Farmers' Electric Cooperative
Together, we have the power to make a difference
Watts Up
A Monthly Publication of The FEC Companies
Your Touchstone Energy® Partner
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Happy New Year!

FEC's 2012 rebate program has a number of changes

The 2012 Farmers' Electric Cooperative rebate program has several changes, several which take place January 1.

On the first day of the year, heat pump efficiencies will be changing in order to be eligible for the rebate. Add-on heat pumps, or dual fuel systems) will now require a SEER rating of 16.5 or higher. Geothermal Heat Pumps, or ground source systems, will now require a minimum EER of 19.1.

The other changes involve the rebates currently being offered for Energy Star dishwashers and clothes washers. These rebates will no longer be offered after May 31, 2012.

This program will be in effect until modified or terminated. Rebates will be paid to those persons whose equipment meets the following qualifications and who make application for the rebate within 90 days after the installation.

Only member/owners of Farmers' Electric Cooperative are eligible for the rebate. Member-owners applying for the rebate must agree to include the appliance in the Cooperative's load management program, as well as approve a five-year electric service agreement with the cooperative. 23131

All rebated appliances must be installed in permanent facilities served directly by FEC. Mobile homes must have hitch and axles removed. Installations are subject to inspection by a representative of the Cooperative. If you have any questions please contact FEC's Member Services Department at (660) 646-4281 or 1-800-279-0496.

ELECTRIC WATER HEATERS

FEC will sell all members an American-made energy efficient 40-gallon or 50-gallon electric water heater for $275 plus tax. Each water heater must have its own electric power source and must not be coupled to any other water heater.

FEC will also install the water heater for member/owners at a flat fee of $100, plus the cost of materials. Member-owners are not required to use the cooperative's installation service. 271742

Members purchasing an electric water heater from another business and applying for the rebate must purchase and install a unit 40 gallons in size or larger. FEC will reimburse the member/owner $50 for a gas-to-electric conversion or a new home installation if the Energy Star electric water heater is purchased at another business. **Tankless water heaters and stock tank heaters do not qualify for a rebate.**

FEC to sponsor 49th annual essay contest

Juniors win trips to Washington, D.C.; Sophomores to Jefferson City

Sophomores and juniors from 26 area high schools will have the opportunity to win all-expense paid trips this summer.

Members of the junior class will be competing to win one of two trips to Washington D.C. Three sophomores will win trips to the Cooperative Youth Conference and Leadership Experience (C.Y.C.L.E.) in Jefferson City.

The Youth Tour to Washington Trip will be held June 15-21, while the C.Y.C.L.E. trip will be July 18-20.

"We usually have around 25 to 30 essays from each class," said Steve Shoot, Manager of Member Services for FEC. "It seems that most of the essays entered come from Meadville, Hardin-Central or Gallatin."

The essay contest is open to all sophomores and juniors attending a high school located within the service area of Farmers' Electric Cooperative. The contest is also open to sophomores and juniors who reside in a home on the FEC system and attends a high school outside of the cooperative's service territory where the essay contest is not offered at that high school.

The contest is not open to a student who resides in a home outside of FEC's service territory and attends a school located within the cooperative's service territory. Children of cooperative employees and directors are not eligible to participate in the contest.

Sophomore and junior class English instructors received essay contest information and applications in the mail in late December. Applications may also be picked up at the FEC office in Chillicothe or by going on-line to the cooperative's web site at www.fec-co.com.

The essay topic for sophomores this year is, "How does implementing energy efficiency measures in your home benefit your family and Farmers' Electric Cooperative" The essay topic for juniors is "Today Missouri is heavily reliant on coal to generate electricity. Discuss the various options available to generate electricity and what option is the best for the future of our state and why?" 50834

The essay contest deadline is Friday, February 24, 2012, at 4:30 p.m. The essays, which may range between 250-600 words in length, must be mailed and stamped at the post office before the deadline listed above.

Winners of the essay contests will be announced around the first week of April.

"If there are any questions pertaining to the contest, please feel free to contact us here at FEC," said Shoot.

FEC office will be closed January 2, for holiday

FEC will close its office Monday, January 2, in observance of the New Year Day holiday. Regular office hours are 7:30 a.m. to 4:30 p.m., Monday through Friday.

CFL light bulb swap will continue again in 2012

Farmers' Electric will continue its popular light bulb swap program in 2012 for as long as supplies last.

FEC members can swap out inefficient incandescent light bulbs for new compact fluroescent light bulbs during regular business hours.

CFL's available include 60-watt, 75-watt and 100-watt equivalent bulbs, as well as 65-watt equivalent interior flood lights.

Members can trade six (6) regular incandescent light bulbs for six (6) CFL bulbs. Plus, if a member signs up for Operation Round Up they will receive three more CFL bulbs.

Operation Round Up is a program in which the monthly bill is rounded up to the nearest dollar. The extra change is placed in FEC's Area Youth Benefit Fund account and is used to pay medical bills for children in the cooperative's nine-county service area.

Building, remodeling smart will save you money

The average American home uses 1,400 kilowatt-hours of electricity a month. But energy-tight houses are being built in Missouri right now that average about 100 kilowatt-hours for a 3,400 square foot home! And that's without any solar collectors generating electricity.

So how low can you go in your existing home or one you hope to build? Here are several smart building and renovation tips to achieve a highly energy-efficient home:

#1: Build or upgrade the most efficient building envelope you can afford — That means using heat wrap on new construction. It's inexpensive and may even replace some of the insulation you otherwise would use. Still, insulation is the low-hanging fruit of energy efficiency so insulate to the max, exceeding Missouri's minimum standards if you can.

While insulation will take care of major leaks and drafts, don't forget caulking and weather-stripping around windows and doors and where plumbing, ducting or wiring penetrates walls, floors, ceilings and soffits. Install foam gaskets behind outlet and switch plates on outer walls. 301004

For doors, replace bottoms and thresholds with ones with pliable sealing gaskets. Also keep the fireplace damper tightly closed when not in use.

When considering building materials, look at insulated concrete forms (ICF), possibly the most energy-efficient building material available. It costs about 15 percent more than conventional materials but creates such a tight house that an air exchanger may be needed.

#2: Buy the most efficient windows you can afford, place them wisely, then shade them — When you consider that as much as one third of heating losses occur through windows and doors, it pays to buy the most efficient windows you can afford. Look for ENERGY STAR windows with low thermal emissivity (low-e) coatings, low overall heat transfer coefficient (U-factors) and low solar heat gain coefficient. Minimize glass on the north of your house, maximize it on the south with overhangs, awnings and deciduous trees for shade.

#3: Consider a ground-source heat pump — Air-to-air heat pumps aren't very effective in Missouri, according to energy consultant Doug Rye, but ground-source heat pumps are extremely effective, with efficiency above 400 percent. They're expensive but qualify for a 30 percent federal tax credit.

#4: **Install an attic fan and ceiling fans** — Particularly in existing homes where efficiency options may be more limited than when building new, attic and ceiling fans are good choices for cross ventilation. Even a small draft will cool you down 4 to 5 degrees. Remember with attic fans, though, to seal and insulate against winter heat loss.

#5: Light efficiently — In another decade LED lighting may be as affordable as compact fluorescent lighting has become. Until then, CFLs are the way to go.

#6: Insulate to the max — ENERGY STAR reports that only 20 percent of houses built before 1980 are well insulated. While the University of Missouri Extension Service recommends at least R-49 insulation in the attic, DOE recommends up to R-60 for wood-framed houses in Missouri.

Insulating your attic, including knee walls in finished attics; exterior walls; cathedral ceilings; crawl spaces; and floors above unconditioned basements is probably the single most important cost-effective efficiency improvement you can make.

2012 FEC Rebate Program

(Continued From Previous Page)

FEC will deliver water heaters to member-owners who plan to install the unit themselves or have another company install the unit for a $30 fee. Members who wish to purchase an 80-gallon electric water heater in an electric-to-electric replacement will pay $500 plus tax. Members are also eligible for a $50 rebate for an electric-to-electric replacement only if the new water heater is an Energy Star unit and replaces an electric water heater that did not qualify for Energy Star status. The make, model and serial number from the old unit must be provided. 276983

After January 1, 2007, FEC will provide service to repair malfunctioning water heaters for a flat fee of $40, which includes the cost of parts, on water heaters purchased through the cooperative after the January 1 date. Water heaters that were obtained by the member prior to the January 1, 2007 date will still be under the free maintenance agreement until that unit is deemed irreparable.

ADD-ON HEAT PUMPS (DUAL FUEL SYSTEMS)

Electric heat pumps added to a fossil fuel (propane or natural gas) system to provide cooling and partial heating. Must have a set point of 25 degrees. Rebate for the Add-On Heat Pump system will be as follows: 16.5 SEER and higher will be $150 per ton. FEC will control only the cooling side of the heat pump during the summer load management program.

GEOTHERMAL HEAT PUMPS (GROUND SOURCE)

Unit must meet federal guidelines for energy efficiency. Specific installation guidelines apply to receive the rebate. Installation must be sized to the heating load of the structure. Horizontal loop length will be a minimum of 600 feet per ton, with the exception of the use of a slinky loop, which will be sized a minimum of 700 feet per ton. Vertical loops will be 180 feet of vertical bore per ton.

Rebate schedule is $600 per ton and is not brand specific. Replacement of a GSHP with a second GSHP will qualify for a $150 per ton rebate. The GSHP must have a minimum EER of 19.1. The GSHP will be installed with a Delta T of 80. A Manual J calculation will be used to support the Delta T. 200934

FEC will control only the cooling side of the heat pump during the summer load management program. Attic insulation must be have at least an R-45 value to receive the rebate.

ENERGY STAR APPLIANCES

FEC will rebate the purchase and installation of the following Energy Star appliances: Energy Star Dishwasher, $50; Energy Star Clothes Washer, $100. A copy of the receipt, which includes the appliance model and serial number, as well as information which will verify or allow FEC to verify the Energy Star rating.

This rebate will end May 31, 2012.

Application for rebates must be completed and signed before the rebate monies will be issued.

Rebate Questions

If you have any questions please contact the Member Services Department. When you call the office use extension 22 (Joe Hardie) or extension 35 (Rick Billinger).

Don't forget to use our e-business services

As a member-owner of FEC you may use our online services to make a payment with a debit or credit card, review your capital credit allocations over the years, look at your billing records for the previous 12 months and more.

To use FEC's online services all you have to do is have a valid email address on file with us. Call us at 1-800-279-0496. Then login on our website www.fec-co.com, click on e-Business Member Login, New User at the bottom of the page, then follow the on-screen instructions.

You will need to know your member number, or account number, to create a password and gain access to your personal records. Once registered, you will have the capability to store your credit card information so you won't have to look up the number every time you pay your bill online. Only the last four numbers of the card will be visible once stored.

The e-Business Member Login is protected by SSL Technology, verified by Geotrust.

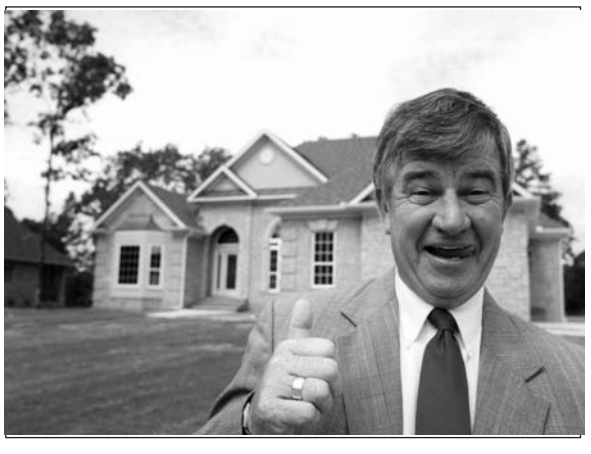
Doug Rye says... "You can have a comfortable home"

No, it can't be. It can't possibly be time to write a column for a new year. It seems like I just wrote one for 2011 a few weeks ago.

Unless you are a teenager, you know exactly what I am talking about. Well, time really flies when you are having fun. Of course, the frog says that time is really fun when you are having flies.

Please smile.

As I think of a new year, I also think of the past. I just love it when you tell me that you were helped by something that you read in this column. I just got a call a while ago from a fellow who told me that he had just finished reading the December column and wanted to order the attic radiant barrier so that he could install it before his attic gets hot. He is a smart fellow. I hope to continue helping you for a long time, so write my phone number down — 501-653-7931 — and just file it under energy nut and continue reading these columns.



Energy Efficiency Expert Doug Rye

I have received a lot of calls lately from folks with comfort problems in their homes. Some have older houses, and others have fairly new ones. It really doesn't matter, because if you are not comfortable, you are not happy.

I can tell you that the subject of comfort has changed over the years. My first bedroom as a youngster was 6 feet by 9 feet. I had my own bunk bed, a place for my electric train, and I didn't have to share it with three older sisters.

The problem was that I had to go through their room to get to my room. And my room had no source of heat whatsoever, except what seeped into my room through the curtain (door) from the big non-vented gas heater in the girls' room, and they didn't have to share the heat with me.

On many cold mornings, I would draw pictures in the frost on the window before I would jump out of bed and run through their bedroom to get to the nonvented gas heater in the living room.

Think of it. My room was freezing; their room was smothering hot; the temperatures of the other rooms were anybody's guess, and basically we were all thankful and happy just to have a house with heat.

What a difference a few years can make. Now we expect every room in our house to be the same comfortable temperature. I know of a case this past year where the homeowner threatened to file suit against the builder of his new house because upstairs was always a few degrees hotter than downstairs in the summer.

We have proven many thousands of times that there is no excuse for a new house not to have affordable comfort. It is not always possible that every room will have the exact same temperature 24/7, but it can be very close. All you have to do is build it like the electric cooperatives and I have been teaching you to do for the last 20 years.

It is easy and affordable, and IT WORKS EVERY SINGLE TIME. Just ask us for help.

I recently received a call from a lady in Illinois who said that she and her family had been in their new house for seven months and the house was cold. I said, "I assume that you meant cold in the winter." She said, "Yes, it was just great in the summer." I said, "You should have built the house to my standards." She replied, "We did." My heart skipped a beat and

I asked her every question I could think of. Did you caulk; did you use cellulose; did you use good windows, etc.? And yes, they even installed geothermal.

I couldn't imagine what the problem might be, so I asked the age-old question. "What is the thermostat setting right now?"

Her answer was 60 degrees. I told her to turn it up to 75 degrees. She said that if she did, her husband would come through and turn it back down to 60 degrees. I told her to go whack her husband upside the head and tell him who was boss, and if that didn't work, stop cooking his meals. She laughed and said that might work.

This is a true story, and it has what appears to be an easy solution. Some problems don't have such easy solutions, but I am confident I can help all of you. See you next month when I will give you more ways to make your house more comfortable.

In the meantime, Happy New Year!

Doug Rye can be heard on KGOZ, KKWK and KAAN

Every Saturday morning Doug Rye hosts a live call-in show on several area radio stations. He can be heard from 9-10 a.m. on KGOZ, 101.7, Gallatin, KKWK, 100.1, Cameron and KAAN, 95.5, Bethany.

Take advantage of new building techniques, materials to save $$$

There are many more options available today for people who are planning on building a home or just building an addition.

For snug walls, add dense-packed cellulose or fiberglass or inject water-based, low-expansion foam insulation into existing walls. Spray polyurethane foams are best applied by professionals but do a better job of eliminating air leaks than other types of insulation.

For additions, new wall options include aerated concrete, insulating concrete forms or structural insulated panels. Also consider 2x6 stud construction instead of the traditional 2x4 and 2x5.

According to the Energy Efficient Network, 2x6 uses fewer studs on the exterior, thus conducting less heat through the wall. If you're building from scratch, consider advanced house framing techniques, which according to DOE, replaces some lumber with additional insulation, thereby reducing waste and tightening the thermal efficiency of the house. Look for framing diagrams at www.energysavers. gov.

For warm floors in winter, insulating floors above a crawl space, slab or unconditioned basement to R-25 is a good place to start.

Radiant floor heating is another option that if properly sized and installed can be 25 to 40 percent more efficient than forced air, according to experts. Electric resistance mats are one type of radiant flooring, ideal for placing under a tiled floor in a bathroom or kitchen. The heat is electric, though, so your utility bill will reflect that.

Another type is hydronic tubing, which can be installed in floors above unfinished areas like basements and crawl spaces. Keep in mind, though, that hydronic tubing doesn't replace the ducts you'll still need for air conditioning.

Finally, inefficient windows lose as much as 25 percent of a home's heat, according to DOE.

For tight windows, replace single-pane windows with more efficient ones. Look for low AL (air leakage) ratings on new windows; 0.1 to 0.3 is the typical range. Also important are the "U-value" (1/R) and the shading co-efficient.

Buy windows whose frames include thermal breaks that interrupt heat flow and loss.

Add window overhangs, awnings and deciduous trees outside and insulating drapes and blinds inside. Window coverings are cost effective because they block about 75 percent of heat loss.Storm windows, either interior or exterior, can reduce heat loss by 25%- 50%. according to DOE, with payback as short as 5 years, according to the Missouri Department of Natural Resources. Plastic sheeting works if you can't afford storm windows, and simple caulking around windows will save energy.

If you're building a new house, keep the glass area at 10 to 12 percent of the floor area.

Some of these efficiency improvements qualify for federal tax credits through 2016, and some electric cooperatives offer rebates. Go to www.energystar.gov/index.cfm?c=tax_credits. tx_index or www.takecontrol&save.coop for details.

Farmers' Electric Area Co-op Connections Card Participants

AA Cyclewear - Chillicothe: 10% off merchandise
AFC Insulators - Chillicothe: 10% off labor and materials for insulation of home, shop or business
Anytime Fitness - Chillicothe - 10% off full membership.
Auto Glass Plus - Chillicothe - 10% discount on oil changes, glass replacement service.
Bailey Studio - Chillicothe: Complimentary Studio Session
Barnes-Baker Motors - Chillicothe: 10% off on parts & service
Barry Electric - Carrollton - 10% off purchases $399 or more.
Broadway Pavilion Mall - Jamesport - 10% off any item unless marked firm.
Brookfield Bowl - Brookfield - Buy one bowling game get one free.
Brookfield Plumbing - Brookfield - 10% off on parts.
Cameron Econolodge - Cameron - 1 bed 1-2 people, $49.99 plus tax; 2 beds 1-2 people $49.99 plus tax.
Cameron Lumber - Cameron - 10% off $299 or greater deck package.
CARSTAR - Cameron - 10% off discount up to $100 maximum.
Central Missouri Community Credit Union - Richmond -$5 deposit to new member account.
Chillicothe Bootery & Repair - Chillicothe: 7% off the purchase of new boots
Christie's Nails - Norborne: 10% off all services
Citizens Bank & Trust - Chillicothe: Free checking-Free gift-check buy back. Also 25% off first year rent of any new lockbox rental with new or existing checking account.
Clark's Furniture - Chillicothe - 5% off all purchases, plus free delivery and set up.
Cole Family Chiropractic Clinic - Chillicothe: 10% off vitamins & supplements
Countryside Banquet Hall - Cameron - 10% off banquet facility
Countryside Jamobree - Cameron - $1 off admittance
Country Time Battery - Gallatin - 10% off all retail pricing
Covenant Rehab Clinic - Chillicothe: Discount will be on all products and supplies not covered by health insurance. Biofreeze, etc.
CSI OHD Overhead Garage Doors Sales & Service - Trenton - 10% off new garage doors or operators.
Curves - Richmond - Discount on monthly fee from $149 to $45.
Dancing Bears Embroidery - Wheeling - 15% off purchase of $25 or more
Domino's Pizza - Chillicothe: Free order of bread sticks or cinnamon sticks with purchase. Add cheese bread for $1.
Easter's Pharmacy - Trenton - 15% off weather alert radios
Eckard's Home Improvement - Carrollton: 10% off carpet. See store for details.
Expressions of Love - Lawson: 10% off purchases of $25 ore more.
Farm House Collection - Jamesport: 10% off purchases.
Foster Heating & Air Conditioning - Chillicothe - $15 of service calls
Grand River Inn Hotel - Chillicothe: $49 plus tax
Green Hills Golf Course - Chillicothe - 15% off green and cart fee, Monday-Thursday only.
Grundy County Lumber - Trenton - 10% off regular priced Valspar paint.
H&R Block - Chillicothe & Trenton: $25 off 2008 tax preparation for new clients only. $5 off for existing clients. Valid in Chillicothe and Trenton only.
Hair Masters & Tanning Co. - Chillicothe: 10% off retail products. (Hair and
Tanning Products)
Hamilton Home Center - Hamilton - $500 discount any new home purchase
Heritage Funeral Home - Chillicothe - 10% discount on pre-arranged paid funeral.
His & Hers Sports Gallery - Cameron - 10% off regular priced items
Hometown Pharmacy - Chillicothe:10% off non-prescription items. 20% off photo processing
J. Crowe Photography - Chillicothe:50% off session fees
Jamesport Grocery - Jamesport - 10% off purchases
JP's Total Image - Richmond: 20% off any product following a professional service by stylist.
Katie Belle's - Jamesport: 10% discount on one item.
Klingsmith TV & Appliance - Trenton: Up to 10% off MSRP on items $399 and up.
Lakeview Motor Lodge - Trenton: 10% off.
Larry's True Value - Richmond: 10% off any regular priced rental or hardware purchase.
Lauhoff Jewelry - Chillicothe: Re-mount special. Re-mount diamonds in a new mounting - 20% off
Lawns Unlimited & County Nursery, Inc. - Cameron: 10% off the purchase of all perennial plants & shrubs
Linda's Tax Service - Carrollton - Bring taxes in and receive 5% discount
Lindley Funeral Home - Chillicothe: Cash rebate 10%
Little Blessings - Cameron - 10% off tea room and coffee bar, conference facility, massage therapy, retreat facility and bed & breakfast.
Mary Lue's Flower Shoppe - Braymer: Relay charge of $1.50 on any orders we send out for you anywhere in the U.S.
Momma B's Cafe - Ludlow: Free drink with menu purchase
Miller Construction - Jamesport: 10% off seamless gutter and leaf protection systems
Momma B's Cafe - Ludlow: Free drink with menu purchase
Montana Log & Hearth LLC -Jamesport: Purchase Pellet Stove and receive 25 bags of wood pellets free; 5% off four-piece log furniture bedroom suite.
Murphy's Photography Studio - Chillicothe: 15% off portrait packages
Nelle's Restaurant - Cameron - 50% off appetizers with two dinners.
New Beginnings - Cameron - 10% off
Northtown Appliance Center - Carrollton - Free humidifier with new furnace or digital thermostat with central air purchase
Oliphant's Heating & Cooling - Rayville - $20 off service call
Pam's Home Furnishings - Brookfield - Free car charger with new 2-year agreement on AT&T, 10% off cash & carry appliances, electronics and furniture
Pat Thorne Lumber - Chillicothe - 10% off $299 or greater deck package.
PC's Elkhorn Steakhouse - Chillicothe: 10% off discount purchase
Photography by Donn - Richmond: No session fee; 15% off portraits
Piggle Wiggly - Chillicothe: Free Pepsi 2-liter with buy of 8-piece Champs Chicken meal
P.J.'s Storage - Chillicothe: 10% off.
Pin Oak Hill - Bogard - 50% off dessert with purchase of entree
PJ's Storage - Chillicothe: 10% off
Premier Eyecare Associates - Chillicothe, Brookfield & Trenton: 10% off all services and materials
Ray County Historical Society & Museum - Richmond: 10% off gift purchases; 10% off costume rentals.
Sam's Club - Become a member and receive $10 gift card.
Sensations Salon - Cameron: $5 off full spa pedicure
Sensenich Jeweler - Chillicothe: 50% off watch batteries.
Shady Valley Court & RV Park - Chillicothe - 15% off regular price
Sharp Focus Video - Chillicothe: 25% off first 2 hours of home video to DVD transfer. 10% off of wedding video production. Not valid with any other offer. Shady Valley Court & RV Park - Chillicothe - 15% off regular price
Solo Tire, Lawn & Quick Lube - Brookfield: First time customers $5 off quick lube.
Sprague's Locker - Brookfield: 1% off retail meats, cheeses & food items.
Sycamore Valley Farm Bed & Breakfast- Brunswick: Book two nights get 3rd free.
The Fast Lane - Chillicothe: Show Card and receive a punch card, bowl 2 games get 1 game free. At 10 games, sign back of card to enter for free bowling ball, shoes & bag.
The Old Firehouse - Jamesport: 10% off storewide.
Tooey's - Brookfield: 20% men and women's in-stock merchandise.
U.S. Graphics - Chillicothe: 10% discount on orders of 12 or more pieces.
UHMC - Cameron: 15% off all equipment, parts and services.
Van Till Farms/Rayville Baking Co. - Rayville: Bakers dozen pastry for the price of 12
Washington Street Food & Drink - Chillicothe: free SW cheesecake with entree buy.