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:	Certificaton #

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

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**
		Total =	**cfm**

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 *(Check 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) *(Circle Applicable cfm & Duct)*		Min. Exhaust Duct Diameter Smooth		Flex	
53	☐	5"	☐	6"	☐
106	☐	6"	☐	7"	☐

CERTIFICATION

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.

Name _____

Phone: _____

BCIN# _____

HRAI Ventilation Certification # _____

HRAI Heat Loss/Gain Certification # _____

HRAI Duct Design Certification # _____

Signature:	Date:

6) HEAT RECOVERY VENTILATOR (HRV)

Make/Model:

cfm high	cfm low
%Sensible Efficiency @ -25c	HVI

7) HEATING APPLIANCE

Make/Model:

Heating Output BTUH	Total Design Heat Loss BTUH

8) COOLING APPLIANCE

Make/Model:

Tons

Cooling Output BTUH	Total Design Cooling Load BTUH

GENERAL NOTES:

1) 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.

2) 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.

3) Provide a rough-in for an exhaust fan when a rough-in for a bathroom is provided within the basement.