Air infiltration or air leakage occurs when unwanted air moves in and out of your home, causing drafts. As a result, your heating and cooling systems have to work harder and longer to keep you and your home at a comfortable temperature, increasing your monthly utility bill. This extra work is an additional cost to you. Fortunately, you can limit many of these drafts with inexpensive and easy solutions. Listed below are a few of the common places air infiltration occurs.

**DOORS**

- **Can you see light coming through the bottom of your door?**
  If so, you need to replace or adjust your threshold weather stripping.

- **One of the best solutions for stopping air leaks at the bottom of a door is a door shoe.**
  Check to make sure the ribbed door shoe that attaches to the bottom of your door is in good condition. If not, you can buy a new one at most hardware stores.

- **Once you have a new door shoe (or have confirmed that the existing one is in good condition), slide it into the threshold bracket.**
  You may have to adjust the bracket up or down for a proper fit. The goal is to have a snug fit that minimizes the gap between the door and the floor while still allowing the ability to open and close the door.

- **Weather stripping is also needed around the door frame.**
  Look for soft, flexible seal that won’t harden over time. Also, look for elongated mounting holes that allow for adjustments of the weather stripping. Remember, a wood door may change its shape in response to varying moisture conditions, so it’s important to maintain a tight seal without making the door difficult to close.

**LIGHT SWITCHES AND OUTLETS**

- **Light switches and outlets on exterior walls are a common location of air leakage.**
  Remove the switch plate cover and apply the foam gasket over the switch. Reinstall the switch plate cover.
EASY WAYS TO REDUCE AIR LEAKS

ATTIC ACCESS

Attic access hatches are rarely weather stripped, leading to significant air leakage around the edges of the access hatch.

Install a self-adhesive foam gasket at the edge of the attic opening. When you close your attic hatch, the gasket will prevent air leakage from your home into your attic space. Also, install insulation on the attic side of the attic hatch.

PLUMBING LOCATIONS

Wherever a pipe penetrates through a wall, there is an opportunity for air to leak in and out of your home.

Use spray foam sealant to seal between the drywall and the pipe. The spray foam will expand and harden. Once hardened, cut the excess foam off with a utility knife and push the escutcheon ring back into place.

WINDOWS

If you feel a draft near your windows, the original caulking and weather stripping may no longer be doing the job.

Remove the old caulking and apply new caulking at the interior and exterior locations where the window meets the house.

OTHER WAYS TO SAVE

A crack in the wall or ceiling allows heated air to escape from your home.

Patch or plaster cracks as necessary.

Be sure your fireplace damper is in good working condition and closes securely when not in use.

A tightly sealed glass screen can help reduce heat loss from a leaky damper in your fireplace.

Remove window/wall air conditioners during the winter when they’re not in use.

Otherwise, air conditioners should be tightly covered on the outside and sealed on the inside for the winter.

Caulking is required wherever two different building materials or parts of the house meet.

These include areas around outside door frames, windows, foundation sills and electrical boxes. Penetrations, cracks and other infiltration points can also be sealed using inexpensive and easy to apply caulking. Silicon caulk is recommended for exterior areas because of its high durability and flexibility. It should be used where there is movement between two surfaces due to stress – for example, the opening and closing of a door. Silicon caulk is more expensive than latex based caulk, but it will maintain a tighter seal longer. Acrylic latex caulk is a good general purpose caulk for plugging gaps in wood, plaster and drywall. It will last for ten years or longer. If you plan to paint over the caulking once it is installed, check the label for compatibility.