



MINOOKA FIRE PROTECTION DISTRICT Fire Prevention Bureau Plan Review

5 Benefits of Having an Automatic Sprinkler System Installed

The risk of a fire in any structure is something serious to consider, but even more so when your entire business and livelihood is on the line. Firefighters can only do so much after a blaze has already been ignited, which is why it's so important to have some form of fire protection service already installed.

Here are five benefits associated with commercial fire sprinkler systems.

1. Sprinklers Save Lives

The National Fire Protection Association (NFPA) has no record of more than two deaths in a fire when the building had a functional sprinkler system in place. These fire protection services save lives and can help those evacuating get out of the building safely.

2. Reduces Risk of Damage

A sprinkler system can not only save lives, it can reduce damage to your property if functioning properly. Keep in mind that approximately 44% of system failures were due to a lack of maintenance, so even though a sprinkler system exists in your building, it doesn't mean you can ignore maintenance necessities.

3. Economics

For the amount of protection, you'll be getting and money you'll be saving in the event of a fire, sprinkler systems are very cost efficient. These systems are affordable, quick to install, and provide peace of mind by fostering a safe work environment.

4. Reduce Insurance Premiums

Some business owners, in an effort to save a little money, won't invest in the best fire sprinkler system. However, investing in a sprinkler system can actually save money on insurance premiums in the long run, not to mention protect a business from serious fire damage.

5. Low Maintenance

Once installed, fire sprinkler systems are actually relatively low maintenance. They only require inspections on an annual basis to determine their functionality, but other than that they can last upwards of 20 years without any major repairs or upgrades needed.

Yet despite all these life-saving benefits, a recent survey of over 100 businesses revealed that only 35% had any kind of fire prevention plan. Too many business owners overlook the importance of a sprinkler system and go without.

Hollywood Effect Myth

Myth #1: Smoke will trigger a sprinkler system to go off.

Reality: In an effort to escape, a bad guy lights a cigarette. He starts on his glorious speech as the smoke wafts toward the ceiling. As he finishes his talk, with everyone sitting in rapt attention, the sprinkler system goes off, the building is flooded, and the bad guy escapes. Nope. Sorry. Automatic fire sprinklers work using either a fusible link or frangible bulb. This bulb or link (depending on the sprinkler head installed) activates due to a change in temperature, not by smoke particulate. In a frangible bulb, liquid is kept inside of a glass tube. When the heat reaches a certain temperature (165 degrees Fahrenheit in most office buildings, but it can be more or less depending on the application), the liquid expands causing the glass to shatter. Once the glass shatters a flange is released and the water comes out of the sprinkler head. How these heads operate varies by system, but it's essentially always the same.... This brings us to Myth #2.

Myth #2: When one sprinkler head goes off, all sprinkler heads go off.

Reality: This occurs in one very famous Hollywood movie. Our action hero needs to distract the bad guys, so he sets off the system with his lighter and the building is flooded, giving him his chance to save the day. But this really wouldn't happen unless you have a deluge system. Deluge systems are used only in very specific applications and are not that common. In the majority of sprinkler systems, only one head is activated at a time. As heat spreads, more sprinkler heads are activated. In a deluge system, once one head is activated, they will all go off. Studies have shown that in a majority of fires, fewer than eight sprinkler heads are needed to control the blaze.

Myth #3: Sprinkler systems can be set off using a cigarette lighter.

Reality: This is a common scene in movies. The bad guy, or good guy, in an effort to distract everyone, uses his cigarette lighter up close to the sprinkler head, activates it, and floods the building. Refer to Myth #2, as they're closely related. While the flame from a cigarette lighter, if held closely enough, could activate a sprinkler head, it would only ever do just that. Activate one sprinkler head. The water would immediately put the small flame out and you'd get a pretty good shower. It wouldn't flood your building as only one head would go off from this amount of heat (unless, of course, it's a deluge system).

Myth #4: Sprinkler systems can be set off by pulling a switch or fire alarm.

Reality: Once again, looking to escape a bad situation, our hero pulls the fire alarm and activates the sprinkler system, confusing the enemies and allowing his escape. Sorry, but another no. As we've discussed, automatic sprinkler system heads are activated by heat from a fire. While they are linked to the fire alarm, they cannot be activated by pulling a simple handle (although there are deluge systems that can be activated this way). The system can be entirely shut down by tampering with either the gate valve or butterfly valve (depending on the type of sprinkler system installed).