

#### RENTS ON THE RISE

WOULD-BE LANDLORDS TAKE NOTE: VACANCY RATES ARE AT AN 11-YEAR LOW, AND RENTS ARE INCREASING.

Average effective apartment rent



SOURCE: Reis

# Home

## Dodge the Draft

AN ATTIC-TO-BASEMENT PRIMER ON AMPING UP EFFICIENCY, HUNTING DOWN POWER HOGS, AND SEALING EVERY LAST CRACK.  
*by Sarah Max*

**JUST AS YOU'RE** recovering from the summer's record temperatures—and the power bills that came with them—it's time to think about staying warm this winter. Heating costs are expected to be relatively flat in 2013, though that's cold comfort given the increases of recent years. The price of heating oil, for one, jumped 25% from 2010 to 2012, according to the U.S. Energy Information Administration.

Still, it's possible, and often surprisingly easy, to shrink winter bills. Here, nine key moves for keeping your home toasty and your costs low.

## 1 GET AUDITED

➔ **THE PROBLEM:** Your power bills seem suspiciously high.

➔ **THE SOLUTION:** For \$250 to \$800, an energy auditor will do a detailed diagnosis of your home, identifying problems and possible solutions. Find auditors via the Building Performance Institute ([bpi.org](http://bpi.org)) or Residential Energy Services Network ([resnet.us](http://resnet.us))—and ask your utility provider if an audit qualifies you for a rebate.



## 2 BREAK OUT THE CAULKING GUN

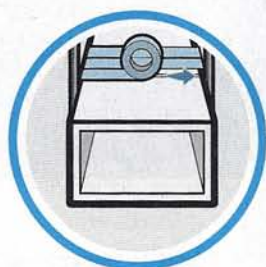
➔ **THE PROBLEM:** Leaky panes.

➔ **THE SOLUTION:** A \$5 tube of caulk is a prudent first step. When new windows are unavoidable, it's worth spending the extra \$5 to \$10 a square foot for an energy-efficient type; it will reduce your heating and cooling bills by up to 20%. Talk to your installer about adding sufficient flashing, which is the material that's applied around the window edges for waterproofing.

## 3 LINE YOUR DUCTS

➔ **THE PROBLEM:** Heating and cooling ducts that aren't well sealed; ducts can leak as much as 30%, says Sam Rashkin of the Department of Energy's Building Technologies Program.

➔ **THE SOLUTION:** Try Aeroseal, a process in which technicians blow sealant into ducts, filling cracks from the inside. It costs about \$1,500, but could slice half that sum off annual utility bills. For a cheaper option, DIYers can cover accessible ducts with less than \$100 worth of metal tape or mastic sealant.



## 4 WASH WITH CARE

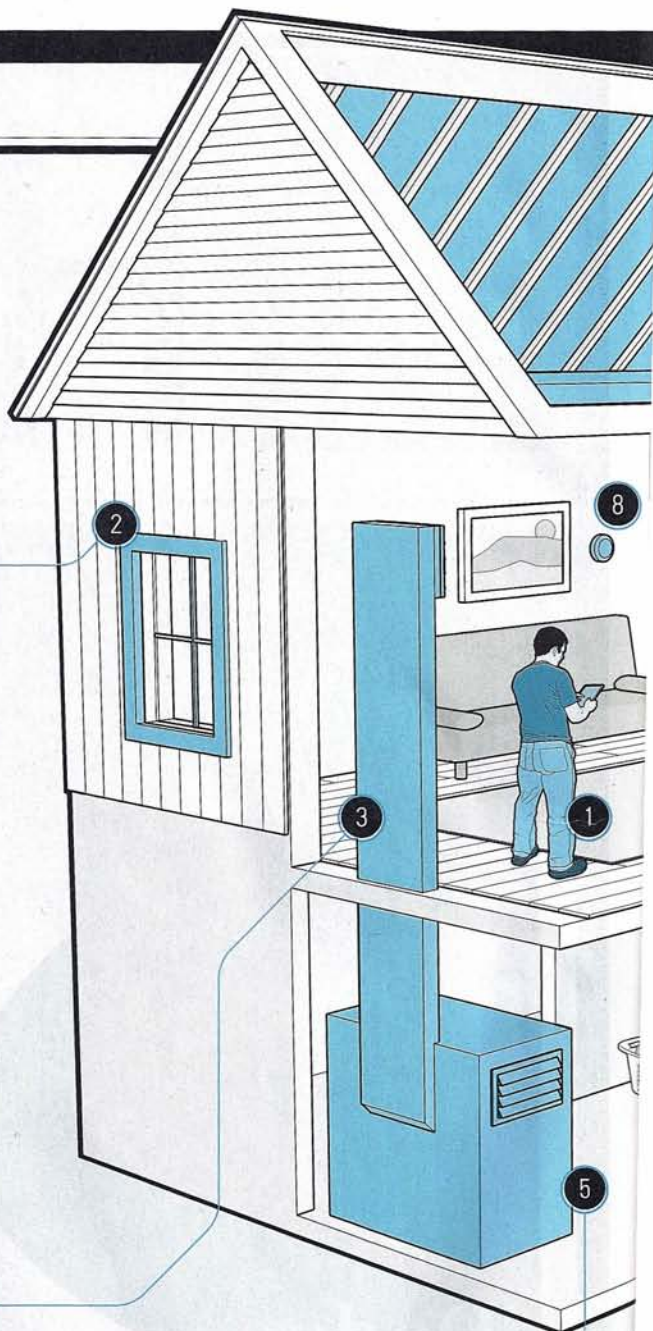
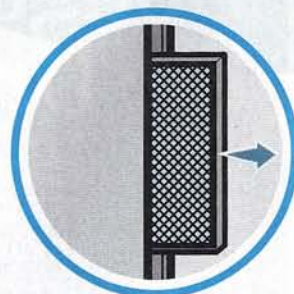
➔ **THE PROBLEM:** Keeping the family in clean duds is bloating bills.

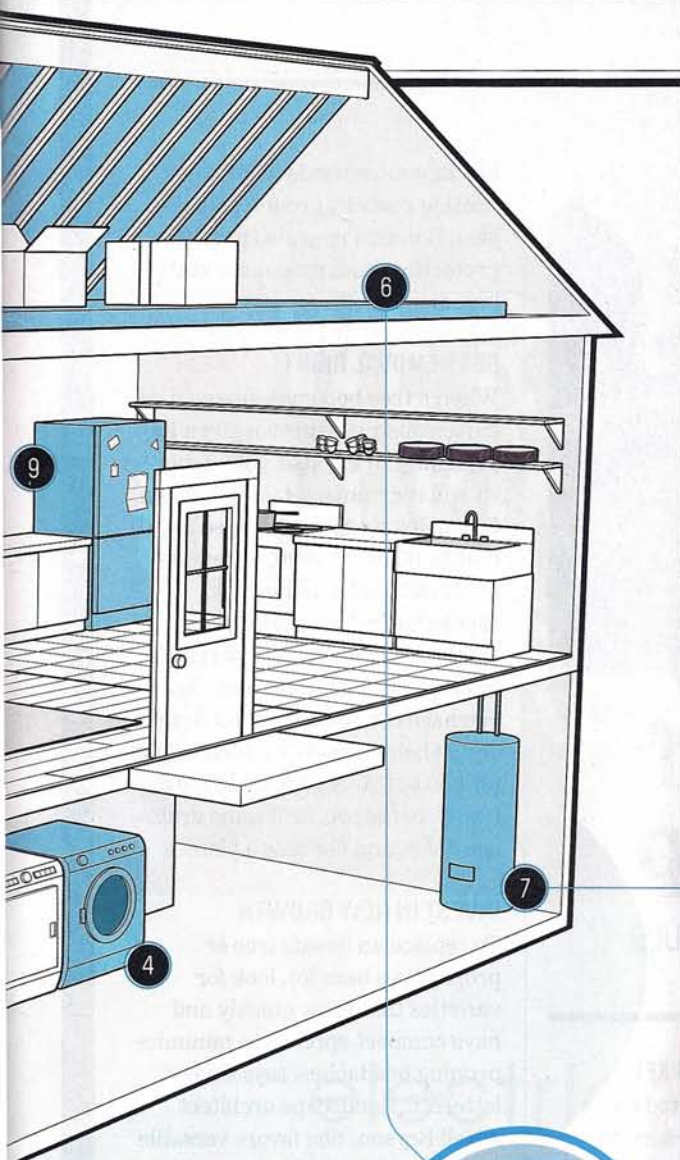
➔ **THE SOLUTION:** Need a new washer? A front-loading model is a good choice. It may cost \$500 or so more than a basic top-loader, but it will use roughly half the water, require less energy and detergent, and be gentler on clothes, says Rashkin of the DOE. Not ready to replace what you have? Most of the energy used in washing goes to heating the water, so stick with a cold- or warm-water setting.

## 5 KEEP THE FURNACE BURNING

➔ **THE PROBLEM:** Your furnace is failing and must be replaced (most last 15 to 20 years).

➔ **THE SOLUTION:** Look for an Energy Star-certified model, which could cut power bills by more than \$200 a year, according to the Environmental Protection Agency. Then keep the whole HVAC system running efficiently by having it serviced annually and by changing the air filter every few months.





## 6 BULK UP ON INSULATION

➔ **THE PROBLEM:** Insufficient insulation or gaps in key places, such as around attic doors and chimneys and in corners.

➔ **THE SOLUTION:** Check your attic floor to see whether you need more; when the insulation sticks up above the floor joists, you probably have enough. But if it's level with or below the joists, you may need more, says Chandler von Schrader, residential program manager with the EPA. For fiberglass insulation, expect to spend around \$1 a square foot. (To find the best type for your region, check out the sealing and insulating section of [EnergyStar.gov](http://EnergyStar.gov).) Your investment will pay off: Increasing insulation can shave about 20% off heating costs.



## HOT TECHNOLOGY

Not every gadget is a power suck. These three will actually make your home more efficient.

### ➔ NEST LEARNING THERMOSTAT (\$250)

Spend a week adjusting the Nest and then let it take over. The device uses motion sensors to determine when you're at home and adjusts temps accordingly.



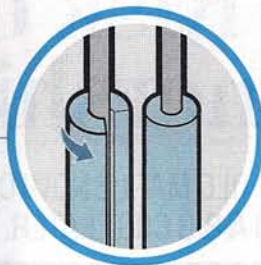
### ➔ CHILIPEPPER WATER PUMP (\$180)

By pushing cold water back toward the heater and pulling the warm stuff in, the pump can cut the time it takes hot water to reach the tap by half.



### ➔ SMART STRIP POWER STRIP (\$35)

Automatically power down related electronics as a group. Turn off, say, your PC, and the Smart Strip kills juice to the printer and computer speakers.



## 7 STAY OUT OF HOT WATER

➔ **THE PROBLEM:** Water heaters can account for as much as 15% of a home's energy use,

says Jim Lutz, a researcher with Lawrence Berkeley National Laboratory.

➔ **THE SOLUTION:** If your water heater is set at 140° F, turn it down to a hot, but not scalding, 120° F. Insulating pipes and covering the heater itself with a \$25 insulating blanket will minimize heat loss. Finish with a low-flow showerhead (look for the EPA's WaterSense label) and you'll cut water use by at least 25%.

## 8 GET WITH THE PROGRAM

➔ **THE PROBLEM:** Coming home or waking up to an icy house.

➔ **THE SOLUTION:** Turning down the thermostat when you're out or asleep could save \$200 or so a year—but can make for some chilly moments. Try a programmable thermostat, starting around \$20. Spend a little more (\$50 or so) and you can upgrade to a five-plus-two-day model that will adjust to your weekend schedule.

## 9 DIAL DOWN THE REFRIGERATOR

➔ **THE PROBLEM:** A fridge that's cranked too high.

➔ **THE SOLUTION:** Temps of 35° F to 38° F (and 0° F to 5° F for the freezer) are cool enough. Keeping the coils underneath the machine clean will also help it stay cold more efficiently.