



City of Wayne Newsletter

City of Wayne
Utilities

Volume 11 —Issue 2
February

ENERGYWISE TIP ~ INFILTRATION



When the thermometer dips below 20°F and there is more than a little breeze outside, you can find out a lot about how well your home seals out the cold. You might notice your curtains lightly swaying with each pulse of wind. You might go downstairs into your basement and wonder why it feels 10 degrees colder than the main floor. Perhaps you wonder why the snow has already melted off your roof while your neighbor's is still totally white. Worse yet, you might have opened your latest utility bill to find you used two or three times more energy than the prior month. All of these situations are often the result of one common problem: infiltration.

Infiltration is the unintentional or accidental introduction of outside air into a home, typically through cracks in the building envelope and through use of entryways. Some people refer to infiltration as air leakage. Infiltration can be caused by wind, negative pressurization of the home, and air buoyancy forces commonly known as the "stack effect."

The "stack effect" is when warm air moves upward in a building. This happens in summer and winter, but is most pronounced in winter when indoor-outdoor temperature differences are greatest. Warm air rises because it is lighter than cold air. So when indoor air is warmer than outdoor air, it escapes from upper levels of a home and through open windows, ventilation openings or penetrations and cracks in the building envelope. Rising warm air reduces pressure in the base of the home, forcing cold air to infiltrate through open doors, windows or where the house sets on its foundation. In winter, this can result in warm, moist indoor air moving into cold envelope cavities. As that air cools, it condenses, creating unexpected water problems in unforeseen locations.

In most homes, about one-third of the energy used for space conditioning is due to infiltration. As such, reducing infiltration can yield significant energy savings, with rapid payback.

To gain an accurate estimation of how much infiltration your home is subject to, a blower door test can be conducted. What is a blower door? It is a powerful fan that attaches to an external doorway (typically the entrance to the home) and blows air into or out of the house to pressurize or depressurize the home. The house is depressurized to a pressure of 50 pascals less than outside, which is the equivalent of a steady 20 mile-per-hour wind blowing at all sides of the building. Once this pressure is achieved, the device measures airflow needed to produce this pressure, which of course is the same as the airflow leaking into the house through various cracks. The resulting value is measured in Air Changes per Hour, or ACH. This indicates how many times per hour the total volume of air inside a home is replaced by outside air due to infiltration.

The State of Nebraska currently requires new homes be built to meet the 2009 International Energy Conservation Code, which states air changes must be less than 7 ACH at 50 pascals. As Nebraska adopts newer versions of the code, that number will drop below 5 ACH.

If you live in an existing home, there are numerous things you can do to reduce infiltration. Here are a few:

- ◆ Caulk and weather-strip doors and windows that leak air.
- ◆ Caulk and seal air leaks where plumbing, ducting, or electrical wiring comes through walls, floors, ceilings, and soffits over cabinets.
- ◆ Install foam gaskets behind outlet and switch plates on

walls. Inspect dirty spots in your insulation for air leaks and mold. Seal leaks with low-expansion spray foam made for this purpose, and install house flashing if needed.

- ◆ Look for dirty spots on your ceiling paint and carpet, which may indicate air leaks at interior wall/ceiling joints and wall/floor joists, and caulk them.
- ◆ Cover single-pane windows with storm windows or replace them with more efficient double-pane, low-emissivity windows.
- ◆ Use foam sealant on larger gaps around windows, baseboards, and other places where air may leak out. The sill plate or perimeter where a house sets on a foundation is often a major source of infiltration in existing homes.
- ◆ Ensure kitchen and clothes dryer exhaust ports on the outside of your home have flaps that seal when not in use.
- ◆ Replace door bottoms and thresholds with ones that have pliable sealing gaskets.
- ◆ Keep the fireplace flue damper tightly closed when not in use.
- ◆ Seal air leaks around fireplace chimneys, furnaces, and gas-fired water heater vents with fire-resistant materials such as sheet metal, sheetrock and furnace cement caulk.

For additional ideas on how you can reduce the effects of infiltration and save energy while heating and cooling your home, contact your local electric utility or visit www.nppd.com. You may even find you are eligible for incentives for helping with the cost of other energy-saving home improvements.

Inside this issue:

<i>Energywise Tip</i>	1
<i>Department News</i>	2
◆ <i>Library</i>	
◆ <i>Green Notes</i>	

CITY COUNCIL MEETINGS

February 6th
February 20th

Cross-Connection Control Survey Form

In the upcoming months, City of Wayne customers will receive a "Cross-Connection Control Survey Form" in the mail that needs to be completed and returned to the City Offices. This form will help prevent the accidental contamination of the City's drinking water.

The City of Wayne is required to do this not less than once every five years, and will greatly appreciate your cooperation.



Department News ~

Wayne Public Library ~



Winter story time continues with Mother Goose on Wednesday mornings at 10:00 and Story Time on Saturday mornings at 10:30.

Join us for stories, activities and fun. This month's themes include Groundhog's Day, Valentine's, Chinese New Year, Hats & The Library.

In an effort to beat the winter blues, the library is offering a Monday Movie Night this month for high school graduates and older. Movies were chosen based on the theme "From Book to Screen" and cover a variety of genres. Join us at 5:30 p.m. each week for a light meal (provided for those who register ahead of time, those who do not register may bring own sack lunch), movie and conversation. Call 402-375-3135 to register today.

Wayne State College Department of Education students will continue to be here on Mondays and Wednesdays from 3:30 p.m. to 5:00 p.m. to offer after school tutoring and homework help for grades K-8. Stop in during this time; no registration is required. Monday, February 12th, the library will host Smart Phone 101-this is just the basics. You will learn about what kind of phone you have, learn how to an-

swer your phone, texting, emails and talk about what apps are. You'll need the passwords for your phone and emails and you will need to have an email connected with your phone. We will also discuss what using your data means. Bring your questions! Registration is required. Call 402-375-3135 or stop in to sign up today.

Coloring Night is scheduled for Tuesday, February 13th, 6:00 p.m. to 7:30 p.m. at the library. All color pages, crayons, markers and pens, plus a light snack, will be available at this FREE event sponsored by Pac-N-Save. Coloring Nights are open to men and women high school grads and older.

Love is in the air! Join us after school on February 14th for a family friendly movie and snacks in the children's room.

February 17th we will be previewing 5 episodes of NET/PBS Kids new show Pinkalicious & Peterrific. This will be in place of our regular Story Time, so we will begin the special programming at 10:30 a.m.

Book Club has selected Colm Tóibín's *New York Times* bestselling

novel, *Brooklyn*, to read for February. This is a moving, deeply satisfying read about a young Irish immigrant in Brooklyn in the early 1950s. Eilis Lacey has come of age in small-town Ireland in the hard years following World War Two. When an Irish priest from Brooklyn offers to sponsor Eilis in America, she decides she must go, leaving her fragile mother and her charismatic sister behind. Eilis finds work in a department store on Fulton Street, and when she least expects it, finds love. Tony, who loves the Dodgers and his big Italian family, slowly wins her over with patient charm. But just as Eilis begins to fall in love, devastating news from Ireland threatens the promise of her future. Copies of the book will be available for checkout soon. Join in the discussion Tuesday, February 27th, at 6:30 p.m.

Tax forms will be available in limited paper copies. Stop in to see if we have what you need. All forms and publications are also available on-line. Library staff can assist with printing what you need for 10 cent per side.

WISE WORDS

"No man will make a great leader who wants to do it all himself, or to get all the credit for doing it."

~Andrew Carnegie

REMINDER

Mayor and Council filing deadlines:

Encumbants:

2/15/18

Non-encumbants:

3/1/18



Green Notes ~ Where can I recycle plastic bags in Wayne?



Plastic bags require a different type of recycling than plastic bottles and containers. Our local grocery stores in Wayne, Pac N Save and Quality Foods, each have a plastic bag recycling bin in their store marked **Bag-2-Bag®**. These bins accept:

- Plastic retail bags
- Produce bags
- Newspaper Bags
- Dry Cleaning Bags
- Cereal Box liners
- Paper towel and toilet paper wrap
- Over wrap on cases of soda or canned vegetables
- Sealed air pouches in mailed packages aka "Air Pillows"
- Ziploc and other zipper style bags (with zippers removed)

The Wayne Transfer Station does **NOT** accept plastic bags for recycling. Many people think the bins next to the glass and plastics recycling areas are for plastic bags, but those contents are taken to the landfill. Take your plastic bags to the grocery stores for recycling. Better yet, bring your own reusable bag when you shop. Both Pac N Save and Quality Foods offer a reusable bag credit of 5¢ per bag.

Food Labels 101 February 12. Join us at our monthly meeting on Monday, February 12, 7pm, for a Food Labels 101 talk led by Wayne State College. Come learn how to read food labels, how to understand ingredients, what it means to be organic, and how to be a smart consumer of healthy foods. This special meeting will be held in the back room of Tacos N More in Wayne.

For more tips on the Green Path to the Good Life, like the Wayne Green Team on Facebook or visit www.cityofwayne.org/greenteam.

YOUR RIGHT:

The Fair Housing Act protects people from discrimination when they are renting, buying, or securing financing for any housing. The prohibitions specifically cover discrimination because of race, color, national origin, religion, sex, disability and the presence of children.

If you believe you may be a victim of housing discrimination, contact HUD 1-800-669-9777 or your local Fair Housing representative:

Beth Porter

306 Pearl Street

Wayne NE 68787

(402) 375-1733

bporter@cityofwayne.org

YOUR CHOICE. YOUR RIGHT. YOUR HOME.

