

Part 1 HOUSE WARMERS' TOOLKIT

HOUSE WARMERS' WORKSHOP

By **BECKY BATCHA**

Gearing up to keep fuel bills down

The U.S. government's crystal ball on winter heating bills, known as the "Winter Fuels Outlook," is predicting a welcome dip in what families that heat their homes with natural gas will pay to stay warm this winter.

Thanks to lower fuel prices and a season that's forecast to be 1 percent warmer than usual, ratepayers in the Northeastern U.S. are estimated to spend about \$178 less for fuel this winter than they did last year, paying an average of \$1,135.

Jittery markets could throw off the projections for homes that heat with oil, but right now the government is predicting that oil bills will rise about \$60 for the winter, to \$2,009 on average.

Homes with occupants who roll up their sleeves to do some basic weatherizing can easily lop another 5 percent or more off their bills, according to Jerry Bennett, an energy-conservation instructor for Philadelphia's nonprofit Energy Coordinating Agency.

Bennett travels from neighborhood to neighborhood in Philly teaching workshops on how to save money by sealing up drafts and taking other steps to conserve fuel. Below are some tools of the trade that he and ECA recommend.

The agency distributes several of these energy-saving goodies in a free sample pack to low-income homeowners and renters who attend its workshops. Although the freebies are reserved for the needy, you don't need to be poor to attend.

Call ECA at 215-609-1046 to connect with a class or to schedule one for your neighborhood or civic group. The agency also has a step-by-step guide to saving energy around the house at its Web site, www.ecasavesenergy.org. Click on "energy education."

CAULK

The weatherizer's main squeeze

"The best thing you can do for a house is \$1.30 a tube," Bennett tells his workshop audiences, displaying a tube of siliconized acrylic caulk.

To use it, cut a small angled opening at



the tip of the tube and load it into a caulking gun. Then, starting in your basement — the main spot where cold air enters a house — seal every location on every exterior wall where two different materials



PHOTOS: ALEJANDRO A. ALVAREZ / Staff photographer

Jerry Bennett of the Energy Coordinating Agency teaches money-saving conservation tricks at workshops around the city.

meet (wallboard and trim, for example).

Caulk indoors and outside, paying special attention to the boundary where your foundation meets your walls, the casing around windows and doors, and actual holes in the wall where pipes, wires and cable lines enter.

MORTITE

Super-easy putty

Also known as rope caulk or caulking cord, Mortite putty is an oldie but goodie that has been helping to seal around windows and doors since the 1940s, Bennett says. Useful for wider gaps than caulk, it has the consistency of modeling clay and comes in a roll that you separate into strands, like shoestring licorice.

Mortite doesn't dry out, so you can press a strand into place now to plug a gap and peel it away later, still pliable. "It's temporary," Bennett says. "You can put it around your windows and still open them in the spring."

PEEL-AND-STICK WEATHER-STRIPPING

Draft dodger

Like a refrigerator seal, stick-on weather-stripping forms a tight seal around the edges of windows and doors — a main source of heat loss in a house.

To use it, cut a length of weather-stripping to fit your window or door, peel off the backing and press into place. Anyone who has played with Colorforms can probably manage the job. "You just want to make sure you're putting it on a dry, clean surface," Bennett says.

A roll that's long enough to vacuum-seal one window or one door costs about \$5.

ATTIC INSULATION

Your roof's own Snuggie

Hot air rises. If you don't want the

heat that you're paying for to literally go through the roof, Bennett says, you should lay down insulation with an R-value (the ability to resist heat flow) of at least R-30 and ideally R-38.

In accessible attic space, you might be able to roll out fiberglass insulation yourself. But visit the Department of Energy Web site www.energystar.gov for important fire-safety precautions, and consider hiring a pro if you have wiring and recessed lighting to work around.

In the typical, attic-less Philly rowhouse, you'll probably want to hire a contractor to blow in cellulose insulation, made from recycled paper. A ballpark price would be about \$2,000 for labor and materials, Bennett says.

PROGRAMMABLE THERMOSTAT

Your furnace, on auto-dial

Along with sealing and insulating around the house, installing one of these set-it-and-forget-it devices is one of the best moves you can make to save money on utility bills.

Bennett advises setting it at a comfortable 68 degrees for when people are at home and awake, and a few degrees cooler when they're out or asleep.

An Energy Star-rated programmable thermostat costs about \$50 and could save you \$200 a year on heating and air-conditioning costs.

REUSABLE WINDOW INSULATION KITS

The Ziploc bag of drafty windows

These kits let you encase a drafty window in plastic without enlisting a hair dryer. You affix self-stick "channels" to the four sides of the window frame, then zip plastic sheeting

into them using a technique that's similar to sealing a zipper sandwich bag.

The plastic is reusable if you leave the channels in place from year to year.

At its weatherizing workshops, ECA distributes samples of a contractors' brand called a Tyz-All window kit. It's hard to find in stores but sells online at www.energyfederation.org, an online retailer specializing in energy-saving supplies.

Another energy-saving window tip: Examine your basement window, and if it's open, close it. "I can't tell you the number of times I see that," Bennett says. "It's a 50-50 shot."

PLASTIC GROCERY BAGS

Where you can stuff them

To insulate a drafty airspace behind a crack in the wall, use a butter knife to push old plastic grocery bags inside.

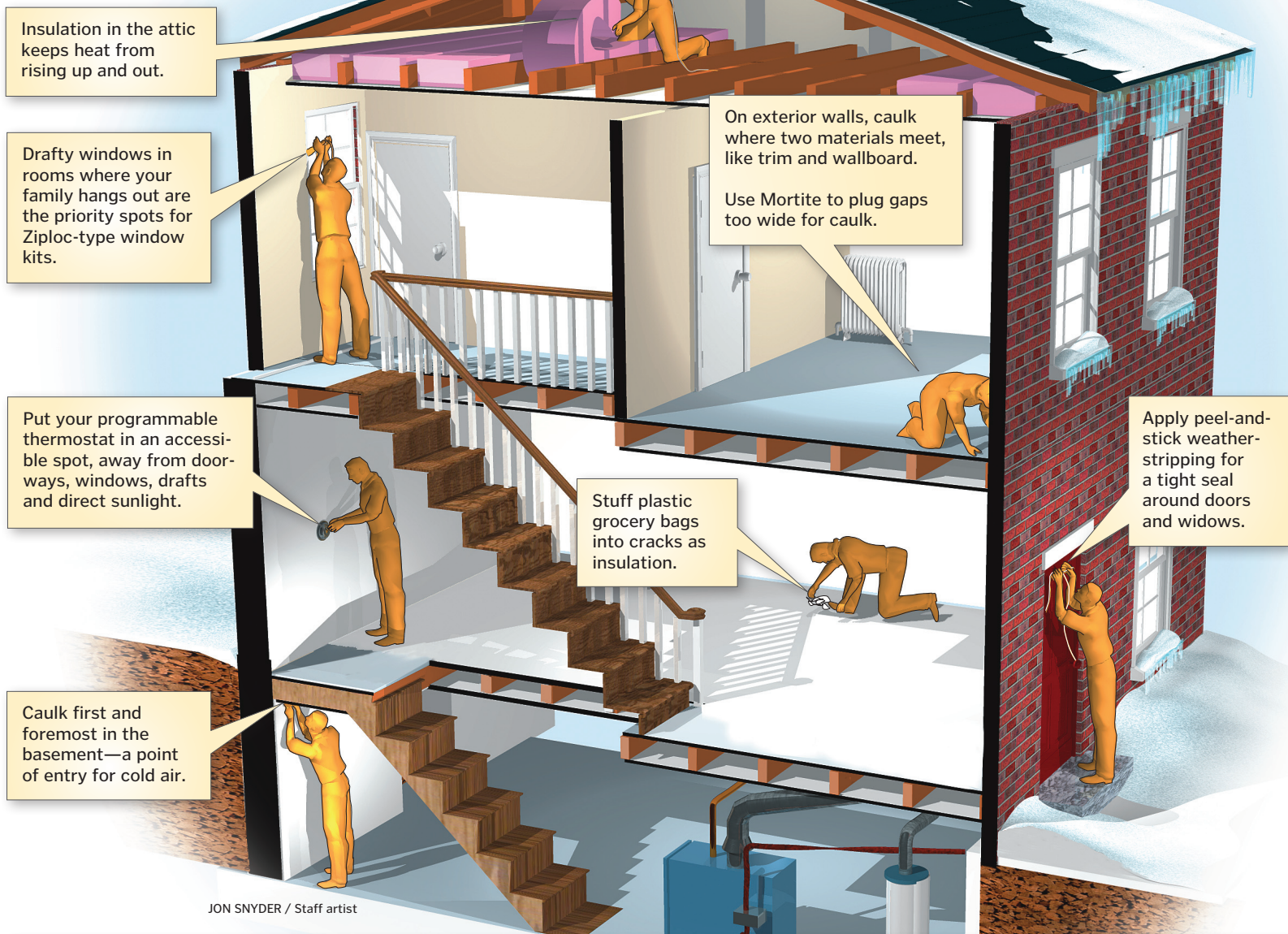
They're free, and instead of clogging landfills, these environmental nightmares find a new, greener purpose. "They will never degrade," Bennett says. "They might as well be in your cracks."

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WHERE IT ALL GOES

Weatherproofing-at-a-glance



Another tool for your kit: IRS Form 5695

No, you can't get one of these babies at the hardware store and drive it home in your truck. But for this tax year—and next year's—Form 5695 is the handiest thing going for home-energy savings.

With it, taxpayers can earn a 30 percent tax credit from Uncle Sam for up to \$5,000 that they spend during 2009 and 2010 on energy-saving home improvements. That's up to \$1,500 subtracted from your tax bill.

These are the energy savers that qualify:

- ▶ Certain types of insulation
- ▶ Storm doors and storm windows
- ▶ Efficient, new furnaces, boilers

- and heat pumps
- ▶ Efficient, new central-air-conditioning systems
- ▶ Some types of efficient, new water heaters
- ▶ Some "biomass" stoves, including pellet stoves
- ▶ Certain types of roofing
- ▶ Some Energy Star-rated windows, exterior doors and skylights

The improvements need to be "put into service" during the tax year for which you claim them, so your deadline for a 2009 tax credit is Dec. 31. The tax form isn't quite ready but should be available any day now at www.irs.gov.

The \$1,500 maximum tax credit is for 2009 and 2010 *combined*, and it covers improvements to existing homes only—not building supplies for new ones. You can earn it whether you put things into service yourself or hire a contractor to do it for you.

Save your receipts and proof that your improvements meet the strict IRS criteria. A "manufacturer certification state-

ment" is required, for example, for windows, doors and skylights—and the precise specifications are different for products bought at different times during 2009.

The Department of Energy Web site www.energystar.gov has detailed guidelines.

Click on the "tax credits" icon.

Form 5695 is also the IRS form to file for the federal government's unlimited 30 percent tax credit on solar-energy systems, wind-energy systems and geothermal heat pumps. No rush there, since the credit for those big-ticket items extends through 2016.

—Becky Batcha

Form 5695 Residential Energy Efficient Property Credit

Department of the Treasury
Internal Revenue Service

OMB No. 1545-0047
08
Your social security number: 158

See instructions.
▶ Attach to Form 1040 or Form 1040NR.

Before you begin: Figure the amount of any District of Columbia first-time homebuyer credit you are claiming.

Note. Skip lines 1 through 21 if you only have a credit carryforward from 2007.

1	Qualified solar electric property costs	1	
2	Multiply line 1 by 30% (.30)	2	
3	Maximum credit amount	3	\$2,000
4	Enter the smaller of line 3 or line 5	4	
5	Qualified solar water heating property costs	5	
6	Multiply line 5 by 30% (.30)	6	
7	Maximum credit amount	7	\$2,000
8	Enter the smaller of line 6 or line 7	8	
9	Qualified fuel cell property costs	9	
10	Multiply line 9 by 30% (.30)	10	
11	Kilowatt capacity of property on line 9 above	11	
12	Enter the smaller of line 10 or line 11	12	
13	Qualified small wind energy property costs	13	
14	Multiply line 13 by 30% (.30)	14	
15	Maximum credit amount	15	
16	Kilowatt capacity of property on line 13 above	16	
17	Enter the smaller of line 14 or line 16	17	