Ask the

INSPECTOR...

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I don't have an air conditioner. Is there anything I can do to reduce the temperature in my house during the summer?

Aside from typical solutions, such as installing a window-mounted air conditioner for cooling an unbearably hot room, there are several things you can do to help reduce a house's temperature, including:

- Sheltering windows with awnings and shrubbery and keeping blinds closed on hot, sunny days to prevent the sun from increasing the interior temperature
- Installing compact fluorescent lighting to produce less waste heat than incandescent/halogen lights
- Keeping lights and computers turned off when possible
- Cooking outdoors (i.e. use a barbecue) to avoid creating indoor heat
- Hanging clothes outside to dry; clothes dryers generate a lot of indoor heat

I am considering installing a new central air conditioner. What type should I buy?

Look for the Seasonal Energy Efficiency Rating (SEER) for the unit. A high SEER indicates a more energy-efficient air conditioner. New air conditioners sold in Canada have SEERs ranging from 10 to 17, with 17 being the most energy efficient and 10 being the least.

The type of refrigerant used in the unit should also be a consideration. The two types of refrigerant available are R-22 (Freon) and R-410A (Puron). Until recently, Freon was the only type of refrigerant available in air conditioners. However, Freon contains chlorine compounds which, if released into the atmosphere due to normal wear and tear or equipment failure, destroy the ozone layer and contribute to global warming. Recent international agreements have created a plan to cease production of Freon in the next few years. This has already effectively reduced the world supply of Freon, driving up its cost to the consumer. Puron does not contain the same ozone depleting properties as Freon. Both Freon and Puron air conditioning systems are available; however, the benefits of installing a Puron system should be evaluated when considering repairing an older system or installing a newer system.

What can I do to maintain my central air conditioner in good working condition?

Here are a few suggestions:

- Inspect and clean/replace the blower fan filter (usually located in the return air duct at the furnace) every two months or as recommended by the manufacturer
- Vacuum or brush clean the outdoor coil to keep it clear of dirt, leaves, and grass clippings; the coil can be carefully cleaned with a garden hose after debris is vacuumed off
- Both the blower fan and outdoor fan should be cleaned and lubricated where applicable, following the manufacturer's instructions
- If there is a humidifier damper, make sure it is closed for the summer to reduce the unnecessary addition of moisture-laden air to the home

If, after completing these suggestions, your air conditioner is performing poorly, we recommend you hire a qualified contractor to undertake a more thorough servicing, such as checking the refrigerant level or making electrical or mechanical checks and adjustments. As with all mechanical equipment, regular servicing by a qualified contractor in accordance with the manufacturer's specifications is recommended.

Can a central air conditioner be tested for proper operation at any time?

No. Unfortunately there are some limitations to when air conditioning systems can be tested or damage to the compressor may result. Air conditioning systems should not be tested when the outdoor temperature is below 18ºC or has been below 18ºC in the past 24 hours, or when the power has been on for less than 12 to 24 hours. Under these circumstances, refrigerant in the compressor can mix with lubricating oil, providing poor lubrication and potentially resulting in seizing the compressor. Given that compressors are the most expensive component to replace on an air conditioner, it is important to not operate them during the above-noted conditions.

How long can I expect my central air conditioner to last?

There are many components in an air conditioner; however, most of these components, with the exception of the compressor, can often be repaired or replaced. Failure of the compressor on an older air conditioner often results in complete replacement. Given that the compressor is considered to be the "heart" of the air conditioner, life expectancies for air conditioners are often likened to the life expectancy of the compressor. In Canada, life expectancies for compressors have generally been established to be on the order of 12 years.

For further information please contact:

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