



Home fire safety fact sheet

Residential Home Sprinklers

What is a Residential Home Sprinkler System?

A fire sprinkler system is an active component of a domestic buildings fire protection system. Installed in ceilings or side walls, the system consists of a water supply, a water distribution piping system and sprinkler heads. It can be installed in new builds or retro fitted to existing homes.

Why should I put sprinklers in my home?

At home if you're woken by a smoke alarm and smell smoke, you have minutes to get out of the home. A fire can engulf your home in minutes. A single sprinkler head may contain 90% of fires to the area of origin, preventing the fire spreading to other rooms. The presence of a residential sprinkler system does not diminish the need for the installation of smoke alarms, as research shows that smoke alarms provide an earlier warning of a fire in a home. Sprinkler systems add an additional level of protection.

Often people get little chance to escape their home once a fire starts. According to recent research, residential fire sprinklers automatically detect a fire and act to control or extinguish it. They have demonstrated life safety benefits and can prevent fire from escalating, which may mean the difference between a minor incident and a major tragedy.

They are a major benefit for buildings where the occupants are unable to extinguish a small fire, and or, unable to evacuate in a timely manner.

(Smoke Alarms in Residential Accommodation - by AFAC Community Safety Group and Built Environment Technical Group | v 3.02 (October 25, 2018))

In the US, the National Fire Protection Association compiled a report of home fires and related deaths from 2015-2019. The death rate of 1.4 persons per 1,000 reported fires was 89% lower in homes with sprinklers, than in homes without sprinklers.

(NFPA – U.S Experience with Sprinklers, October 2021)

Home Fire Sprinkler Demonstration

“A side by side burn demonstrating the effectiveness of residential fire sprinklers”

<https://www.youtube.com/watch?v=Ke9ea80cDrA>

(FRNSW & Home Sprinkler Coalition)

Home fire safety fact sheet

Some of the advantages include:

- Suppress fires and complement the early warning capabilities of smoke alarms.
- Are an added layer of protection on top of properly installed, working smoke alarms as they help contain a fire to reduce the risk of damage to life, property, and the environment.
- Help control fire growth, so the fire doesn't spread to the rest of the home.
- Produce water sprays that 'scrub', or act as a physical barrier, to smoke travel within the home.
- Serve to reduce risks faced by Fire crews when fighting fires in homes, and
- Reduced environmental impact due to a smaller fire.
- Assist those residents that are unable to extinguish a fire or evacuate in a timely manner.

Common Myths:

Myth - Fire sprinklers go off accidentally and could ruin my house and furniture".

Fact - Sprinkler malfunctions are extremely rare. In fact, there's only a 1 in 16 million chance they'll discharge accidentally.

Myth - "If one sprinkler goes off, they all will and cause water damage all over the house".

Fact – Unlike what you see in the movies, only the sprinklers directly affected by a fire will activate.

Myth - "Sprinklers look ugly. I don't want my lounge room to look like a factory".

Fact - There are a large range of sprinklers available that are small and unobtrusive. Most homes are fitted with a type that is concealed within the ceiling, with the only visible part being a flush-mounted white metal disc, about the size of a LED downlight.

Myth - "Home sprinklers are too expensive".

Fact - The cost of installing a home sprinkler system into a new house will vary depending on the size of the house and how many sprinkler heads are installed. Home sprinkler systems are far cheaper than the systems installed in commercial buildings. Home sprinkler systems can also be installed in existing dwellings, but generally cost more than new house builds.

Home fire safety fact sheet

MFS recommends:

- Installation completed by a qualified technician, as per Australian Standard (AS) 2118.5-2008
- Arrange Annual Checks. Please refer to manufacturer's specifications and requirements
- Don't hinder sprinkler heads.
- Do not paint over any concealed sprinkler covers.
- Never hang anything from or tie anything to a sprinkler head.
- Don't shut off the Sprinkler System unless maintenance is required after a fire Incident.
- Make sure you always have two spare heads on hand for each sprinkler head type in the house. Then if one is used or becomes damaged you can keep your family and home protected again as soon as possible.

Residential dwellings have a home sprinkler system installed to the requirements of Australian Standard (AS) 2118.5-2008.

Smoke alarms complying with AS 3786 must still be installed and located in accordance with AS 1670.6.

For more information visit Australian Sprinkler Coalition homefiresprinklers.org.au

Special thanks to NSW Fire & Rescue for their assistance.

In an Emergency Call Triple Zero (000)