

Residential Fire Sprinklers Systems
Your Life Can Depend Upon Them

Fire Protection 24/7
Like Having a Firefighter on Duty in Your Home

Two fire incidents which occurred in the Town of Plymouth, Massachusetts illustrate the effect that residential fire sprinkler systems can have upon occupant life safety in the event of a fire.

The first incident occurred in a multi-unit garden style apartment complex. The buildings are wood framed, three stories in height and contain from 11 to 23 apartments in each building. There are local 110-volt smoke detectors within each unit. A 24-volt fire alarm system consisting of heat detectors, smoke alarms, pull stations and horn-strobes protects the common areas, stairwells, hallways and vestibules. The buildings were constructed in 1968 and are not sprinklered.

At 02:39 on January 14, 2006 an alarm from municipal fire box # 2411 was received for # 55 Summer Street. A subsequent 9-1-1 call from a resident of Apt 3 in # 57 Summer Street reported smoke in the hallway of her building. The Plymouth Fire Department responded and discovered a fire inside apartment # 4C.

Firefighters encountered heavy smoke and heat inside the apartment. During search and rescue efforts the body of a 55 year old male occupant was discovered on the living room floor. The man was removed from the building and CPR was administered. The victim was pronounced dead at the hospital.

Upon extinguishing the fire on an upholstered couch in the living room fire investigators determined the fire was accidental, caused by smoking materials on the couch. While heat and smoke damage occurred throughout the unit, the actual flame damage from the fire was confined to the couch itself. The fire, which was extinguished with a minimal amount of water, had produced sufficient heat and toxic smoke to be lethal to the tenant, who was apparently sleeping on the couch.

The second incident, a fire at 30 Highland Terrace a multi-family condominium building on February 6, 2007 occurred at 06:07 and demonstrates the value of residential fire sprinklers. The occupant, a middle-aged female in apartment #3010, was burning several votive style candles on a side table placed against the wall in her living room. A tapestry was hung on the wall over the table. While the owner was in the kitchen she reportedly heard a sizzling sound, turned and saw a fire burning up the wall. Her phone was located across the living room and she was alert enough to realize that she should make her escape from the apartment rather than going past the fire to the phone to call for help. She used her medical alert pendant to call for help. During the moments it took firefighters to arrive at her home the fire sprinkler system had quickly activated and extinguished the fire before her possessions could be destroyed by flames, smoke and heat. Only one

sprinkler head activated in response to the fire. The water discharged to put out the fire was easily mopped from the floor and the carpet was dry within a day or two.

The amount of water damage is negligible in comparison to having fire destroy the building and its contents. Most importantly the occupant was able to safely escape from the fire before heat and smoke built up to hamper her exit.

The latest edition of the Massachusetts State Building Code has included requirements for the installation of residential fire sprinklers in multi-family dwellings of 3 or more units, and for the first time in single family dwellings of 14,000 square feet floor area. While this may seem to be a very large structure for a single family home it represents a starting place for mandating residential fire sprinklers in all dwellings.

At the 2008 ICC convention in Minneapolis fire service voices advocating for residential fire sprinkler regulations were finally heard loud and clear. 73% of the voting body assembled cast a vote in favor of mandating fire sprinklers in 1 & 2 family dwellings beginning in 2011.

The fact that residential fire sprinklers have a proven record of efficiency and effectiveness for over 20 years in those communities that have been proactive in requiring their installation should be enough evidence that lives can be saved through their presence. Yet there are still organizations and individuals, some from within the fire service, and other tradesmen and building code officials that remain opposed to fire sprinkler requirements.

It is an indisputable fact that the United States has among the highest death rates from fire in the industrialized world. It is also a fact that the majority of fire deaths occur in 1 and 2 family dwellings. Each year the death toll is 3-4000 lives. Where is the public outcry for stopping these preventable deaths! The death toll of military personnel involved in the war on terrorism has surpassed 4,000 and the national media screams for a stop to the efforts to protect our country, yet very few take up the cause for a national problem for which a very simple solution already exists, the installation of residential fire sprinklers, a solution which would save, on a yearly basis, the same number of lives which have been lost through military action since Sept, 11, 2001.

We need to stop debating 'if' we should require residential fire sprinklers in every residence, we must begin the process now, and set a target date for full implementation and protection of our citizens.

These closing words were heroically spoken by the Mother of a young fire victim at the 2008 ICC convention in Minneapolis; "My husband still cannot bear to speak of the loss of our daughter. For the cost of our lawn irrigation system or the flowers for her funeral, we could have instead, installed fire sprinklers in our home".

Michael A. Young
Battalion Chief, Plymouth Fire Dept.