

# CONSUMER INFORMATION

## Different cooling for different areas of the home (300 words)

(NC)—Air conditioning is wonderful to have on hot summer days, but sometimes one would like to have more cooling in some areas of the home and less in others.

In a multiple-storey home, the top floor may require more cooling than the main floor, which in turn requires more cooling than the basement. As well, different people have different comfort levels. A comfortable temperature for one person might be too warm or too cool for another.

This is easily achievable today, thanks to a technology called “zoning.” Any central air conditioning system can be zoned. Dampers are installed in the ductwork to automatically open and close to direct the cooling where it is needed. If your home has one of the new ductless or “mini-split” systems, a separate indoor unit would be installed in each zone.

One of the common reasons for zoning today is to save energy. It makes sense to cool only those rooms that are actually in use – the living room or family room and kitchen during the day; the bedrooms at night. A

programmable thermostat can be set up to automatically change the cooling emphasis through the day and night.

While it is possible to create a separate zone for every room in a home, the result would be an extremely complex and expensive system. A more common approach is to divide a home into individually cooled zones by floor. In a two-storey house, the basement, main floor and upper floor would each have their own thermostat or programmable control.

Your professional air conditioning contractor can explain how zoning your air conditioning system will make your home more comfortable and energy efficient.

More information on finding qualified contractors is available from the Heating, Refrigeration and Air Conditioning Institute of Canada online at [www.hrai.ca](http://www.hrai.ca) or call 1-877-467-4724.

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## Choose the right air conditioner for your home (358 words)

(NC)—Today air conditioning is widely recognized as a must-have to live and work in comfort through the summer months, particularly in those regions with hot and humid summers.

In its simplest form, an air conditioner transfers heat and humidity from the home to the outdoors while cooling and circulating the inside air to provide a comfortable environment.

There are two types of permanent home air conditioners typically used in Canadian homes today.

A “split” or “central” air conditioning system is combined with a “forced air” heating system. The actual air conditioner, or “condensing unit,” is located outside the home, typically on a concrete pad/patio stone, or mounted on brackets to a wall. It is connected by small diameter copper pipes, or “lines,” that carry refrigerant to the indoor unit or “evaporator coil” that is mounted in the ductwork above the furnace.

The cooled refrigerant returning from the outdoor unit cools the coil which in turn cools the air, while at the same time removing humidity. The furnace fan circulates the cooled air throughout the home, using the same ducts as for

heating. The temperature is typically controlled by a dual-purpose heating/cooling thermostat or an energy saving programmable thermostat.

Ductless or “mini-split” air conditioners are typically used in homes that do not have furnace ductwork, such as those equipped with a heating boiler or baseboard electric heat.

Like the split system, an outdoor condensing unit removes heat from refrigerant coming back through refrigerant lines and sends cooled refrigerant back into the home. However, the indoor unit, typically attached high on a wall, is self-contained with its own fan to distribute the cooled air. It is often controlled with a remote.

Mini-split systems often use multiple indoor units, with one on each floor, for example. Ductless units can also be added to a specific area of a home or office that generates excessive heat, such as a computer room.

Your professional air conditioning contractor can help you choose the right air conditioner for your home. More information on finding qualified contractors is available from the Heating, Refrigeration and Air Conditioning Institute of Canada online at [www.hrai.ca](http://www.hrai.ca) or call 1-877-467-4724.

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## Efficient air conditioning (265 words)

(NC)—Large strides have been made in air conditioner efficiency in recent years. As a result, many homeowners replace their old air conditioning system not just for a more comfortable home environment and quieter operation, but to reduce their electricity bills.

Air conditioner efficiency is rated by the unit’s seasonal energy efficiency ratio, or SEER. The higher the number the greater the efficiency and the less it costs to operate the system.

In Canada, central air conditioners are covered by the federal government’s energy efficiency regulations, which came into effect in 1995. The minimum allowable efficiency level is 13 SEER. Units with a rating of 14.5 or higher will have an Energy Star designation. Energy Star is an international symbol applied to equipment that achieves a premium level of energy efficiency. Some of today’s central air conditioners are rated as high as 25 SEER.

There is another rating system that is sometimes used. The energy efficiency ratio (EER) is a measure of how much cooling is provided for a given amount of electricity consumption. As with SEER, a higher number represents a more efficient the unit.

Some of today’s air conditioners use high efficiency electronically commutated motors (ECM). They use substantially less electricity than older motors, and run much more quietly.

Your professional air conditioning contractor must carefully size the system to suit your home and ensure the different components in the system are designed to work together as a matched system

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