March 28, 2008

A Message from the U.S. Fire Administrator about Residential Sprinklers

In the year 2006, 19% of all reported fires in the United States occurred in one- and two-family structures; however, these fires caused 66% (2,155) of the fire deaths in the US. More than 25% of firefighter on-duty deaths are associated with residential fires — about 25 firefighters die each year during responses to residential fires. Despite the fact that these figures represent improvement over the last 30 years, they continue to be appalling. Such losses are unacceptable.

Since the 1970's, the U.S. Fire Administration has promoted research, development, testing, and demonstrations of residential fire sprinkler systems and smoke alarms. These studies, in concert with heroic efforts by many organizations and individuals, have resulted in the adoption of requirements to install smoke alarms in new residential construction. In many jurisdictions, the retrofit of smoke alarms into existing residential occupancies has been mandated. Together, these efforts have saved many lives.

The results have been different, however, with respect to residential fire sprinkler systems; only about 400 of the thousands of jurisdictions across our great country have mandated the installation of residential fire sprinklers in new construction, and none have mandated the retrofit of existing one and two family housing stock.

Much has been written about the reduction of residential fire deaths due to improvements in building codes and the installation of smoke alarms. Without a doubt, these have had a substantial impact on the home fire problem. The trend in fire death data, however, shows that the number of civilian residential fire deaths is declining at a slower rate over the past 10 years than it did in the period 1977 through 1995.

Full-scale fire tests have shown that the available time to escape a flaming fire in a home has decreased significantly — from 17 minutes in 1975 to 3 minutes in 2003. Researchers have concluded that a fire involving modern home furnishings grows faster than a fire involving older furnishings. The practical impact of this finding is clear – smoke alarms alone may not provide a warning in time for occupants to escape a home fire. Fire sprinklers are the only proven technology to control the spread of flames and toxic smoke.

The U.S. Fire Administration's mission is to reduce life and economic losses due to fire and related emergencies, through leadership, advocacy, coordination, and support. In fulfilling this mission, we have carefully reviewed the data and the relevant research to formulate this statement:

It is the position of the U.S. Fire Administration that all citizens should be protected against death, injury, and property loss resulting from fire in their residence. All homes should be equipped with both smoke alarms and automatic fire sprinklers, and all families should have and practice an emergency escape plan. The USFA fully supports all efforts to reduce the tragic toll of fire losses in this nation, including the proposed changes to the International Residential Code that would require automatic sprinklers in all new residential construction.

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