About energy efficient windows

Energy Answers

(NC) — Question: Should I replace the windows in my house and, if so, how do I select the most energy-efficient windows?

Answer: Windows have little insulating value and are often the site of serious condensation and air leakage. Depending on the severity of the problem in your home, you may want to seek a qualified contractor's advice. However, as a rule of thumb on the energy side, you should always consider upgrading the thermal performance of your windows before you proceed with the more expensive task of replacement.

Windows can lose heat two ways: through air leakage and through conduction.

Air leakage involves the movement of air through cracks between the window frame and the wall studs, and at joints where the window opens. Start the upgrading process by thoroughly caulking and weather stripping. This will reduce heat loss and cut down on uncomfortable drafts.

Conductive heat loss (heat loss directly through the window materials) can be reduced by increasing the number of *glazings in a window*. The most familiar way to do this is to install exterior storm windows for the cold season.

If a window is severely warped, rotted, damaged or poorly fitted, air leakage control may be impossible, and the window should be replaced.

A great variety of windows with improved energy-efficiency are available, so shop around before making a decision. Recent developments in the glass and plastic industries have produced relatively light window materials that offer significantly better thermal performance. Construction techniques have also improved.

A major development in window technology is low-emissivity (or low-E) glass. Emissivity simply means the power of radiating light or heat. In low-E windows, a thin, invisible coating of metal is deposited on one or both panes of a double-pane window. This coating reduces the tendency of the inner pane to radiate room heat to the outside. Thus, the inner glass is warmer, heat loss is reduced, and condensation is less likely to occur on cold winter nights. An added benefit is that units with low-E glass are the same thickness as standard ones and can be just as easily installed during renovation.

When shopping for windows look for high-quality and serviceable weatherstripping and ask about the tested air leakage rates for specific windows. You should also consider the need for long-term maintenance, and whether or not the windows conform to accepted industry standards.

For free advice on upgrading or replacing your windows, call the toll-free HEATLINE at 1-800-267-9563.

Energy efficiency is an important consideration when purchasing windows.

Keeping heat inside the house

Energy Answers

(NC) — Question: How can I keep the warm air from leaking out of my house?

Answer: Air leakage is the single largest source of heat loss in many Canadian houses. Air leakage control should therefore be at the top of your list of energy management projects.

The costs involved in air leakage control work can usually be recovered quickly through the savings on your heating bills. You'll also benefit from increased comfort and peace of mind in the structural integrity of your house.

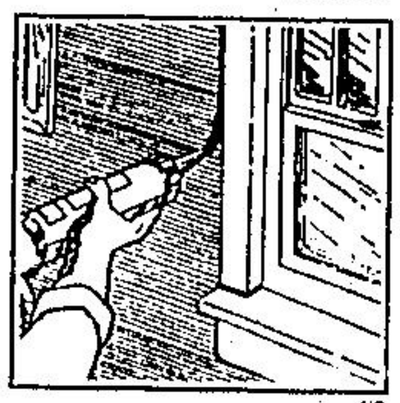
The attic is a good place to start. Moist air from the living space leaks into the attic through cracks around ceiling light fixtures, bathroom and kitchen exhaust fans, chimneys, the plumbing stack and the attic hatchway. Besides wasting energy, this air leakage can result in condensation in the attic.

Working from inside the attic, use caulking to seal cracks where light fixtures and exhaust fans penetrate the attic floor. You should also insulate fan ducts to prevent condensation from running back inside the ducts. Since the plumbing stack moves up and down, the hole around it must be flexible. Use polyethylene plastic and acoustical sealant to make a loose "boot" of plastic, similar to the boot around the stick shift of a car. The plastic should be sealed tightly to the plumbing stack and the attic floor. Attic hatches should be weatherstripped like any door, and closed securely.

In the basement, the main air leakage points are where the floor and header joists meet, and where the wooden sill plate rests on the foundation wall. Both these areas can be caulked with latex acrylic or butyl caulking. Polyurethane foam in a spray can with a long nozzle can be used to seal hard-to-reach areas.

To test for air leakage in the living space of your house, run a piece of tissue attached to a wire coat hanger over and around windows, doors and baseboard trim. If the tissue flutters, you have located an air leak.

Use weatherstripping to seal air leaks at moveable joints of doors and windows, and caulking to seal leaks at fixed joints. If air is leaking out at floor level, you can remove the baseboard and caulk where the wall and floor meet. In some cases, a simpler procedure is to lay a bead of appropriately colored interior grade sealant at the intersection of the floor and baseboard.



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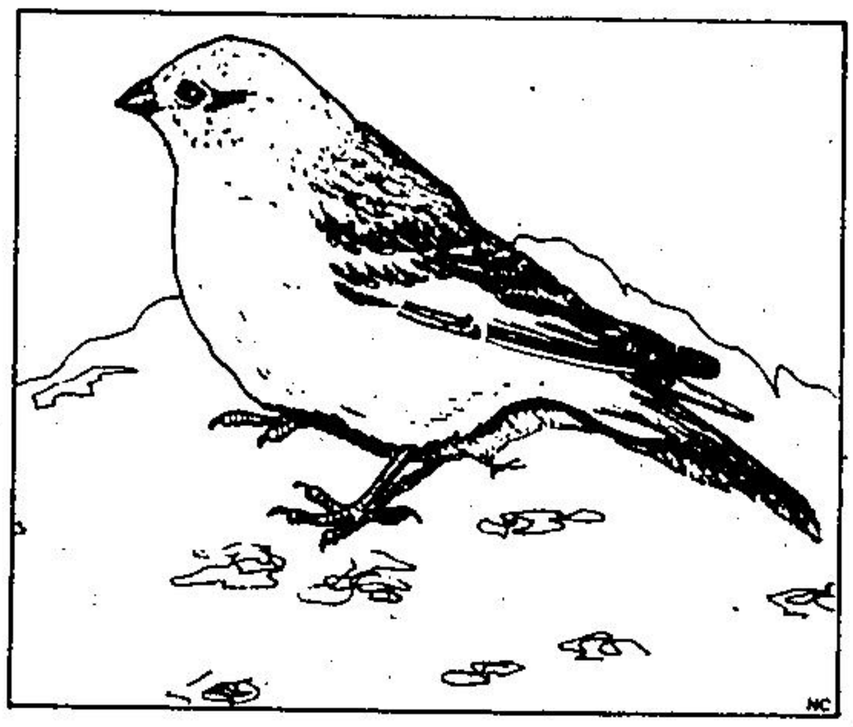
Caulking cuts down on uncomfortable drafts and increases savings

For free advice on air leakage control and ventilation, call the toll-free HEATLINE at 1-800-267-9563.



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Snow bunting

MARSH WORLD

(NC) — Appropriately named, the snow bunting is usually found close to the snow line. Each fall, large flocks of these brown-black and white birds can be seen as they return from high arctic nesting grounds and converge on open fields in search of weed seeds and waste grain, the mainstay of their diets. It is not uncommon to see thousands at a time in one field. At freeze-up, these birds are attracted to the edges of marshes for another kind of feed. Aquatic insects become sluggish in the cold water, and fall winds wash them up onto frozen mudflats and the surface of newly formed ice. The snow buntings arrive to gather a seasonal feast of the hapless frozen insects.

For the free pamphlet, Know Your Ducks, write: Ducks Unlimited Canada, 1190 Waverley St., Winnipeg, Manitoba R3T 2E2.

SHOE CARE CORNER
Del Foxton

Confessions of a winter boot

(NC) — If our winter boots could talk, boy would they have a story to tell! They would probably tell us that they don't appreciate being so neglected. I am sure they would also tell us that **good grooming goes all the way down to the boots.**

Most boots are made from the skin of animals — and, like human skin, animal skin requires cleansing, nourishing and protecting. Without this attention, the skin of our boots becomes dry, brittle and old before their time.

So right about now we should be doing a mid-winter boot check-up. Here are some suggestions:

- To clean smooth leather boots, wipe them with a solution of Saddle soap and water. However, if there are salt stains, neutralize them first with salt stain remover.
- To soften, color and shine dried up shiny smooth leather, use shoe cream. Shoe creams nourish the leather and buff to a high shine.
- If boots are worn, scuffed and salt stained, use Scuf pak, a heavily pigmented wax.

After cleaning and polishing leather boots, re-protect immediately with Spray'n Wax. The spray protects against stains and the wax, especially around sole edges, helps prevent leakage.

Del Foxton is Vice-President of Corporate and Public Relations for Tana Canada Inc. For more information, or for a complimentary shoe care booklet, write Del Foxton, Tana Shoe Care Corner, 8505 Dalton Road, Montreal, Quebec H4T 1V5.