Preventing Fire Sprinkler Freeze-Ups

Fire sprinkler pipes and fire sprinklers - like domestic water pipes - are subject to damage and/or freezing when temperatures dip below 40°F. Water leaks caused by freezing and bursting pipes can damage buildings and contents and interrupt your business. Most sprinkler freeze-ups can be prevented with an effective freeze-up prevention program.

Business owners can follow these tips to prevent fire sprinkler systems from freezing during cold weather:

**Preventive Maintenance and Contingency Plan**
- Assign personnel to ensure your fire sprinkler system is getting its required annual inspection by a licensed sprinkler contractor. Correcting deficiencies and impairments caught by the inspecting contractor can prevent sprinkler freezes (such as repairing a heater in a fire riser room).
- Provide staff with a contact list for fire sprinkler and fire alarm contractors, water department, electric and gas companies, and equipment suppliers.
- Conduct a physical survey of the facility, looking for freeze-up hazards such as missing insulation, holes in exterior walls, heaters that aren’t turned on, etc.
- Provide periodic program review and employee training.
- Create and follow a seasonal checklist to ensure all these measures are followed.

**Winterizing Inspections**
- Monitor products in unheated areas subject to freezing, or install permanent heating appliances (do not use extension cords longer than 90 days).
- Ask your sprinkler contractor to drain low point drains (drum drips) on dry-pipe sprinkler systems to remove water that may be present from condensation or accidental freezing.
- Place dry chemical or carbon dioxide fire extinguishers in areas subject to freezing, as these extinguishing agents won’t freeze like a water extinguisher might.
- Inspect attic insulation to ensure it is properly in place.
- Ensure void spaces over patios protected by fire sprinklers have adequate insulation.

**Temperature Monitoring**
- Appoint individuals to monitor weather reports. Establish guidelines to alert management and maintenance personnel.
- Maintain indoor temperatures of 70°F (or higher). Provide adequate heating throughout areas susceptible to freezing, such as stairwells, above dropped ceilings, and attic spaces, as well as fire riser rooms, fire pump rooms and water tanks.
- Put thermometers in key areas throughout the building.
- Monitor boilers and other facility heat supply sources, using personnel and/or supervisory devices.
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Unattended Buildings
- Monitor building temperature via supervisory devices, which should transmit to a location with 24-hour attendance.
- Have security or maintenance personnel conduct periodic rounds to monitor indoor temperatures.
- Maintain the outside of the facility. Repair broken windows and doors.

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For more information about your fire protection systems please visit lfra.org or call 970-962-2498.

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