mandate maximum fire protection. In addition, state government doesn't prohibit behavior that causes fires: smoking in bed, or using space heaters in homes.
3. **Smoke detectors save the most lives in residential fires, not sprinklers!** The rapid adaptation of smoke alarms in the 20<sup>th</sup> century (1980's) reduced fire deaths by over 40%. The National Fire Protection Assn. reports that in the 21<sup>st</sup> century (2000-04) **65% of home fire deaths were in homes with no smoke alarms or no working smoke alarm** - 43% of homes had no smoke detectors and 22% had inoperable smoke detectors. Clearly, if all homes had working hard-wired interconnect smoke detectors, deaths would be reduced dramatically - 65%! Interconnected –wired smoke alarms have been installed in new homes since 2000.
4. **Smoke detectors are more than adequate to protect residential home occupant's safety.** Since one & two family homes are much smaller than commercial buildings in square footage and in the number of stories, they pose a much smaller fire risk for occupants. Residents simply need to be aware that a danger exists to safely escape. They are only seconds away from door and window exits. Residential fire sprinklers are more effective in the reduction of fire damage to property, than they are to reducing residential fatalities!

5. **Most home fires are in older or mobile homes without hard-wired fire alarms.** Fires in houses built before 1979 are 34% more likely to result in fire death than newly constructed homes. If the goal is to reduce fire fatalities, the focus should be on older homes, not new homes!
6. **The risk of fatalities is less in homes than commercial buildings.** Single & two family homes are different from commercial property. While un-sprinkled commercial facilities (sofa store/motel/apartment complexes) expose the public to significant and unknown risk, residential buildings do not. In a home, fire avoidance is easier because residents know where fire extinguishers are, square footage is small, escape options are known, and the risk is born by the private residents of the home, not the public!
7. **Residential fire sprinkler systems are very expensive.** The actual cost quoted in SC (January 2008) is \$4-6/square foot for the installation of the sprinkler equipment alone. In addition, the cost of installing water lines and meters to the house to handle the increased water capacity would easily add another \$3-4 per square foot to the cost. That brings the total cost to \$7-10/sq. ft. to homes on water systems. For homes in rural areas the cost will be even higher. A hidden cost is the annual, and never ending, maintenance costs of keeping the system in working order, not to mention recovery from an accidental discharge. In a 1,000 square foot starter home the total cost of installing a sprinkler system and required water infrastructure would be \$7,000+. That would be 7% of the cost of the house - the smallest house on the market. Research has shown that for every \$1K increase in the cost of a house, 200,000+ young first time SC home buyers will be forced out of the market.
8. **Mandatory fire sprinklers will keep low income citizens at risk.** An unintended, but very real consequence, of mandatory residential sprinklers is that by raising the cost of a house, the government is forcing the economically disadvantaged to stay in older marginal housing with little fire protection, instead of moving into a safer modern home.
9. **Local governments not receptive to fire sprinkler incentives.** A bill was passed in 2008 that enabled local government to participate in a state/local match incentive program for sprinklers. While local fire officials were very vocal in support of the bill, very few local governments even considered participation, and currently no local government in SC is offering a fire sprinkler incentive.
10. **Mandated residential fire sprinklers will be a tremendous unfunded mandate on home owners.** It is estimated that it could cost home owners \$210 million per year annually to require the installation of fire sprinklers across the state in every new home. That is over a billion dollars every five years. Mandates (federal, state or local) are mandates, not incentives!
11. **South Carolina does not have the infrastructure in place for mandatory residential fire sprinklers.** In many parts of the state, the water utility does not have enough water pressure, nor adequate size pipes, to adequately support residential fire sprinklers. The cost up of upgrading water systems would be expensive and time consuming to install. In rural areas, wells are insufficient for sprinklers and the few alternatives are extremely expensive.

12. **South Carolina has only a small residential sprinkler industry in place to respond to mandatory installations.** The S.C. sprinkler industry is primarily involved with commercial installations. Only 200 sprinkler companies exist in SC and few do residential installations. While mandatory fire sprinklers would be a large economic windfall for the sprinkler industry (\$100 million to \$3 billion- US Market), it would go primarily to large out-of-state firms.
13. **Maintenance Cost Expensive and Never Ending:** The cost of fire sprinkler installation is just the first of many cost the home owner faces with a fire sprinkler system. There is the annual inspection fees, the replacement cost of aging fire sprinkler heads, and water line leaks.
14. **Accidental Sprinkler Discharge Is Catastrophic:** The potentially for an accidental catastrophic fire sprinkler discharge is greater than the chance of fire. Non-maintained sprinklers, curious children, careless furniture movers, a game of catch inside can all be precursors of disaster. The ruined carpet, water damaged furniture, warping floors and water stained wall repair, and the loss of invaluable family antiques, decimated family pictures are usually the result of a accidental discharge of fire sprinklers.
15. **Insurance Saving Questionable:** In some cases insurance companies provide slight discounts for homes with sprinklers, and in other cases they do not. The saving in insurance cost is minimal compared to the cost of installing and maintaining residential fire sprinklers. Since very few homes have fire sprinklers the insurance industry has had little data to base their decision and in turn few claims for accidental discharge. Once the installation of residential sprinkler is government mandated and claim cost start to go up the discounts will disappear and the insurance premiums will rise.