

## Prevent Frozen Pipes and Water Damage

As autumn temperatures drop and a chill settles over our churches, school facilities and homes, the potential for frozen and damaged water pipes and subsequent water damage to a building and its contents increases. We can reduce or eliminate the chance of that happening with a little “winterizing” and some basic precautionary actions.

### Bundle Up

Most of us throw on a jacket when it gets cold. Before that cold weather arrives, bundle up your plumbing. Pipes protruding through walls to the outside and exterior faucets should be insulated, as should pipes running through attics, crawlspaces, garages, and other unheated areas. Hot water pipes are not always hot and should also be protected when exposed.

Where extreme cold weather exists, one might consider using heat tape or thermostat-controlled heat cables to keep exposed, vulnerable pipes protected from freezing, but use such equipment only if it is UL (Underwriter’s Laboratories) approved.

### Outside Down, Inside Up

When outside temperatures drop below freezing (32 degrees F., 0 degrees C.) make sure the heat is turned up. This is particularly important when leaving buildings empty for a period of time, like classrooms over the weekend and churches for days. Information varies as to how high to set thermostats, and that may be influenced by a building itself, its construction and how well it is insulated. Most sources, however, indicate that heat should be left on and set to no lower than 55 degrees F. (12.78 degrees C.). If you know that your building is poorly insulated, leaks cold air through windows and has areas that do not get as warm as others, crank the heat up higher. In some instances, as a last resort, we may need to let the cold water run continuously. (A stream of water slightly less than a pencil width is recommended.)

If leaving a building vacant for a long period of time, consider shutting off water and draining lines by opening faucets at the highest and lowest points. This process may also require blowing air through the pipes to remove water from low spots.

Open cabinet doors under sinks in kitchens and bathrooms and on other cabinets along walls where

there might be plumbing, to allow heated air to circulate underneath. Keep room doors open to enhance the circulation of warm air throughout the building.

### Winterization

Some winterization practices will help prevent pipes from freezing. Seal gaps where pipes enter buildings. Stop drafts. Seal leaks around doors and windows to prevent the penetration of cold air into the facility.

Disconnect water hoses from all faucets. When connected, water in the hose can freeze and expand and cause faucets and connecting pipes inside the home to freeze and break.

Where homes have interior shutoff valves for outside faucets, close the valves and drain water from the pipes leading to the outside.

### If Pipes Freeze

If pipes freeze, carefully consider options for thawing. Plastic pipes, if accessible can be heated with a hair dryer, but move the dryer continuously along the length of the pipe and do not stay focused on one small area too long. A grounded electrical heating pad on low can also help, but do not use these, hair dryers or other electrical apparatus if floors and other areas are wet, as electrical shock can occur. Hot wet rags wrapped around pipes provide another option.

Metal pipes can be thawed in the same manner as plastic. Some may consider the use of a flame device to thaw metal pipes, but considerable risk of damage to the pipes exists, and the potential for fire is high. There are numerous statistics on record concerning building fire losses due to pipe thawing activities.

### Ready for the Cold?

There are other “winterizing” activities that should be done each year, like cleaning gutters and downspouts, but this *Foresight* is intended to address only freeze prevention with pipes. Take the time now to ensure that your buildings are prepared for the coming cold season.

On particularly cold days, visit churches and other empty buildings and check for problems. It is worth the effort.