

## **Debunking home energy myths**

Myth: Bigger is better when buying an air conditioner or heating system.

act: Bigger is not better and will cost you twice if you do purchase an over-sized system – initially for the larger equipment and then each time the system starts up.

It takes heating and cooling equipment a period of time to reach their peak efficiency each time they turn on. When equipment is over-sized, it can heat up or cool down the home very quickly, leading to short run times. The system runs for shorter time periods, but more frequently, meaning it does not function at its peak efficiency nearly as much as properly sized equipment.

Over-sized equipment can also lead to discomfort. Oversized heating systems over heat the home, then allow it to cool



down to the thermostat setting before coming on again. This leads to temperature swings.

Over-sized cooling systems short cycle and do not dehumidify the air. Properly sized equipment costs less up front and operates more efficiently. Heating and cooling contractors should always be asked to perform heat loss and gain calculations to ensure rightsized equipment is installed. Just replacing with same size ensures that over-sized systems remain over-sized and will continue to cost the homeowner during the life of the new system.





A significant amount of the average home energy bill pays for heating water. Take 5-minute showers instead of baths and make sure your **(461-58)** water heater is set no higher than 120° F.

Source: U.S. Department of Energy



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#### **OFFICE HOURS**

8:00 a.m. - 5:00 p.m. Monday - Friday

# DURING OFFICE HOURS, OR AFTER HOURS TO REPORT OUTAGE

217-357-3125 800-576-3125

### **BOARD OF DIRECTORS**

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- Paul Dion Manager
- Tommie Long Manager of Operations
- Becky Dickinson Office Manager

#### MAP LOCATION CONTEST

Every month we are printing four member's map location numbers in the newsletter. If you find your map location number call the WIEC office by the 25th of the following month, tell us where it is and we will give you a \$10.00 bill credit. Keep on reading the WIEC News.

## Mark your calendar

WIEC Annual Meeting will be June 24, 2010. Watch the WIEC News for more information.

### **Nominating Committee appointed**

WIEC's board of directors recently appointed the following members to serve on the 2010 nominating committee: District No. 1 – Charlie Ford. Lomax; District No. 2 – Spencer Berry, Nauvoo; District No. 3 - Ned Woolverton, Niota: District No. 4 - Mike Johnson. Basco, and Jason Jacquot, Carthage; District No. 5 – Jonathan Fecht and Mike Tracy, Carthage; District No. 6 – Robert Menn, Plymouth; (4418-5) and District No. 7 - Max Roskamp, Sutter.

Two members are appointed from the districts whose board terms expire each year, with one being appointed from remaining districts. These members will nominate at least one member for a three-year term to represent Districts 4 and 5.

Calvin W. Baumann represents District 4 and Dave Biery represents District 5.

The first meeting of the nominating committee will be at 7 p.m., Tuesday, April 13 at the WIEC office.

## **Welcome New Members**

Trevor Scheetz, Carthage Scholl Real Estate Co., Inc., Ft Madison IA Elisa J Torres, Carthage

## WIEC's office will be closed in observance of Good Friday on Friday, April 2. The office will reopen on Monday, April 5.

As always, in case of power emergencies, call 217-357-3125 or 1-800-576-3125.

Please wait and call for questions concerning billing, payment arrangements, capital credits or other non-emergency matters until normal business hours

# Be careful when tackling home wiring projects Mistakes can be deadly

f spring sends you into remodeling mode, consider checking with professionals before you migrate to the nearest hardware store. While do-it-yourself (DIY) projects can be very satisfying to complete, they pose risks when it comes to electricity.

"Mistakes can be costly — or even deadly," warns John Drengenberg, consumer affairs manager for Underwriters Laboratories, Inc., (UL), a Chicago, Ill.-based not-for-profit firm that tests and sets minimum standards for electric-consuming items. "The first and best safety tip is to call in an expert rather than be your own electrician."

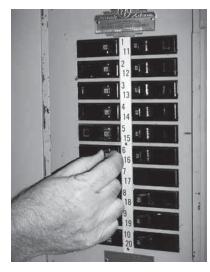
An ongoing study by the Quincy, Mass.-based Fire Protection Research Foundation has given UL engineers a better understanding of typical DIY wiring mistakes. The most common:

## Working with a live wire

It may seem perfectly obvious, but thousands of DIYers receive electric shock injuries each year. To avoid becoming a statistic, always turn off the circuit breaker (or remove the fuse) before working on or replacing electrical equipment. If you have a pre-1940s home, be mindful that you probably have more than one breaker box, or panel board, as electricians call them.

# Using the wrong lightbulb

Most lighting fixtures feature a sticker on the socket that tells you the proper type and maximum wattage of the lightbulb to use. Installing a different type of bulb, or one with higher wattage, will not only make the room brighter, but could also damage the lights and cause a fire. Heat is



usually the catalyst in this case: the higher the wattage, the hotter the bulb and the hotter the wire that goes to the lighting fixture.

### Not being grounded

For optimal safety, receptacles should be wired with the proper grounding and polarity. Generally, three-pronged outlets signify an effective ground path in the circuit. However, homes built before the mid-1960s probably don't have a grounding path, and simply replacing the existing outlet with a three-pronged outlet won't give you one.

"You see instances of this in homes with older wiring," Drengenberg says. "It's no worse than if you plug your two-pronged devise into a two-pronged outlet. But it does give the homeowner a false sense of security."

Wiring with a grounding path usually sports a copper grounding wire with the cable. If you are uncertain about whether your home's wiring is grounded, inexpensive UL-listed outlet circuit testers are available to check for proper grounding and polarity. If your outlet is improperly grounded, call an electrician before moving forward in any project.

# Splicing, splicing, splicing

Always make sure your wiring size and type match. Splicing wires by simply twisting them together and covering them with electrical tape is rarely a good idea. Instead, use wiring suitable to your home's wiring and place wiring connections in metal or plastic boxes to decrease fire risk.

Also keep in mind that circuits protected by 15-amp fuses or breakers should be wired with No. 14 AWG copper wire minimum. For 20 amps, use No. 12 AWG minimum size copper wire. Other guidelines apply, so if you expect to do any splicing, seek professional help before you begin.

## Hooking new lights to old wires

Most light fixtures are marked with instructions for supply connections, such as "Use wire rated for at least 90C," which refers to the maximum temperature — 90 degrees Celsius or about 200 degrees Fahrenheit — under which a wire's insulation can safely be used. Again, if you have an older home (pre-1984, in this case), wiring may have a lower temperature rating than a new luminaire.

"This isn't something most DIYers even think to consider," Drengenberg cautions. "It probably won't burst into flame immediately, but it does increase the risk of a fire."

To avoid that risk, check your wire rating first and either upgrade it or buy fixtures within the supply connection range.

Article courtesy of

Underwriters Laboratories, Inc.

Be sure to turn off the main breaker switch (or remove the fuse) before doing any electrical work.

## Repair and replacement of storm-damaged trees

Summer windstorms and winter ice can cause severe damage to trees. If you have storm-damaged trees, the first task at hand is the removal of branches and broken limbs to restore power and eliminate safety hazards. After that task is completed, you may be one of the many landowners with damaged trees facing the decision of repair or replacement.

If you have a tree that is severely damaged, you may need the advice of a professional to determine whether the tree is worth saving through pruning and repair. A professional arborist can help you evaluate the tree based on its age, species, growing location, and the value it adds to your property.

Arborists are specialists in the care of individual trees with the training and proper equipment to do the job correctly and safely. Trees on your property are an investment; so to protect your investment, select an arborist carefully. Many arborists are certified by the International Society of Arboriculture and therefore can be located by searching for a local arborist on their web site located at http://www.isa-arbor. com/. The yellow pages in your telephone directory are another source of local arborists with certification.

Before you hire someone, always get estimates from at least three arborists. Make sure that they have liability insurance, Worker's Compensation coverage, and references, in addition to professional certification. It's a good idea to get a written detailed description of

the work that will be done for the price quoted in their estimate.

Keep in mind that storm events sometimes opens "the door of opportunity" for door to door solicitors offering bargains for tree services. Also a good arborist will only perform accepted best management practices for tree care. Practices such as tree topping, rather than selected branch removal, and the use of tree climbing spikes on trees that are not being removed are not recommended arboriculture practices.

If you find that tree removal is your best option, based on the condition of your tree, replace the tree with a species that is less susceptible to ice or wind damage. You should also select a species that is appropriate for your space and intended use of the tree. Select a tree that is hardy for

your climate, and is adapted to your soil type. (4714-1) You can head off future problems by selecting tree species that are native to your region of Illinois.

Remember too, that unless a tree's mature height is less than 15 feet, it should not be planted under or near overhead utility lines, so plan

and plant accordingly. Old clay tile sewer lines may also become clogged with roots, if you plant a tree too close to the sewer line's location. A simple map of your property, showing existing utilities, buildings, trees and activity areas, will help you determine the amount of space you have available.

This all may seem like a lot to consider, but remember that you are making a long-term investment. The University of Illinois Extension Unit office in Carthage (ph 217-357-2150) can provide you with technical bulletins on tree selection. The Illinois Nurseryman's Association, 1717 S. 5th, Springfield, IL 62703 maintains a list of member firms that sell nursery stock in Illinois, if you need help locating a source for a new tree.



## **Considering Replacing Storm-Damaged Trees?**

### Call WIEC and J.U.L.I.E. before beginning any outdoor projects

Before beginning any spring digging projects, keep in mind that there may be underground utility lines in the way that could prove to be harmful. Even when digging down only a few inches, it's important to know what's there. Many utilities are buried just inches below the surface.

Please call the WIEC office to locate underground electrical

lines on either side of the meter. We ask for 24-hour notice. To

locate water, sewer, phone, gas, cable and all other utility lines, call JULIE at 8-1-1 (or 1-800-892-0123). They require 48-hour notice. Both services are free.

By having professionals mark any

underground lines in the area, you will avoid any potential serious injury and prevent possible damage to the

possible damage to the utility lines that could disrupt service to your home and your neighbors. (3610-48) Besides being a good idea, calling J.U.L.I.E is the law.

