

# VENTILATION HANDY REFERENCE SHEET

## STEP ONE—Determine Ventilation Requirements

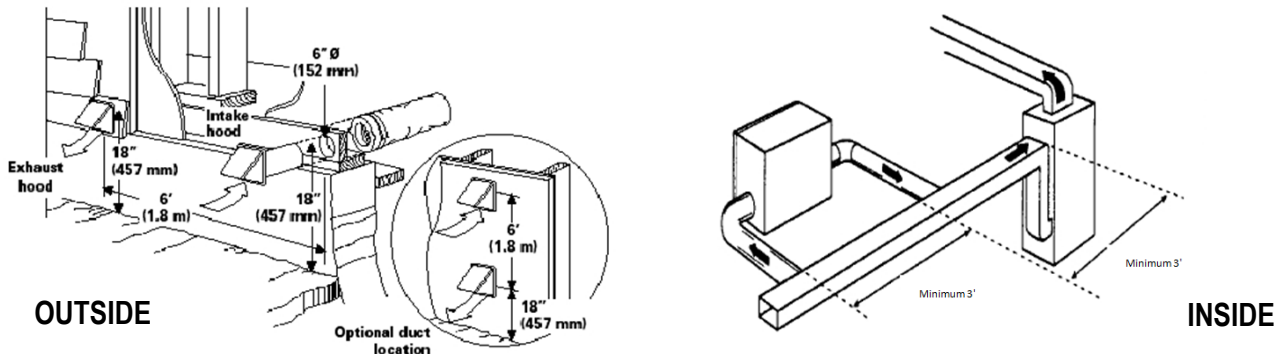
CAN/CSA F326 Total Ventilation Capacity Requirements (TVC)			
Master Bedroom	_____	x 21.2 CFM	= _____
Other Bedrooms	_____	x 10.6 CFM	= _____
Other Rooms	_____	x 10.6 CFM	= _____
Unfin. Basement	_____	x 21.2 CFM	= _____
<b>TOTAL</b>			= _____

Principal Exhaust or Minimum Ventilation Requirements (PVC)			
Master Bedroom	_____	x 31.8 CFM	= _____
Other Bedrooms	_____	x 15.9 CFM	= _____
<b>TOTAL</b>			= _____

## STEP TWO—Choose a Unit

Select Airflow from HVI Listing at 0.4 w.c. (100Pa) → 0.5 w.c. (125Pa)

## STEP THREE—Location of Units



## STEP FOUR—Duct Sizing and Installation

- Use as few fittings as possible and use “smooth” fittings
- Seal all joints with mastic or foil tape
- For long runs or if there are lots of fittings, increase size of duct
- Avoid running ducts through unheated areas
- Support the ducts properly and use 3 screws at every join

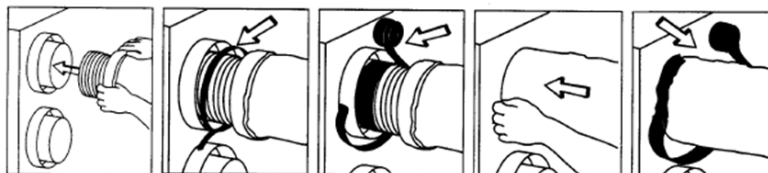
Suggested Duct Sizes

Maximum Air Flow (CFM)	Duct Diameter
40	4"
80	5"
150	6"
200	7"
250	8"

## STEP FIVE—Flexible Duct Connection Installation

### Insulated Flexible Duct

- Keep it short
- Seal it well
- Straight
- Smooth



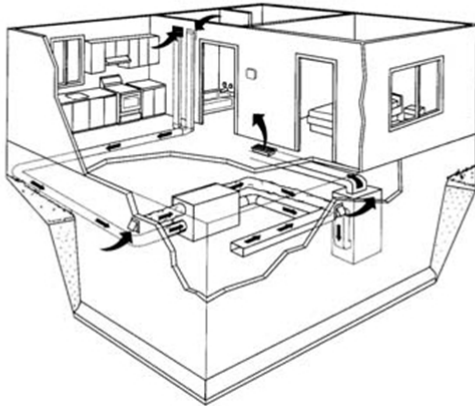
### Insulated Flexible Duct

- Both the inside duct and outside vapour barrier must be well air sealed

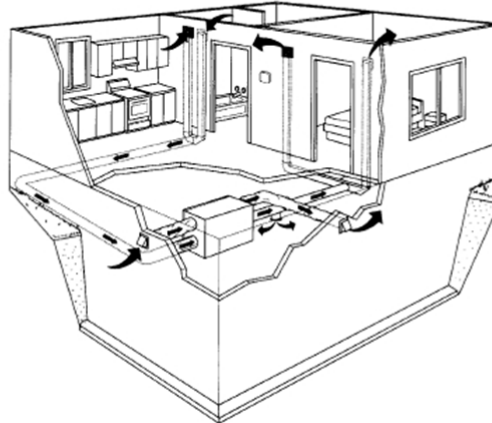
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## STEP SIX—HRV Installation

### Ducting Alternatives



Fresh air into furnace return, Exhaust ducted from bathrooms and kitchen



Fully Ducted System (Fresh Air to bedrooms and main living area)

**OBC 9.32.3.10:**  
 "Supply ducts...where ducts are more than 10' in length, they must be insulated to a minimum level shown below:

Outside Winter Design Temp (°C)	Supply Duct Insulation for Ducts over 10'
-7 to -11	R3
-12 to -17	R5
-18 to -24	R7
-25 to -29	R8
-30 to -34	R10
-35 and cooler	R12

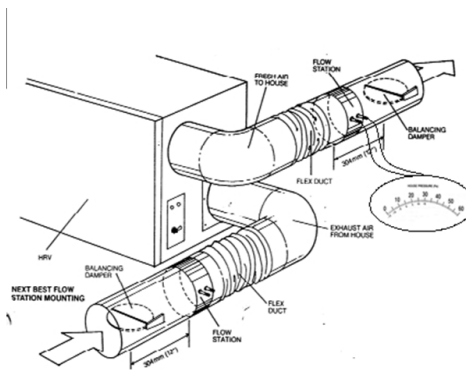
According to the Air Diffusion Council, flex that is run over 14' must be a duct and not a connector

## STEP SEVEN—Balancing Procedures

*Balancing Procedures (Balancing on high speed is preferred)*

**All HRVs must be balanced:**

- To maintain unit efficiency
- To avoid freeze ups
- To avoid negative/positive house pressures
- Fresh air to equal exhaust air out (within 10%)



**Using Door Taps:**

- Find air flow on label of unit
- Match air flows of exhaust/supply streams by adjusting balancing dampers mounted on unit

## STEP EIGHT—Maintenance Schedule

Every 3 Months	Every Year
<ul style="list-style-type: none"> <li>• Inspect the intake hood and clean if needed</li> <li>• Clean the filters</li> </ul>	<ul style="list-style-type: none"> <li>• Clean the recovery core</li> </ul>
<ul style="list-style-type: none"> <li>• Clean the interior of the cabinet and clean the door</li> <li>• Clean the condensation tray and inspect tubing</li> </ul>	<ul style="list-style-type: none"> <li>• Clean the blades of the blower wheels if needed</li> </ul>