



NEW YORK STATE SENATOR

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## Air Conditioning and Energy Saving Tips

JOHN J. FLANAGAN June 3, 2013

### Don't Let Your Hard Work And Cool Air Go Out The Window

As the temperature outside starts to heat up, you might be getting ready to install room air conditioners (AC) to cool your home. Before you do, read these tips from the [New York State Energy Research and Development Authority \(NYSERDA\)](#), so your hard work – and cool air – won't go out the window.

First, if you're buying a new room AC, be sure to select an ENERGY STAR®-qualified model, which will save you more than \$100 in energy costs over the lifetime of the unit.

Installing your room AC unit correctly can save a bundle in energy costs, too. In fact, in a report issued on April 14 by Urban Green (a chapter of the U.S. Green Building Council), researchers found that the average room air conditioner leaks as much air as a six-square-inch hole in the wall. Aptly titled *There Are Holes in Our Walls*, the report states that each poorly fitted and poorly sealed unit leaves a gap “about the size of your fist if you punched a hole in the wall.”

NYSERDA recommends the following tips to keep the cool air in your house when using a room AC unit:

Seal the unit's top and bottom: Since most portable air conditioners are installed in an open

window, the window must be lowered onto the top of the unit. Even if it looks like the window is tightly closed, there is usually a space between the unit and the window where air is leaking. Use a foam strip to insulate the gap where the two sashes meet.

- o Home improvement stores sell kits to insulate your AC unit, which include foam rubber strips that squeeze into small spaces for a snug fit.
- o Hardware stores sell foam insulation for pipes, usually in the plumbing section, which reduces “sweating” of the pipes in summer. These are usually available in various lengths, but you’ll only need 3-4 ft. Be sure to buy the insulation for a 2-inch pipe, approximately the same size as the bottom edge of a window. Open the insulation where it is split and push it along the bottom of the window.

Check the sides: When you expand the accordian-like sides on the AC unit, be sure they are not cracked or split, and that they fit snugly. Replacement units are available at most hardware stores.

Don’t forget the area between the upper and lower sash: Be sure to insert foam insulation in the space that is left when your window is open.

NYSERDA recommends these additional tips to maximize the operation of your window-type AC unit:

Size it up: A properly sized air conditioner will operate more efficiently and dehumidify more effectively.

Stir it up: Run ceiling paddle fans on medium, blowing down, in summer.

Close it up: Close shades and drapes during the day to help keep heat out in summer.

Clean it up: Remove and clean the AC air filter monthly.

Seal it up: Keep “fresh air” vents closed on window AC units.

When your air-conditioning unit is snug in its window, don't neglect the other places in your home where cold air could escape. Use caulk to seal other windows and doors.

**DUE TO THE EXPECTED INCREASE IN ELECTRICITY DURING THE SUMMER MONTHS, PLEASE USE THE TIPS BELOW TO STAY COOL AND CONSERVE ENERGY:**

- Close blinds or shades on sunny windows, but open windows to take advantage of natural ventilation when conditions permit – especially during cool morning or evening hours.
- Set the air-conditioning thermostat just a few degrees higher. Each degree above 75° F saves you 3 percent of the energy used to cool your home.
- Turn off all lights and electrical appliances in unoccupied areas.
- Run household appliances such as dishwasher and dryers at "off-peak" (after 7 p.m.) hours. These would include dishwashers, dryers, pool pumps and water heaters.
- Keep doors closed when it is hotter outside than inside. Open them up again in the evening or morning when it is cooler outside.
- Turn it off – Save electricity and reduce waste heat by shutting off lights and home electronics, especially computers, while not in use. Televisions, cable television boxes, computers, cell phone chargers and other electronics give off far more waste heat than you might imagine.

**NYSERDA and NYPA Help New Yorkers Stay Cool This Summer**

**Air Conditioning Information From NYSERDA**