
THREE T'S WINTERIZATION GUIDE

12 Steps to Winterize Your Home

Winterizing a Vacant Home

If you flee to warmer climates in the winter or have a vacant home for sale this winter, careful decisions need to be made to prevent expensive repairs from frozen plumbing. Homes with damaged plumbing (or worse) due to lack of, or improper winterization can cost thousands of dollars to repair.

To Winterize, or Not To Winterize?

The simplest solution and least risky alternative to winterizing are to leave the heating system running at a minimum setting (with the water turned off of course). Though it might seem like a waste of money or energy at first glance, a minimal heating bill will be less expensive than the cost of potential repairs if everything were to freeze up. Also, the rigors of extreme winter temperatures and low humidity in a winterized home stress the interior of the house and the appliances. Wood trim and furniture dry out, and seals in appliances can dry and crack.

As a side note, it is always prudent to turn off the main water supply or well pump whenever you will be gone from the home for even a day or two. On properties with a well, a major leak can cause the well pump to simply run itself to death in your absence, also causing significant water damage.

Also consider that if the house is on the market, a cold house will not show well. When a buyer does come along, it will also need to be de-winterized before a home inspection can be performed (we know that you will of course want to have the house inspected by us!). Extra cost, more delays. On the other hand, exposed plumbing in some crawlspaces, or plumbing in homes with no central heating may be at risk. Some vacation homes were just] not built for winter. In the case of older homes that are poorly insulated and/or unevenly heated (or just poorly constructed homes), then winterization may be the safest bet. Who Should Do the Winterization?

It is true that the owner or a convenient handyman winterizes many homes every year, without problem. However, big repair bills may result if it is done only half way, or improperly. If a house is to be winterized, we suggest it be done by a professional plumber.

Basic Steps Needed to Properly Winterize a Home.

1. **Turn Off Water.** The first step is usually easy; locate and turn off the main water shut off valve, preferably one that is outside. If the property is supplied by a well, then also turn off the breaker to the pump system.
2. **Water Heater.** After the water is off, turn off and drain the water heater. There are a couple of different procedures that could be followed to accomplish this step. Temperature controls on gas water heaters should be set to the Off position, as well as closing the gas valve. Electric water heaters should be shut off at the breaker. A faucet or spigot will need to be opened to allow air to flow in as water is drained out.
3. **Drain Supply Lines.** Water then should be drained from the entire water supply system, faucets and fixture shut off valves left open. If the house is on a well, the pressure tank should also be drained.
4. **Blow Out the Water Supply Lines.** Though gravity may be sufficient to drain the plumbing in many homes, standing water will remain in some pipes. Though the water is no longer under pressure, this remaining water will freeze and may strain some fittings. CPVC (plastic, not PEX) would be prone to cracking. We recommend that water be blown out of the water supply lines with an air compressor. Many do-it-yourselfers skip this step, and most get lucky. If the house is to be winterized by a handy man or plumber, verify their level of thoroughness by asking if they blow out the water lines.
5. **Using special fittings to connect a compressor to the house plumbing, the water supply lines would be cleared of water by systematically closing and opening faucets and valves starting with plumbing fixtures most distant from the compressor and working backward.**
6. **Other Items to Drain.** Water softeners, filters, and water treatment systems also need to be drained (the brine tank in a water softener can usually be ignored).
7. **Anti-Freeze.** Once all the water supply lines are completely empty, flush the toilets until they are empty, then winterize toilets and other drain traps by filling them with a special non-toxic RV type antifreeze solution (pink in color).
8. **Other Appliances.** Keep in mind that water also runs through many appliances such as the washing machine and dishwasher, as well as the water supply line to the ice-maker in refrigerators. Each one

of these will also need to be drained and/or disconnected. Some professionals also recommend anti-freeze be poured into the bottom of the dishwasher and washing machine.

9. Turn Off Electrical. Turn off all electrical breakers to appliances as well as any other unnecessary breakers, and post a reminder note at the panel to make sure the electric water heater and other appliances aren't turned on before the water is turned on.
10. Heating systems. You wouldn't think that a furnace would contain water, but some do. High-efficiency furnaces (also called condensing furnaces) generate a significant amount of condensation from the water vapor in the flue gases. These systems, as well as air conditioners, have a condensate drain line. Sometimes the condensate drains into a floor drain, but if there's no drain available the condensate drains into a small pump which pumps the fluid uphill into the plumbing drain. Though there is less chance of damage, these should also be looked at.
11. Special Heating Systems. If the home has any sort of a more elaborate heating system such as a hot water boiler, heat pump, or radiant floor heat, then we recommend VERY strongly that it be handled by a HVAC professional familiar with these systems. These heating systems sometimes circulate water instead of a freeze-resistant fluid, or may interconnect with the plumbing system and/or hot water heater. It should not be assumed that these systems could simply be turned off without danger of damage from freezing. We inspected one house with an expensive hot water boiler system that was severely damaged, and radiators cracked after the house had been "professionally" winterized. That professional may have understood plumbing, but did not understand the heating system. Caused some problems on that sale.
12. Warning. Last of all, post signs in conspicuous locations ("Winterized - Do Not use Plumbing") just in case there are unexpected visitors.

De-Winterization is just as important.

When returning to occupy the house, the entire process must be carefully reversed (de-winterized), such as turning off faucets and fixture shut off valves before turning the water supply or well pump (otherwise you can be in for a rude surprise).

If you have any questions or need help with your winterization, plumbing or heating, please call Three T's Plumbing and Heating at 989 780-2963. We are here for you.