## ENERGY NEWS AND NOTES

## **Ductless Air Conditioning: A Cool Alternative**

(NAPSA)—If you struggle with installing and removing window air conditioners every summer and complain about losing the view out of your windows, or the convenience of opening them to fresh air, you are not alone in thinking there must be a better way.

In fact, there is. It's called ductless air conditioning. This technology can be used to heat or cool and is especially well-suited to homes and businesses built without central air systems. It is used increasingly in home improvement projects where a porch is enclosed or an attic is converted to bedrooms.

Every building and every situation presents its own problems with climate control. Architects and engineers have realized this for years and they have struggled to adapt air-conditioning technology to modern living and working demands. Ductless air conditioning systems now make the job much easier.

These systems use no ductwork or ducted air distribution. Because of that, there are few places where the systems cannot be installed. In addition to homes, the systems have been placed in thousands of offices, shops, motels and hotels, schools and universi-



ENERGY SAVER: Ductless systems conserve energy, thanks to zone-controlling ability. Only occupied rooms need to be cooled, while the rest of the home or building is turned down or shut off.

ties, computer rooms, banks, hospitals, nursing homes and labs.

Going ductless can mean changing indoor climates from variable and unpredictable to comfortable and consistent, without expensive renovation work or compromising the integrity of the structure. And the work can often be done by a trained professional in a matter of hours.

Ductless systems are made up of four components: the condensing unit, located outside the building; the indoor unit, or units, which can be wall or ceiling mounted; thin refrigerant lines, which connect the outdoor unit to the indoor unit; and a wireless remote or wall monitor, which controls the entire system.

Simple copper tubing and electrical wiring connects the outdoor unit to indoor units. Refrigerant is pumped from the outdoor condenser coil and compressor through the tubing to the indoor unit or units. A fan then quietly distributes cool air drawn across the unit's evaporator coil.

According to the Air Conditioning and Refrigeration Institute, there are a number of benefits users get with a ductless system. These include:

- · Easy and clean installation.
- Easy maintenance.
- Efficient and quiet operation, with heating too.
  - Simple controls.
  - Attractive and efficient design.
- Doesn't take up window space, which adds to the beauty and security of your home.

An informative Web site describing more benefits of ductless air conditioning, including frequently asked questions and links to manufacturers of ductless equipment, can be found at www. ari.org/consumer/ductless.