This handout outlines several facts associated with residential fire sprinkler systems. However, it is not all inclusive. Please contact the Minnetonka Fire Marshal with specific questions or to receive further information.

Why Install Fire Sprinklers?
Residential fire sprinkler systems provide numerous benefits to property owners, including:

Increased Safety. While smoke detectors can only alert occupants to a fire, sprinklers will automatically contain or extinguish a fire prior to the fire department’s arrival. In a home equipped with fire sprinklers survivability is drastically increased to nearly 100%.

Reduced Water Damage. To extinguish a fire in an unsprinklered home, each Minnetonka Fire Department hose line will discharge 160 or 325 gallons of water per minute and each fixed nozzle on the fire engines and ladder trucks will discharge anywhere from 600 to 2,000 gallons per minute. In a home equipped with fire sprinklers, the average sprinkler system will use only 20 gallons of water per minute to contain or extinguish a fire.

Reduced Property & Financial Losses. In an unsprinklered home, a fire can displace residents for several months, destroying both the home and valuable possessions. Financial losses in a home equipped with fire sprinklers will likely be 90% lower than those losses that occur in unsprinklered homes.

Insurance Discounts. Many insurance providers offer premium discounts for fire sprinklers. Discounts range from 5% to 15%.

Did You Know...
Changing Fire Environment. The contents of today’s homes are more flammable than they used to be. Synthetics and plastics burn hotter, burn quicker, and produce more toxic smoke than the natural materials used in the past. In addition to the changing contents of homes, structural components have changed. Today’s engineered “lightweight” construction components are reliable under normal circumstances, but when exposed to fire, they can fail in a fraction of the time compared to the traditional solid wood “legacy” construction of the past. Open floor plans typically designed into today’s homes also allow for rapid fire spread throughout the interior compared to the more compartmented designs of the past. This combination drastically reduces a resident’s time to escape a fire, down to about 3 minutes from the nearly 30 minutes in the past.

Low Cost. A fire sprinkler system installed during new home construction generally accounts for less than 1% of the total building price. In the City of Minnetonka, the 20 year average cost for residential fire sprinklers is $1.51 per square foot.

Low Maintenance. Fire sprinkler systems require very little maintenance. Simple visual inspections and periodic water flow tests can be done by homeowners.

Individual Activation. Sprinklers are activated by heat, not smoke or smoke alarms, and are individually activated based on their proximity to a fire.

Unobtrusive Appearance. Sprinkler heads do not have to be obtrusive. Current options include concealed heads, sidewall mounting, or pendants, protruding less than an inch from finished ceilings or walls.

Sources: Federal Emergency Management Agency
Home Fire Sprinkler Coalition
Minnetonka Fire Department