



Tips to help prevent pipes from freezing

The three central causes of frozen pipes are quick drops in temperature, poor insulation and thermostats set too low. You can prepare your home during the warmer months.

- Insulate pipes. **Pipe insulation** in your home's crawl spaces and attic helps even if you live in a climate where freezing is uncommon. Exposed pipes are most susceptible to freezing. Remember, the more insulation you use, the better protected your pipes will be.
- Use heat tape or heat cables. **Heat tape** or thermostatically controlled heat cables can be used to wrap pipes. Be sure to use products approved by an independent testing organization, and only for the use intended (exterior or interior). Closely follow all manufacturer's installation and operation instructions.
- Seal leaks. Locate and thoroughly seal leaks that allow cold air inside. Look for air leaks around electrical wiring, dryer vents and pipes, and use caulk or insulation to keep the cold out.
- Secure outdoor hoses, valves and faucets. Before winter hits, disconnect garden hoses and, if possible, use an indoor valve to shut off and drain water from pipes leading to outside faucets. This reduces the chance of freezing in the short span of pipe just inside the house.
- Let water drip. A trickle of hot and cold water might be all it takes to keep your pipes from freezing. Let warm water drip overnight when temperatures are cold, preferably from a faucet on an outside wall.
- Adjust the thermostat. Keeping your thermostat set at the same temperature during both day and night also reduces the risk of frozen pipes. During **extreme cold**, this also helps reduce the strain on the furnace.
- Open cabinet doors. This allows heat to get to un-insulated pipes under sinks and appliances near exterior walls.

Low-cost ways to save

Ductwork and Air Distribution

- Seal leaky duct connections with duct sealing mastic. Do not use duct tape, as it will dry out and come loose.

Water Heating

- Install an insulation blanket around your water heater.
- Install low-flow showerheads in your bathrooms.

Lighting and Appliances

- Test your refrigerator gaskets by closing the door over a piece of paper. If you can easily remove it with the door closed, consider replacing either the gaskets or the appliance.
- Install timers or motion switches on exterior lighting fixtures.

Investments for larger savings

Insulation

Minimum recommendations include:

- Attic Insulation: R-38 (12 to 15 inches)
- Floor: R-19 above unheated areas (6 inches)
- Crawl Space Wall Insulation: R-10 with a vapor barrier (foam board)
- Duct Insulation: R-13 in unheated areas
- Rim Joist Insulation: R-13 (4 inches)

Windows

- Install storm windows to provide additional insulation and to reduce air leakage.
- Replace your old, leaky windows with new, energy-efficient double pane windows.

Ductwork and Air Distribution

- Insulate all uninsulated ductwork in unconditioned spaces (attics and crawl spaces).

Air Conditioning

- Replace your air conditioning unit with a new unit with a SEER rating of 14 or higher.

Heating

- Replace your furnace with a new unit with an AFUE rating of 95 percent or higher.

Water

- Consider replacing your water heater with an energy-efficient model if it is over 7 years old.

Appliances

- Purchase ENERGY STAR qualified models when replacing appliances.



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Free ways to save in the winter

- Set thermostat settings at 68 degrees or as low as possible while you are home.
- Set thermostats to 60 degrees when you're away from home or install a programmable thermostat to do that automatically. Make sure you install a programmable thermostat if you have a heat pump so that you can gradually warm the house back up before you return home.
 - If you have a heat pump, do not make a lot of changes in the thermostat temperature during heating season unless you are going to be away for several days. Otherwise, the auxiliary heat will come on which makes the system costlier.
- Wear layers of clothing and use extra blankets.
- Close fireplace damper when not in use.
- Don't block vents and radiators with furniture, curtains, or rugs.
- Keep shades open during the day and close them at night. for windows that receive direct sunlight.
- Reduce the temperature setting on your water heater to 120 degrees or less.
- Clean the coils on the bottom or the back of your refrigerator regularly.
- Recommended temperature for your refrigerator is 37 to 40 degrees and 5 degrees for the freezer.
- Inspect and clean your dryer vent tube on your dryer periodically. Built up lint can lead to longer drying times and can be a fire hazard.
- Take 5-minute showers instead of baths.
- Run washer, dryer, and dishwasher only when you have full loads.
- Wash clothes in cool or cold water whenever possible.
- Since some appliances use electricity all the time, plug them into a power saving electric strip or turn a regular strip off when the appliances are not in use.
- Scrape your dishes rather than rinsing them before putting them in the dishwasher. Air dry dishes instead of using the drying cycle feature on your dishwasher.

Low-cost ways to save

Heating

- Replace the system's filter every three months or more often if it gets clogged with items like pet hair.
- Schedule regular tune-ups for the heating and cooling system for optimum efficiency.

Windows/Doors

- Replace weatherstripping on exterior doors.
- Check door bottoms and thresholds to make sure air is not escaping. Replace when necessary.
- Caulk window and door frames on the exterior side.
- Replace missing window putty or glazing as needed.

Air Sealing

- TIP: Place a lit stick of incense near walls, windows and doors during a windy day to check for air leaks. A horizontal flow of the smoke means you have a leak. Spider webs can also indicate an air loss.
- Install foam gaskets behind light switches or outlets located on exterior walls.
- Seal holes in the exterior walls, crawl space or basement where air conditioning and plumbing pipes penetrate the building.
- Close off openings between a masonry chimney and surrounding wood framing in the attic with sheet metal or foil-faced foam board insulation.
- Install weatherstripping around the perimeter of attic access hatches and pull-down stairs.

The bigger the difference between the inside & outside temperature, the more energy you will use to heat a house.

Example: If the outside temperature is 20 degrees & inside is set at 75 degrees. This 55-degree difference is going to cost more than if you lower the thermostat!

What to do if pipes freeze

Pipes do not always burst when frozen. There are a few things to keep in mind:

- Call a plumber if needed. If you turn on your faucets and nothing comes out, leave the faucets turned on and call a plumber.
- Avoid use of appliances near water. Do not use electrical appliances in areas of standing water. You could be electrocuted.
- Avoid applying flames to thaw pipes. Never try to thaw a pipe with a torch or other open flame because it could cause a fire hazard. Water damage is preferable to burning down your house!
- Use a hair dryer as a possible heat source (with caution). You may be able to thaw a frozen pipe using a hair dryer — again, make sure you are not in standing water. Start by warming the pipe as close to the faucet as possible, working toward the coldest section of pipe.
- Shut off the water supply. If your water pipes have already burst, turn off the water at the main shutoff valve in the house. Make sure everyone in your family knows where the water shutoff valve is and how to open and close it. Be sure to leave the water faucets turned on.