



Risk Control Services: Preventing Frozen Pipes

Freezing weather may bring discomforts but one of them, frozen water pipes, can be avoided with a little planning and a few simple steps. When frigid arctic air hits, water freezes, and as it freezes, it expands causing pipes to burst and possible flooding to occur. Domestic water lines, heating and cooling systems and sprinkler systems are all susceptible.

Before Freezing Weather

Preventative maintenance (building envelope – keep the cold weather outside).

- Seal/caulk windows, doors, electrical outlets and ensure weather-stripping is in good condition
- Insulate wall cavities
- Insulate water pipes exposed to cold temperatures or drafts

Preventative maintenance (heating systems)

- Maintain heating equipment according to manufacturer recommendations
- Inspect filters and piping for obstructions (dust, sludge, etc)
- Verify that dampers, vents and valves are in the proper positions, allowing for adequate air movement/water flow

Consider monitored low temperature alarms in strategic locations to provide warning prior to freezing conditions.

Frequently inspect (daily) unoccupied building areas susceptible to cold weather conditions for cold temperatures, drafts, dampness, water staining, etc (vacant tenant spaces, mechanical rooms, sprinkler rooms, concealed spaces, etc). Maintain a log of all inspections.



Know the locations of all water system piping. For example are lines contained in wall cavities or ceiling spaces that may experience colder temperatures than adjacent rooms?

Keep portable electric heaters available. Note: Portable heaters should only be used as a last resort and a temporary solution. Ensure extension cord use is limited and that the heaters have tip-over protection and a thermostat.

During Freezing Weather

Allow water to trickle slowly from faucets during abnormally cold weather. This helps prevent pipes from freezing.

Areas with domestic water lines: Don't set thermostats (including vacant areas) lower than 13° C (55° F).

Buildings Equipped With Fire Sprinkler Pipes: Areas with wet system sprinkler system piping (including sprinkler valve rooms for wet and dry systems) must be maintained at a minimum of 5° C (40° F) to be in accordance with fire code requirements intended to prevent freezing lines.

Open cabinet doors and run fans to allow warmer air to circulate around the plumbing (where piping is situated within enclosed vanities along exterior walls).

Response

Consider monitored liquid sensors in strategic locations to provide early detection of leaks.

Know the location of all isolation valves and the areas they service. Doing so should facilitate a prompt response which reduces the time required to stop the flow (plot locations on floor plans and identify valves located in concealed spaces using colour-coded stickers or tags).

Keep tools and supplies required to shut valves readily available at all times.

**If you have any questions regarding this subject,
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