



Winter is just around the corner – are you ready?

By Tom Lienhard, PE, BSME, CEM, CLEP

Over the years I've spent countless hours making sure my home is energy efficient. However, last winter taught me a few lessons about the havoc tough winters can play on our homes. Without proper winterization, our homes can suffer from roof leaks, broken gutters, broken windows, energy loss and increased energy bills. It's important that we winterize our homes before it gets too late for this heating season.

To prevent your energy dollars from escaping through air leaks, sealing your home is imperative. Since sealant typically doesn't set up well with temperatures of 45 degrees or below, it's important to caulk outside now before the severe weather kicks in to ensure the effectiveness of the caulk.

Make sure to caulk externally around windows, doors and other places where dissimilar materials come together. Not all caulks are equal, so be sure to choose the right one for the job. Keep in mind that homes generally need to be re-caulked every three to five years. My son re-caulked our home this summer and even though he is an excellent handyman, you don't have to be an expert to do an efficient job.

Since air leaks around doors and windows can account for up to 11 percent of air infiltration, you also need to weatherize the inside of your home.

Weatherstripping is an inexpensive way to stop leaks, and it comes in all shapes and sizes. To ensure its effectiveness, use the appropriate weatherstripping for each location.

Another major source of heat loss is your home's fireplace. Up to 14 percent of heat loss can escape through your fireplace. To prevent this heat loss, keep the flue damper closed snugly. Over time, fireplace flues can lose their effectiveness creating an opening for heat to escape. Chimney top dampers and chimney balloons can be used to fix a drafty chimney.

Warm air build-up in your attic, along with solar heat, can melt roof top snow, contributing to ice dams, which can form on overhangs and gutters. To help prevent this, make sure your attic is properly ventilated and insulated. Put simply, if you don't have any snow on your roof and your neighbors do, you have some work to do.



Other causes of attic heating can be unsealed and uninsulated heating ductwork in the attic space or air leaks from the conditioned space below the attic. For safety purposes, do not cover attic vents with insulation and be sure to clear snow or leaf debris from areas around exhaust vents. Also, don't vent fans into attic space. This can cause heat build-up or possible moisture damage to your attic insulation.

There are many low-cost energy efficiency improvements you can make to keep the heat inside your home and the cold outside. However, energy savings will vary depending on the R-value of your home's insulation, the efficiency level of your heating system and how you use energy in your daily life.

For more energy saving winter tips, visit www.energysavers.gov

Equipment Rebates and Incentives

Some electric and natural gas utilities offer rebates and incentives for customers making energy efficiency upgrades to their home or business. It could pay to find out what your energy provider offers.

Tax Credits

Find out how the new stimulus funding has affected Federal Tax Credits for Energy Efficiency at www.energystar.gov

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