

HRV ventilation system maintenance.

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The National Building Code of Canada, the basis for most building codes in the country, requires mechanical ventilation in all new housing because it is now recognised that our modern energy efficient homes must have the possibility of good through ventilation beyond opening windows. There are many different ventilation arrangements that will satisfy the National Building Code to provide minimum healthy ventilation. The primary drawback to many of these various systems is that a lot of hot air is expelled outdoors and the heat is wasted, but at least the household air is healthy and mould free. The best of these systems are called Heat Recovery Ventilators (HRV) or Energy Recovery Ventilators (ERV). Why are they the best? Because they provide fresh air and recuperate 80 to 95% of the heat from the outgoing stale air. All R-2000 houses and other energy efficient houses have HRV's or ERV's installed. Click here for details on just what is an HRV or an ERV -- and here for more information on why heat or energy recuperation is cost effective. Although the HRV is not a code requirement in any jurisdiction, there are a great number of them installed right across the country. The HRV has been around for going on 30 years now while the ERV for a cold climate came of age 10 years ago. Which raises the point; what must be done in the way of homeowner maintenance on these machines? Natural Resources Canada has published a booklet entitled: Operating and Maintaining Your Heat Recovery Ventilator (HRV) that you can view directly on-line. The basic maintenance tasks are: 1- Clean or replace air filters (one to three months) 2- Clear exterior intake and exhaust fans of obstructions (as necessary). Very important and usually forgotten! Turn off the fans while cleaning the intake screen or all the dust will flow into the machine. With the fans off, it just falls onto the ground outdoors. A shop vac is a great way to clear the intake screen. 3- Clean heat exchanger core, hose it out (twice a year). Some ERV exchanger cores cannot be rinsed with water -- check your manufacturer's instructions. 4- Clean condensate drain and pan (twice a year). Some ERVs have no drain. 5- Service the fans, oil if necessary, cleaning or replacement if noisy 6- Clean room grilles and inspect ductwork for damage (once a year) 7- Get an accredited contractor to teach you how to maintain the system. Install an HRV or an ERV and keep it in good operating condition, and you will never want to live in a home without one again.

Keywords:

Air Quality, HRV, Cleaning, Air Changer, ERV, Ecology, Maintenance, Fans, Health, Ventilation