

Energy & Conservation for a Greener Home

Before doing any work on your home, consult a professional. Follow all construction and safety regulations applicable in your area.

Chapter 1 Introduction

Summary:

- Contribute to preserving the environment by cutting down on your energy usage.
- Both the age of your home and the number of people living in it are important in evaluating your home's energy needs.
- Drafts, circulation problems, ventilation and moisture are particular to each structure and make each home unique.
- In an energy audit, measurements are taken of a home's structural elements, including window sizes, exposed floors, skylights and back walkouts, all of which contribute to how well the home is functioning.
- Energy efficiency measures the amount of energy produced by a piece of equipment, compared to the amount of energy it uses. The higher the percentage, the more efficient the equipment is, as less energy is wasted.
- Newer air conditioners are more efficient and use less hydro than older models.

Chapter 2 Furnace - Heating and Insulation

Summary:

- Reduce energy consumption by replacing your mid-efficiency furnace with a high-efficiency furnace.
- Duct work should be sealed with silver or foil tape or with caulking.
- Always use work gloves when doing duct work as the metal can be sharp.
- Insulate both your cold and hot water pipes.
- Inspect and replace your furnace filter regularly.
- Washable filters should be cleaned and sanitized for bacteria.
- To test a room's circulation, place a garbage bag over the floor register and see how long it takes for the bag to fill up with air. Use this simple test to compare rooms and to determine whether each room is getting enough air.
- Programmable thermostats can be lowered in the winter and raised in the summer to reduce energy use and costs.
- Water pipes should be insulated. Insulate hot pipes to stay hot, and insulate cold pipes to control condensation. Insulating your water pipes is cheap and easy to do!

Chapter 3 Basement

Summary:

- Hot and cold level returns should be present on all floors of your home.
- Pot lights are best used with CFLs (compact fluorescent light bulbs). Replace your 60 watt bulbs with 13 watt CFLs for significant energy savings. Have an electrician wire pot lights on several switches for even more energy savings.
- Consider the function of the light bulbs in your rooms, and light each room appropriately.
- New dimmer switches are a great power saver. Make sure they are compatible with your current lighting fixture and with CFL bulbs.
- Turn off your computer when it's not in use for 20 minutes or more.
- Unplug appliances such as basement refrigerators if they are not being used or not being used effectively.
- A proper exhaust fan is essential in the bathroom. Noisy fans don't get used, so install a low-noise rating fan. You can also put the fan on a timer for greater efficiency.
- SON - a measurement of noise and the level at which humans hear it.
- Install low-flow showerheads to reduce water use and use of energy for heating.
- Minimize running water while washing your hands, shaving or brushing your teeth. Reducing shower time can have a significant impact on water usage as well.
- Install aerators on all your faucets and inspect them regularly. Aerators reduce water volume by adding air to the water.

Chapter 4 Main Floor

Summary:

- Energy Star and Energuide are trademark labels helping consumers to choose energy-efficient appliances. Use your local energy efficiency labels as a guide to help you choose efficient appliances.
- The refrigerator has replaced the oven as the modern home's main appliance. Buy the most energy efficient model available and make sure to choose the right size for your family's needs.
- Use small amounts of water when cooking on the stovetop and keep pots covered.
- Proper ventilation in the kitchen helps maintain good air quality and gets rid of odors.
- Use the dishwasher only when it's full, as half load cycles can be costly. Stay away from pot and pan scrubbing cycles as they increase energy use.
- 15-25 years should be the maximum life of your refrigerator. Replace it with a more energy efficient model.

- Keeping refrigerator doors open wastes energy. First, decide what you want, then open the fridge door. Your fridge will run better if you keep it clean.
- Keep the flues of your fireplace closed when not in use.
- Vent clothes dryers outside, and control the air quality inside.

Chapter 5 Blower Door Test

- This test simulates wind hitting the house from the outside to measure air leaks throughout the house.

Chapter 6 Upstairs

Summary:

- The lid to the attic should fit well and be sealed with weather stripping. There should be no air exchanges between the attic and your living space.
- Acrylic latex caulking is recommended for caulking around the house; it's fully paintable and water-washable. Use silicone caulking in wet areas.
- Wear latex gloves when applying expanding foam around windows and doors.

Chapter 7 Energy Audit

Summary:

- Results from a blower door test are calculated after depressurization for air leakage.
- Each audit is unique to a particular house.
- Identify problem areas before insulating and sealing your home. Have a proper assessment done.
- Proper air sealing and ventilation allows more control over how energy is being used in our environment. Maintain the air quality of your home at the most energy efficient level possible.
- Energy efficiency is something we can all achieve without major renovations.
- Energy efficient homes pay off year after year in savings on energy costs.
- Take into consideration the age, size and structure of your house. Air leakage, ventilation, insulation, and exposed flooring will all contribute to a home's energy efficiency.

Chapter 8 Energy Efficiency

Summary:

- You control your environment.
- Blinds should be light on the outside and decorated on the inside only.
- Ceiling fans are a great way to circulate air inside the house.
- There are many options and styles of insulation available; what you choose will depend on the structure of your home.
- Roofs covered with less snow in winter may indicate proper insulation is lacking, the escaping heat melts the snow.

Chapter 9 Phantom Power

Summary:

- Phantom power is what we call the energy that keeps on being used by equipment that is turned off but isn't unplugged.
- If you are not using something– have it on a power bar or unplug it altogether!
- Make wise purchasing decisions.
- Put products on a power bar. Make sure you turn the power bar off when you turn off the equipment so it won't continue to draw power.
- Use energy meters to read and keep track of your energy usage on products around your home. They can be purchased at your local hardware or department store

Ten Energy & Conservation Tips for Your Home

1. Tape all duct work to improve air circulation and comfort level.
2. Turn off all lights and appliances when you're not using them.
3. Use proper ventilation to ensure good air quality in your home.
4. Weather strip and air seal your home.
5. Participate in your community's recycling programs.
6. Get rid of unnecessary gadgets and articles you no longer use.
7. Check your faucets for leaks, and get them fixed.
8. Turn down your thermostat. Turn it down for heat, and up for air-conditioning.
9. Have an energy audit.
10. Educate yourself and your family on safety, the environment and energy usage.

Check your local and federal governments for energy requirements and for more cost saving tips.

Ford Underwood Biography



Ford has been an energy auditor since 1999, and has provided written and verbal information to over 2,500 clients. He is both a Certified Energy Advisor and Energy Efficiency Consultant.

He has assisted in the pilot project for Cool Shops, doing Energy Efficiency data collection for 40 storefront small businesses. He has expertise as a Home Renovator and has operated his own demolition company. He is a certified Home Inspector, and a professional cabinetmaker.

Ford has participated in “Lunch and Learn” sessions speaking on Energy Efficiency programs and opportunities to many large organizations and companies.

You can contact Ford through email at: coveryourassets@on.aibn.com.



About Shannon Leroux:

www.shannonleroux.com

Shannon is a talented actress who has been featured on CTV & Global Television, the History Channel and a variety of independent films. She has performed in theatre, industrial videos, and contributed to many commercials and voiceovers. She is represented by her agent, Colin McMurray who can be reached at ColinMcMurray@rogers.com.

Along with her many acting credits, Shannon enlisted in the 1st Air Defense unit of the Canadian Forces and attained the qualification of Firearms Certified marksman status. She is also a group 2 fitness instructor and competitive swimmer and has attained titles as both a Pro Figure Athlete and Pro Fitness Model with the WNSO Fame Organization.

Special thanks to the Leroux family for their participation in this video series.

The Living Series © 2008 - See more titles at www.thelivingseries.com