

# Residential Mechanical Ventilation and Heating/Cooling Design Summary (HVAC)

PLEASE PRINT LEGIBLY (all information must be completed)

APRIL 2010

LOCATION OF INSTALLATION	
Lot #:	Plan #:
Munic. Address:	
Multiple Units:	LHS / RHS      Upper / Lower
Permit #:	Other:

BUILDER	
Name:	
Address:	
Phone:	Certification #

INSTALLING CONTRACTOR	
Name:	
Address:	
Phone:	

COMBUSTION APPLIANCES	
	a) Direct Vent (sealed Combustion) only
	b) Positive venting induced draft (excluding fireplace)
	c) Natural draft, B vent or induced draft fireplace
	d) Solid Fuel (including fireplace)
	e) No combustion appliances

HEATING SYSTEM	
	Forced Air
	Non-Forced Air
	Electric Space Heating

HEATING FUEL TYPE	
	Gas
	Oil
	Propane
	Electric

HOUSE TYPE	
	I Type (a) or (b) appliance only, no solid fuel
	II Type I with solid fuel (including fireplace)
	III Any Type (c) appliance
	IV Type for electric space heat
	Other: Type I, II, or IV with no forced air

SYSTEM DESIGN OPTION	
	Exhaust Only/Forced Air (complete 1-5,7,8)
	HRV with Exhaust ducts/Forced Air (complete 1,6-8)
	HRV simplified connection to Forced Air (complete 1,6-8)
	HRV full duct/not connected to Forced air (complete 1,6-8)
	Part 6 Design - More than 5 bedrooms

CERTIFICATION	
<p>I hereby certify that this ventilation system has been designed in accordance with the Ontario Building Code and good engineering practice. The undersigned has reviewed and takes responsibility for this design, and has the qualifications and meets the requirements set out in the Ontario Building Code to be a designer.</p>	
Name:	
Phone:	
BCIN#	
HRAI Ventilation Certification #	
HRAI Heat Loss/Gain Certification #	
HRAI Duct Design Certification #	
Signature:	Date:

1) TOTAL VENTILATION CAPACITY			Div. B 9.32.3.3.(1)
Bsmt & Mstr Bedroom	x 21.2 =		cfm
Other Bedrooms	x 10.6 =		cfm
Bathrooms & Kitchen	x 10.6 =		cfm
Other Rooms	x 10.6 =		cfm
<b>Total =</b>			<b>cfm</b>

2) PRINCIPAL VENTILATION CAPACITY			Div. B 9.32.3.4.(1)
1 Bedroom	31.8 cfm		
2 Bedroom	47.7 cfm		
3 Bedroom	63.6 cfm		
4 Bedroom	79.5 cfm		
5 Bedroom	95.4 cfm		

\*\*More than 5 Bedrooms

Pt. 6 Dsgn

3) SUPPLEMENTAL VENTILATION CAPACITY			Div. B 9.32.3.5.
Total Ventilation Capacity	(box 1)		cfm
Less Principal Ventilation Capacity	(box 2)		cfm
Supplemental Ventilation Capacity			cfm
Range Hood Vented to Exterior?			Yes      No

4) PRINCIPAL EXHAUST FAN CAPACITY			Div. B 9.32.3.4.B
Make/Model:	Location		
cfm	sones	HVI	
Principal Exhaust Duct Size (Circle Applicable Bedrms & Duct)			
# Bedrooms	Smooth Duct	Flexible Duct	
1	4"	5"	
2	5"	6"	
3	5"	6"	
4 & 5	6"	7"	
Over 5	Part 6 Design	Part 6 Design	

5) SUPPLEMENTAL FANS					Div. B 9.32.3.5
Location	cfm	Make	Model	Sones	

Supplementary Exhaust Duct Size			
Fan Capacity (cfm)	Min. Exhaust Duct Diameter		
(Circle Applicable cfm & Duct)	Smooth	Flex	
53	5"	6"	
106	6"	7"	

6) HEAT RECOVERY VENTILATOR (HRV)			
Make/Model:			
cfm high		cfm low	
%Sensible Efficiency @ -25c			HVI

7) HEATING APPLIANCE			
Make/Model:			
Heating Output		Total Design	
BTUH		Heat Loss	BTUH

8) COOLING APPLIANCE			
Make/Model:			
		Tons	
Cooling Output		Total Design	
BTUH		Cooling Load	BTUH

**General Notes**

- The principal exhaust fan shall be controlled by a manual switch centrally located in the dwelling unit and be identified with the words VENTILATION FAN.
- The forced air heating system circulation fan shall be controlled by a manual switch located adjacent to the ventilation fan switch and shall be identified by the words CIRCULATION FAN.
- Provide a rough-in for an exhaust fan when a rough-in for a bathroom is provided within a basement.

**Kitchener · North Dumfries · Waterloo · Wellesley · Centre Wellington · Wilmot · Woolwich**

