

# **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. If you watch my show much, you know that I am constantly at odds with the Ontario Building Code in that Ontario has opted out of this requirement claiming that it is an unnecessary added cost, leaving many new homeowners with significant moisture problems in brand new homes and without New Home Warranty recourse. Personally I consider this totally irresponsible on the part of the Ontario authorities and case histories from you web visitors are constantly confirming my position.

There are many different ventilation arrangements that will satisfy the National Building Code to provide minimum healthy ventilation. The primary drawback to most 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. Almost all R-2000 houses have HRV's or ERV's installed.

Although the HRV is not a code requirement in any jurisdiction, there are a great number of them installed right across the country, including most quality homes in Ontario, and they have been around for going on 20 years now. 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)
- 3- Clean heat exchanger core, hose it out (twice a year)
- 4- Clean condensate drain and pan (twice a year)
- 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 and keep it in good operating condition, and you will never want to live in a home without one again.

**Keywords:**

Air Changer, Air Quality, Ecology, Fans, Hrv, Maintenance, Ventilation