COMMON QUESTIONS ABOUT FIRE SPRINKLER SYSTEMS

Why Do I need Fire Sprinklers?

Fire Sprinklers provide an additional level of protection to increase the safety of your facility from the devastating effects of a fire. Some people believe that smoke detectors are enough but smoke detectors coupled with a sprinkler system significantly increase your chances of surviving a fire.

Myths and Facts about Sprinklers

Automatic sprinkler systems have enjoyed an enviable record of protecting life and property for over 100 years. Yet, there are still common misunderstandings about the operation and effectiveness of automatic fire sprinkler systems:

Myth 1: "Water damage from a sprinkler system will be more extensive than fire damage."

Fact: Water damage from a fire sprinkler system will be much less severe than the damage caused by water from fire-fighting hose lines or smoke and fire damage if the fire goes unabated. Quick response sprinklers release 8-24 gallons of water per minute compared to 50-125 gallons per minute released by a firehose.

Myth 2: "When a fire occurs, every sprinkler head goes off."

Fact: Sprinkler heads are individually activated by fire. Most fires are usually controlled with one or two sprinkler heads. 90% of all fires are controlled with six or fewer heads and a study conducted in Australia and New Zealand covering 82 years of automatic sprinkler use found that 82% of the fires which occurred were controlled by two or fewer sprinklers.

Myth 3: "A smoke detector provides enough protection."

Fact: Smoke detectors save lives by providing a warning system but can do nothing to extinguish a growing fire or protect those physically unable to escape on their own, such as the elderly or small children. Too often, battery operated smoke detectors fail to function because the batteries are dead or have been removed.

COMMON QUESTIONS ABOUT FIRE SPRINKLER SYSTEMS

Myth 4: "Sprinklers are designed to protect property, but are not effective for life safety."

Fact: Sprinklers provide a high level of life safety. Statistics demonstrate that there has never been any multiple loss of life in a fully sprinklered building. Property losses are 85% less in buildings with fire sprinklers compared to those without sprinklers. The combination of automatic sprinklers and early warning systems in all buildings and residences could reduce overall injuries, loss of life and property damage by at least 50%.

Myth 5: “Smoke alarms will set fire sprinklers off.”

Fact: Fire sprinklers and smoke alarm systems are designed to activate according to different conditions. Sprinkler heads are individually heat activated, usually at 165°F. Smoke alarms, when activated, give only an audible warning sound; they do not cause fire sprinklers to flow water. In commercial applications where flooding volumes are needed to control hazardous areas, preaction and deluge systems may use smoke detection for early notification and operation.

What not to do with sprinklers from the National Fire Sprinkler Association:

1 Don't paint the sprinklers.

2. Don't damage the sprinklers.

3. Don't hang objects from the sprinklers, valves or other components.

4. Don't obstruct the sprinklers.

5. Don't cover the sprinklers.

6. Don't remove the sprinklers.

7. Don't turn off or disconnect the system.

8. Don't shut off the system in the event of a fire.

In the event of a fire, be calm and leave the building immediately. Call 911.

COMMON QUESTIONS ABOUT FIRE SPRINKLER SYSTEMS

Frequently Asked Questions

How do sprinklers operate?

Fire sprinklers are individually heat-activated and connected to a network of water pipes. When the heat from a fire raises the sprinkler to its operating temperature (usually 68◦C or 155 deg. F), only that sprinkler activates delivering water directly to the source of the heat.

Why are sprinklers so effective?

All fires start small and, if detected and tackled early enough, can be controlled with very little water. Residential sprinklers are a special type of fire sprinkler, which respond very quickly and are completely automatic in operation. They can therefore tackle the fire at a very early stage, even if you are not home, releasing water directly over the source of the fire and sounding an alarm.

How reliable are sprinklers?

Records from Australia and New Zealand (where all fire must be reported) between 1886 and 1986 show that sprinklers controlled 99.7% of all fires where they were fitted.

Do sprinklers go off accidentally?

Records in service show that sprinklers are very dependable. The chance of a defective head is less than 1:16,000,000 - less than your chance of winning the Lottery! The chance of an accidental discharge is considerably less.

What about water damage?

Typically a sprinkler discharges 10gal/min. A fireman's hose on the other hand discharges 200+ gallons a minute. In general a sprinkler system will use between 1/100th and 1/1000th of the water used by the Fire Brigade. Even then, most things that get wet can be restored - but a pile of ashes is beyond hope!