

BURT COUNTY

PUBLIC POWER

PO Box 209
Tekamah, NE 68061

It's Your Power!



Is Your Home's Envelope Well Sealed?

Most of the time, when we think of the word envelope, we think of the outer covering that our mail comes in. Or, to irritate our kids or coworker, we might push the envelope.

However, your home's envelope consists of its outer walls, windows, doors and other openings. A well-sealed envelope, coupled with the right amount of insulation, can reduce your energy use — and, in turn, your utility bills. According to EnergyStar.gov, a whopping 9 out of 10 homes in the U.S. are under-insulated. Homeowners can save an average of 15% on heating and cooling costs (or an average of 11% on total energy costs) by air sealing their homes and adding insulation in attics, floors, over crawl spaces and basements.

DIY Home Energy Audit

If you would like to complete your own DIY audit, find out the following:

- The type of insulation in your home.
- The R-value (rate of thermal resistance) of your insulation. Typically, the higher the R-value, the more effective it is at insulating. Depending on where you live, you do not necessarily need the highest value; it depends on your local climate.
- The thickness or depth (inches) of the insulation you have.

In a newer home, the builder can help identify the type of insulation used and where it is located. In an older home, you will need to perform the inspection yourself. To complete a DIY energy assessment, you will need to check the following items:

In The Attic

- A general rule of thumb when inspecting the attic insulation is that if the insulation is level with or below the attic floor joists, you probably need to add more insulation.
- If you cannot see any of the floor joists because the insulation is well above them, you probably have enough, and adding more insulation may not be cost-effective.
- Insulation should be evenly distributed with no low spots; be sure to check throughout the attic to determine if there are any thin spots.
- Make sure the insulation in your attic has the appropriate R-value for where you live. Check the value printed on your existing insulation. If you cannot find the value, measure the depth of the insulation in inches. Multiply the depth by the following insulation type: 3.2 for fiberglass batting, for the loose fibers category, multiply by 2.5 for loose fiberglass, 2.8 for rock wool and 3.7 for cellulose. Then check EnergyStar.gov's recommended R-values. If your calculated value is less than the recommended levels for your region, then you should consider adding more insulation to your attic.

Behind The Walls

- Turn off the power to the outlet before beginning this check. Then use a voltmeter or voltage tester to confirm that there is no power at the socket before beginning work.
- Remove the outlet cover and shine a flashlight into the crack around the outlet box. You should be able to see if there is insulation in the wall and possibly how thick it is.
- Pull out a small amount of insulation if needed to help determine the type of insulation.
- Check outlets on all floors, as well as old and new parts of your home. Just because you find insulation in one wall does not mean that it is uniform throughout your home.

For more information on energy efficiency and electrical safety, visit SafeElectricity.org.

Burt's Briefs

Holiday Closing. Our office will be closed Thursday, November 25 and Friday, November 26 in recognition of Thanksgiving. In case of an emergency please call our toll free number 888-835-1620.

Changing Address.

If you are on the move be sure to let your Rural Public Power District know! Simply call us or drop us a note! You will be responsible for the power bill until we are notified.

"Ground" Your Tractor. A tractor outfitted with an engine heater can be shorted out when the operator touches the tractor, he became the ground path. Be sure you use a drop cord with three conductors, and be sure that the ground prong is left intact. A Ground Fault Interrupter outlet would be added protection.

Thank Heater Maintenance. If you use electric stock tank heaters, they could be a source of abnormally high winter electric bills if they are not properly maintained.

1. Check thermostats to make sure they work. Replace old units.
2. Check temperature settings periodically.
3. Make sure the insulation is still effective.
4. Check for water leaks.

Is your Stand-by Generator Standing By? If anything can go wrong it will. Store the generator in a clean assessable place so you're ready for that emergency. Make sure you have a transfer switch that's working properly before you connect your generator.

Utility and Solar Installation SCAMS

The energy industry is undergoing rapid change, and technology is paving the way for innovation in the way energy is used, produced, stored, and shared. While the changing energy market has created more options for consumers, it has also resulted in more utility scams and misleading information surrounding solar installations, in particular. That's because of two factors.

Utility scams are common because of the vast number of utilities that exist, and consumers are understandably anxious about the threat of disruption to their electric, heating, or water service. Second, new products and services in the energy industry provide an opening for scammers and pop-up companies to provide misleading information or shoddy products and services.

Avoid Phone Scams

A common phone scam typically begins with a phone number that appears to be from a valid utility company. The scammer will claim you have a past due account and threaten to disconnect service or take legal action. The scammer will typically demand that you use a prepaid debit card or money order, often within a very short, urgent time frame, to pay the "past due" amount. You can combat this scam by being aware of the status of your account. Never give your banking or personal information over the phone to someone you did not call. If you have a question or concern about your energy bill, call us directly at **888-835-1620**. Do not use the phone number given by the scammer.

Avoid Solar Scams

Another scam we see from time to time is connected to solar arrays. Homeowners with solar arrays may receive a sales call offering an accessory, upgrade, or extended warranty to their solar array. The calls could be from crooks claiming to represent a solar company, promising to replace faulty or broken parts or improve efficiency. Again, if you are not expecting the call, don't be fooled. These calls offering misleading information are likely a scam.

Use Trusted Sources

If you're considering a solar array for your home, make sure you are working with a reputable company. Because this is still an emerging industry with evolving technology, there has been a proliferation of pop-up companies in the market to make a quick buck. Burt County PPD wants its customers to make informed decisions about whether solar is right for them. After all, Burt County PPD has a different "bottom line" that is not directly tied to the sale of a product or service. We take a more holistic, objective view of how to achieve energy and cost savings for our customers, and that may or may not include solar. Before you sign the dotted line, please feel encouraged to contact us with any solar array questions at **888-835-1620**. In this ever-changing environment, it's important to remember you have a trusted energy advisor — your local Public Power District. We are a community-focused organization serving our diverse communities with innovative energy solutions and life-enhancing services. Remember, we're just one call or click away, so please reach out with any questions about your electric service or bills — we're here to help.

Interested in Home Solar?

Please call Burt County PPD at
888-835-1620 before signing a contract.

We want to make sure you have
all the facts so that you
can determine if home solar
is right for you.

Burt County PPD



888-835-1620

‘Watt’ Do I Need to Know About How Much Electricity My Appliances Use?

Determining how much electricity your appliances and home electronics use can help you understand how much money you are spending to operate them. Electricity is measured in units of power called watts, and one watt is a joule of energy used or produced per second.

The power consumption of small devices is usually measured in watts, while the power use of larger devices is measured in kilowatts (kW) (1 kW equals 1,000 watts). Knowing how much electricity an appliance uses and how much the electricity costs can help you decide whether to invest in a more energy-efficient appliance or make other cost-saving decisions, such as unplugging appliances when not in use. Becoming watt savvy is also helpful if you are considering purchasing a generator.

There are several ways to estimate how much electricity your appliances and home electronics use:

See the data plate

Appliances usually have data plates located on the back or inside the door. They tell you how many amps, watts and volts are needed to power the appliance. If your appliance does not list watts for some reason but does list the number of volts and amps, you can multiply them to get the number of watts.

Review the EnergyGuide label

The EnergyGuide label, a yellow-colored sticker or tag found on new products, provides an estimate of the average energy consumption and cost to operate the specific model of the appliance you are considering. The FTC requires the label, and the dollar amount is the estimated yearly operating cost based on the national average cost of electricity.

Use a monitor or meter

Wattage meters are affordable instruments that are easy to use and can measure the electricity usage of any device that runs on 120 volts. To put it to work, just plug the monitor into the electrical outlet and then plug the device into the monitor. The monitor will display how many watts the device uses. If you want to know how many kilowatt-hours (kWh) of electricity a device uses over a length of time, just leave every-

thing set up and read the display later. Some monitors even allow you to plug in your utility’s cost per kWh rate to determine how much that specific appliance costs you over a certain length of time.

Install a whole-house system

Whole-house energy monitoring systems provide more detailed data on your home’s energy use (as well as the ability to measure the energy use of 240-volt appliances). The features of these systems vary, and the cost and complexity depend on the number of circuits you want to monitor, how detailed the feedback is and the type of features available. The monitors are often installed directly into the main breaker panel of the home, and some require an electrician to install. Some monitors must be connected to your home’s wireless network, with data being viewed on a computer or smartphone, while others come with a dedicated display. In addition to providing information on the energy consumption of your appliances, this type of monitoring system helps you understand where and when you use the most energy, allowing you to develop strategies to reduce your energy use and costs.

To learn more information about electrical safety and energy efficiency, visit SafeElectricity.org.



Nebraska Extension News

By Kathleen Cue, Extension Educator

My Tree Was Planted Too Deep. What Does That Mean?

“Trees don’t die when they are killed” is a quip my colleague Jack likes to share. Nothing illustrates this truth better than in instances where trees are planted too deep. What constitutes a tree being too deep, you ask? The simplest answer to that is to look at the base of the tree. If the tree trunk has no visible flare at or slightly above the soil line, then it is planted too deep. Further confirmation can be observed when there is a gap between the soil and tree trunk, indicating trunk movement with the wind.

Structurally, all trees have a flare—the part where the trunk meets the roots. Parts of the tree above the flare have evolved to perform best when exposed to sunlight and air. Parts of the tree below the flare have evolved to perform best when growing in the highly-competitive soil environment. Ignoring this basic tenet of tree planting leads to chronic side effects that cause tree death, often after 5-10 years invested in its growth.

Some expected and unexpected symptoms of a tree planted too deep:

Bark Lifting

Cracking/lifting bark exposes the vascular tissue to air, which decrease water, nutrient, and sugar movement throughout the tree. These wounds further compromise tree health by diverting tree resources away from growth to the critical necessity of wound closure.

Borers

Most native borers are not the primary cause of tree decline but their presence is symptomatic of a tree already in decline. While steps to manage borer numbers may help the tree to survive, without correcting the underlying cause—being planted too deep—borer pressure will be an ongoing issue and internal distribution of insecticides within trees compromised.

Lions Tailing

Trees that are too deep often manifest their stress by developing leaf clusters at the end of branches, with mostly bare branches within the crown. This is a cause for concern because a tree’s inner leaves perform an important function during the heat of summer. The outermost leaves shut down, ceasing photosynthesis, when temperatures are high. This is where the inner leaves become important, taking over the task of photosynthesis on hot days. Lack of these inner leaves means less photosynthesis and slowing tree vigor.

Girdling Roots

Trees that are planted too deep foster and hide a host of root issues. Of these root issues, the most damaging is girdling roots. A girdling root is one that circles rather than grows outward, away from the trunk. As a circling root grows in girth and comes in contact with trunk tissue, the two structures compete for space, ultimately resulting in the constriction of water transport through the girdled portion of the trunk and to the top of the tree. Trunk constriction is apparent by the flat area at the base of the tree coupled with branch dieback within the canopy.

Trunk Decay

Trees that are too deep are prime candidates for breakage at the soil line from wind and snow loads. Naturally-occurring decay organisms in the soil cause rot in bark and heartwood, weakening overall stem strength.

Chronic Health Problems

The best defense any tree has is good health. Healthy trees are resilient, being able to withstand the onslaught of insect and disease problems, dry periods, mighty winds, hot summers, and severe winters. Trees that have been planted too deep have compromised health. Even though they may

Burt County Public Power District News Tekamah, Nebraska 68061 Phone 374-2631 or 1-888-835-1620 Board of Directors

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Meetings

In accordance with Nebraska Statute, notice is hereby given that the regular meetings of the Board of Directors of the Burt County Public Power District are held on the 1st Thursday of each month, commencing at 9:30 A.M. at the district office located in Tekamah, Nebraska. In the event that a holiday falls on the said 1st Thursday, the meeting date shall be as set by the Board of Directors and published in the Legal Notice.

An agenda for each regular meeting of the board is available for public inspection during business hours at least three (3) days prior to each meeting; provided however, that the Board of Directors shall have the right to modify the said agenda to include items of an emergency nature.

Office Hours
7:30 A.M. to 4:00 P.M.

grow, it will not be with the vigor of their species nor with the resiliency of their correctly-planted counterparts.

Most tree owners address poor tree growth by fertilizing, adding more water, piling mulch up against the trunk, applying pesticide as a last-ditch effort to save the tree, and/or hoping the tree will “grow out of it”. These responses are understandable, given the tree owner’s investment of time and money into the tree, but this does not ensure tree success and instead often hastens tree decline.

Planting trees too deep is widespread. This means tree growth and canopy cover will be diminished due to tree loss. The best way forward is at the tree’s start, by taking the time to plant at the correct depth. This will result in faster tree growth, greater natural defenses, and better root establishment. For a Backyard Farmer Tree planting demonstration, follow this link: <https://go.unl.edu/evb3>.

