

# *Catholic Mutual. . ."CARES"*

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## **PREVENT FROZEN SPRINKLER SYSTEMS**

Frigid temperatures can cause extensive freeze damage to automatic sprinkler systems. A person should be designated and trained in the inspection and maintenance of a property's sprinkler system. Tests on the system should be performed frequently. Other personnel should also be trained to act as back-ups to the designated inspector. Small properties may prefer to use a sprinkler contractor to perform this inspection, but one or two persons associated with the property should still be taught how to visually check the sprinkler system for breaks or potential hazards on a regular basis.

Special precautions should be taken during cold weather to prevent sprinkler systems from freezing. These include:

1. Promptly and completely remove snow which prevents access to control valves, hydrants, or service roads; blocked access might discourage regular maintenance or inspections of the sprinkler system.
2. Ensure that doors, windows, skylights, ventilators, and other openings are weather-tight to prevent the admission of cold air.
3. In properties protected with wet-sprinkler systems, maintain a constant temperature higher than 40 degrees Fahrenheit. This is very important if sprinkler piping is located in concealed spaces or attic areas. Necessary steps should be taken to assure adequate heating in these areas.
4. Check sprinklers around unit heaters or other heat producing devices for correct temperature rating.
5. Inspect sprinkler systems frequently for technical malfunctions which may cause or aggravate freeze damage. Corrosion, clogged lines, mechanical damage, and tampered valves are a few disorders which could significantly reduce the performance of the system and make it more vulnerable to freeze damage.

Regular maintenance of sprinkler systems is one of the most effective methods for preventing freeze damage. A large freeze loss processed by Catholic Mutual during the Freeze Catastrophe of December, 1989 involved \$250,000 in damages at a school. During the Christmas break, a portion of the dry sprinkler system malfunctioned and filled with water. After the system froze and broke, water ran for approximately twenty hours before it was discovered. Proper maintenance of the sprinkler system, frequent inspections of the vacant school during cold

weather, and a higher building temperature could have prevented or lessened the extent of damage.

If your sprinkler system becomes frozen:

1. Notify the Fire Department responsible for protecting your property.
2. Do not attempt to thaw out piping by use of a torch or open flame device.
3. Determine the specific causes of the freezing (i.e., inadequate heat, insulation, mechanical failure). Take corrective action to prevent another occurrence.
4. If the system has been damaged, repairs should be made and the system returned to full operation.

(REV 6/04)