

## Frozen Pipes

However tempting it is to turn down the building's thermostat to conserve fuel during cold weather—don't. The clean-up costs of fixing burst pipes is much more than the cost of the fuel saved. **Thermostats should never be set lower than 55°.** Keep thermostats **above 65°** when the weather may dip below 0° or the facility is to be unoccupied for a weekend or longer.

### Guide for Discussion

#### During cold weather

- Keep all building areas heated, **never lower than 55°.**
- Put low temperature alarms in place.
- Remove barriers to the flow of warm air, i.e., remove some ceiling tiles to allow air circulation.
- Maintain heating system.
- Ensure adequate fuel supply for heating system over weekends and vacations.
- Consider using UL or equivalent heat tape or similar products—but consult a professional about how to apply and use heat tape, as improper use can cause a fire.
- Drain unused water systems.
- Consider using antifreeze solutions in non-potable water systems

#### During a "deep freeze," when temperatures drop below 20°.

- Schedule regular building "Freeze Watches," during winter storms and cold weather.
- Turn thermostat **to 65° or higher.**
- Open cabinet doors to allow warm air to circulate around plumbing pipes.
- Temporary or portable heating devices **should not be used by the building occupants for supplemental heating.** These devices should only be used for facilities personnel for emergency purposes.
- Let water trickle from faucets that are served by exposed or vulnerable pipes. Even a small trickle of water flowing through the pipe will help prevent it from freezing.

#### Thawing a frozen pipe

If a water pipe does freeze, it should be thawed immediately, but very carefully. Building fires have been started by careless people who've used a propane torch to thaw a pipe.

- **Locate the main shut-off valve and be prepared to close it in case of sudden rupture.**
- Find the frozen area of the pipe; it may be frosted or have ice on it. If the situation is getting critical the pipe may be slightly bulged or look slightly fissured.
- **Open the faucet closest to the frozen area.**
- Aim the warm air from a hair dryer at the frozen area of the pipe to gently thaw it. **Never use a propane torch. Pipes that heat up too quickly can rupture and burst. Worse, fires can be easily started by the open flame.** You can also use an infrared heat lamp, if the pipe is behind a wall.
- PVC pipes, as well as copper pipes, should be thawed as quickly as possible because they too can rupture and burst.
- Begin thawing from the faucet side, moving back towards the main water line; this allows the water to flow out, without adding further stress to the pipe.

**Additional Discussion Notes:** Areas of your buildings that have poor air circulation are likely to be much colder than in the room itself, causing pipes located there to freeze.

#### Remember

#### Attendees \_\_\_\_\_

*Questions? Ask your Supervisor or CIRMA Risk Management Consultant.*