

# CLEARING THE AIR

*Residential Ventilation Issues*

by Dara Bowser & Bob Allison

## Inspector/Operator Information Resources

In the last issue of the OBOA Journal, we wrote about the need for informational support to homeowners, and the need to encourage annual service & maintenance. We also promised to follow-up with resources that are available to inspectors to educate homeowners.

### CANADA MORTGAGE & HOUSING

CMHC of course, has a wide variety of useful publications for builders and consumers that are useful. Some publications worthy of note are:

- *How to Improve the Quality of Air in Your Home*
- *Clean-Up Procedures for Mold in Houses*
- *The Clean Air Guide*

The information products catalogue; *All About Housing* is available from:

**Canadian Housing Information Centre (CHIC)**  
 700 Montreal Road, Ottawa, Ontario, K1A 0P7  
 Tel: .... 613-748-2367 Tel: ..... 800-6687-2642  
 Fax: .... 613-748-4069 TTY: ..... 800-309-3388  
 Email: ..... chic@cmhc-schl.gc.ca  
 Web: ..... www.cmhc-schl.gc.ca

### ONHWP

The famous ONHWP "Ventilation Redbook" is handy for explaining ventilation requirements. There is a consumer-oriented booklet as well.

Contact:

**ONHWP:** 5160 Yonge St, 6th Floor  
 North York, Ont. M2N 6L9  
 Tel: .... 800-668-7504

### OPERATING & MAINTAINING YOUR HRV

NRCan (Natural Resources Canada) booklet; *Home Heating & Cooling Series #8*. This free, brochure-sized booklet contains clear, concise, well-illustrated information such as:

- Need for ventilation
- HRV System Description
- Need for Balancing
- Operating your HRV
- Maintenance Requirements (Homeowner and Technician)
- Trouble shooting Guide

Get this free booklet from:

**Energy Publications:**  
 c/o Canada Communications Group  
 Ottawa Ont, K1A 0S9  
 Tel: .... 613-995-2943 Tel: ..... 800-387-2000  
 Fax: .... 613-994-1498  
 Web: ..... http://eeb-dea.nrcan.gc.ca

### HRAI CERTIFIED VENTILATION INSTALLER/DESIGNER LIST

Twice a year, HRAI prepares a current list of all persons who have been certified under their ventilation installer/designer program. Printed lists are available sorted by municipality or name. The list is also available as a data-file. Contact Lynn Bartoshuk at:

**HRAI:** 5045 Orbitor Dr. Bldg 11, Suite 300  
 Mississauga, Ont. L4W 4Y4  
 Tel: .... 905-602-4700 Tel: ..... 800-267-2231  
 Fax: .... 905-602-1197 Web: ..... www.hrai.ca  
 Email: ..... lbartoshuk@hrai.ca

### HRV MAINTENANCE CHART

Unless otherwise recommended by the manufacturer, service your HRV according to the following schedule. If service or maintenance items not specified below are recommended by the manufacturer, write them into the blank spaces provided.

**CAUTION! DISCONNECT ELECTRICAL POWER BEFORE SERVICING YOUR HRV.**

| Maintenance Required                        | Recommended          | Date Maintenance Performed |  |  |  |
|---|----------------------|----------------------------|--|--|--|
| Clean or replace air filters                | Every 1 to 3 months* |                            |  |  |  |
| Clean or unblock outside hoods and screens  | Every 1 to 3 months* |                            |  |  |  |
| Inspect and clean heat-exchange core        | Every 6 months       |                            |  |  |  |
| Inspect and clean condensate drain and pans | Every 6 months       |                            |  |  |  |
| Service and clean fans                      | Every 1 to 6 months  |                            |  |  |  |
| Clean grilles and inspect ductwork          | Annually             |                            |  |  |  |
| Check defrost system                        | Annually             |                            |  |  |  |
| General servicing by a qualified contractor | Annually             |                            |  |  |  |
| Adjust dehumidistat controls                | Seasonally           |                            |  |  |  |
| Balancing                                   | Supply airflow       |                            |  |  |  |
|   | Exhaust airflow      |                            |  |  |  |

\*You may want to alter this schedule to meet your own needs, depending on the severity of your home's indoor and outdoor environments or the manufacturer's recommendations. More frequent servicing may be required if your home is in a location that is dusty, has high traffic flows, etc.

| Contractors | Telephone number |
|-------------|------------------|
|             |                  |
|             |                  |

Sticky-back maintenance chart from OPERATING & MAINTAINING YOUR HRV - NRCan Booklet

## HRAI COMPLAINT & ARBITRATION PROCEDURE

HRAI will investigate complaints against its certified Ventilation Installers and Designers. HRAI will assist in determining if the installer or designer complied with the appropriate codes and good practice. If appropriate, the offending installer or designer's certification will be removed. For more information, or if you have an installation concern, call *Gord Arnott* at HRAI, email; *garnott@hrai.ca*. (See box for address and telephone numbers.)

## FAN SWITCH & RETURN AIR LABELS

OBC sentences 9.32.3.4(4) & 9.32.3.6.(5) require labels on Principal Fan Switches and Circulation Fan Switches. Some Municipalities also use a label affixed to the return air duct which clearly indicates whether the house is Type I, II, III or IV. Markham and Haldimand Norfolk have obtained these labels from:

|                            |   |
|----------------------------|---|
| <i>TJM Engraving Plus:</i> | 127 Marville Road Unit 3<br>Scarborough, Ont, M1L 4J7 |
| <i>Tel &amp; fax:</i>      | 416-752-7580  |

The Municipality of Cambridge has obtained labels from *Highland Print Craft* in Cambridge. Contact *Rob Galway* @ 519-621-5390.

## VENTILATION MANUFACTURERS

Most manufactures of ventilation equipment are willing to become involved to resolve complaints and participate in general information activities. Many have excellent consumer-oriented publications. The NRCan booklet above has a list of HRV manufacturers that is quite current. There is also a listing of ventilation manufacturers (both fans and HRVs) in the **HVI Certified Home Ventilation Products Directory** which is available from:

|                                    |  |
|------------------------------------|--|
| <i>Home Ventilating Institute:</i> | Division of AMACA<br>30 West University Drive<br>Arlington Heights, Illinois, 60004-1893 |
| <i>Tel:</i> . . . . . 847-394-0150 | <i>Fax:</i> . . . . . 847-253-0088   |
| <i>Email:</i> amca@amca.org        |  |

Of course this directory also lists sound, airflow and efficiency data for fans and HRVs.

## HRAI RESIDENTIAL VENTILATION MANUAL

This manual was substantially revised in August 1996. It now contains a comprehensive section on trouble shooting and maintenance.

Although you may have an older version of this manual, the new version contains many new forms in a "submittal" format for new housing (e.g. *Single Duct Design Worksheet W6A*). Get it from *Elizabeth Tarczy* at HRAI, email; *etarczy@hrai.ca*. (See other references for address and telephone numbers.)

## ANY OTHER INFORMATION?

If any members know of other helpful information we would be happy to print them here.

*\*Dara Bowser is an HRAI Ventilation Instructor, an associate member of the CSA Technical Committee on Residential Mechanical Ventilation. Dara has been involved in residential ventilation as a consultant, manufacturer, and trainer for the past 15 years. [D\\_bowser@compuserve.com](mailto:D_bowser@compuserve.com)*

*\*Bob Allison is the Deputy Chief Building Official of the Regional Municipality of Haldimand-Norfolk and has 23 year's experience as a building official. Bob takes a keen interest in ventilation and has assisted in the development of the 2-day OBOA Ventilation Workshop for Building Officials.*

NOTE: Although this column has appeared under the title "HRAI Commentary" in the past, readers should note that HRAI no longer endorses the content. The opinions expressed in this column are those of the writers and do not reflect the views of HRAI, OBOA or any other agency, corporation or individual.