

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 (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" | |

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 | Total Design |
| BTUH | Heat Loss |
| | BTUH |

8) COOLING APPLIANCE

| | |
|----------------|--------------|
| Make/Model: | |
| _____ | |
| | Tons |
| Cooling Output | Total Design |
| BTUH | 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.