INSPECTION, TESTING, AND MAINTENANCE OF YOUR FIRE SPRINKLER SYSTEM

As in any investment, it is important to ensure its continued effectiveness and performance. The sprinkler system is a working mass of piping and sensory parts that will need to be properly maintained, respected by the residents/members and inspected by a knowledgeable professional on a regular basis.

How often should our system be inspected?

At least annually, a full sprinkler system inspection should be performed by a sprinkler system professional. Some cities and states require more frequent inspections. Most sprinkler contractors offer economical long-term service agreements. These contractors can provide you with the test certificates, which will comply with your local fire department inspection requirement.

Many municipalities have required compliance of NFPA 25 code which specifically addresses the standard for a periodic maintenance inspection. This code expects an owner of a property to ensure that the sprinkler system remains operable over the life of the system.

Regular inspections provide for the peace of mind that comes in knowing your system is always ready and in top-working order. Like any other investment that you make to your property, you need to preserve the value. An annual maintenance inspection program will confirm system readiness, inspect components and provide you with a detailed report recommending any necessary corrective action that needs to be taken.

The contractor who has installed your system may not have a division that does these maintenance inspections. If they do not have this service available there are numerous national firms that can be retained to do this for your property. Refer to www.nfsa.org for some recommendations.

There are certainly some service items that you as a property owner can be responsible for on an on-going basis such as checking monthly to ensure the valves are open or that the water pressure gauge reports a pressure in an acceptable range. Your installation contractor will be responsible for giving you some training initially, so be sure and have this discussion with them.

Are there other times when the system should be checked?

Fire sprinkler systems are designed to the conditions which exist in a chapter house when the sprinkler system was installed. After any changes to the building or the use of the building, an analysis should be done to determine if the system is adequate.

Similarly, even if the building and its use remain the same, changes in the water supply or changes to equipment necessitates a reevaluation of the system.

How should the resident/members use the sprinkler system?

For the system to be effective, the equipment should be kept intact and not disrupted. There are a few simple ways residents can help:

- Never paint any fire sprinkler part
- Never hang anything from any part of a fire sprinkler system
- Never stack items close to fire sprinklers
- Always report damages to any part of the fire sprinkler system
- Always make sure control valves are in the open position
During winter breaks, should I be concerned about the sprinkler system freezing?

It is important during the bid and specifications process that you and the contractors identify any areas where the sprinkler piping could be exposed to temperature fluctuations, such as freezing and make certain that sufficient insulation is used to reduce this risk.

During the breaks, we recommend that the interior temperature be maintained at 55 degrees to ensure that the pipes do not freeze and ultimately break which would cause significant water damage and potentially render the system inoperable.

The risk of freezing pipes to a building can be far more damaging than an actual fire, as you are hindering the operation of the piping. Proper oversight during the winter months is critical.

Serious fires in student housing wreak almost unimaginable devastation and disruption; this potential warrants careful consideration of fire safety options. In particular, automatic sprinkler systems should be considered as a viable option; they have established an impressive record of preventing residential fire catastrophes, particularly in the hospitality industry.

With technologies developed specifically for residential applications, automatic sprinkler systems are now commonplace in hotels and motels, where they afford the traveling public with a high level of fire safety. College students deserve this same high level of protection ... and their parents expect it.

**Helpful Info**

**Building and Fire Research Laboratory**

The Building and Fire Research Laboratory studies building materials; computer-integrated construction practices; fire science and fire safety engineering; and structural, mechanical, and environmental engineering. Products of the laboratory's research include measurements and test methods, performance criteria, and technical data that supports innovations by industry and are incorporated into building and fire standards and codes.

**BFRL Mission**

To promote U.S. innovation and competitiveness by anticipating and meeting the measurement science, standards, and technology needs of the U.S. building and fire safety industries in ways that enhance economic security and improve the quality of life.

**BFRL Vision**

To be the source for creating critical solution-enabling tools—metrics, models, and knowledge—and promoting performance-based standards that are used by the U.S. building and fire safety industries to establish global leadership.

http://www.bfrl.nist.gov

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Tim has an extensive background in fire protection including over 35 years of service with the Whitman, Massachusetts Fire Department, a suburb of Boston.

With over twenty years as Chief of Department, he has many appointments to his credit, including the Massachusetts Department of Fire Services, Special Operations Team where he served as an Operations Chief; the Massachusetts Fire Service Commission where he was elected as Chairman; the Task Force on Fire & Building Safety, a committee charged with making a comprehensive review of the Commonwealth’s building and fire codes; and the Fire Science Technology Program Advisory Board at Massasoit Community College.

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