RESET

RESIDENTIAL MECHANICAL VENTILATION DESIGN SUMMARY

for design and performance of residential ventilation systems to OBC 2024 - 9.32

1. Location

Municipality: ____________

Civic Address: ____________

2. Builder

Name: ____________

Address: ____________

City: ____________ Postal Code: ____________

Ph: ____________ Fax: ____________

3. Designer

Name: ____________

Address: ____________

City: ____________ Postal Code: ____________

Ph: ____________ Fax: ____________

HRAI #: ____________

E-mail: ____________

4. Combustion Appliances

- ☐ a) Direct Vent
- ☐ b) Induced Draft
- ☐ c) Natural Draft
- ☐ d) Solid Fuel Appliances
- ☐ e) No Combustion Appliances
- ☐ CO Alarm Required

5. Heating System

- ☐ Forced Air
- ☐ Non-Forced Air

- ☐ Gas
- ☐ Propane
- ☐ Other
- ☐ Oil
- ☐ Electricity

6. Distribution System

- ☐ Furnace
- ☐ Inline fan
- ☐ HRV/ERV

7. Principal Ventilation System Design Option

- ☐ Exhaust only forced air distribution system

  (Circ. fan at least 5 times the capacity of the principal exhaust)
- ☐ Balanced no heat recovery
- ☐ HRV/ERV with extended exhaust
- ☐ HRV/ERV with simplified exhaust
- ☐ HRV/ERV with full ducting/not coupled to forced air
- ☐ HRV/ERV with no supplemental fans

  (High speed must be at least 2.5 times the principal exhaust)
- ☐ Supplemental fans

8. Principal Ventilation Capacity (PVC)

of Bedrooms: ☐ Required Exh Airflow: ☐ CFM

Supply Air Required: ☐ Yes ☐ No

Mixed Air Temperature Calculation Required:

☐ Yes ☐ No

For a System coupled with a Forced Air Furnace:

Furnace Blower Rate: ____________ CFM

Max Allowable Outdoor Airflow as per NBC 9.32.3.4.(2):

____________ CFM

9. Principal Ventilation Fan

- ☐ HRV/ERV
- ☐ Central Inline Fan
- ☐ Bathroom Fan

Location: ____________

Manufacturer: ____________

Model: ____________ ☐ HVI Rated

Design Airflow: Low: ________ CFM High: ________ CFM

Sones: ________ ESP: ________ " w.c.

________ % Sensible Efficiency @ 0 ºC @ ________ CFM

________ % Sensible Efficiency @ -25 ºC @ ________ CFM

(If HRV/ERV is used, the system must also comply with SB-12)

10. Other Ventilation Fans

Location: ____________ Sones: ________

Manufacturer: ____________

Model: ____________ ☐ HVI Rated

Design Airflow: ________ CFM ESP: ________ "w.c.

- ☐ Supplemental Fan
- ☐ Supply Fan for Principal Exhaust
- ☐ Circulation Fan
- ☐ Make-up Air Fan for ________

Location: ____________ Sones: ________

Manufacturer: ____________

Model: ____________ ☐ HVI Rated

Design Airflow: ________ CFM ESP: ________ "w.c.

- ☐ Supplemental Fan
- ☐ Supply Fan for Principal Exhaust
- ☐ Circulation Fan
- ☐ Make-up Air Fan for ________

Location: ____________ Sones: ________

Manufacturer: ____________

Model: ____________ ☐ HVI Rated

Design Airflow: ________ CFM ESP: ________ "w.c.

- ☐ Supplemental Fan
- ☐ Supply Fan for Principal Exhaust
- ☐ Circulation Fan
- ☐ Make-up Air Fan for ________

Location: ____________ Sones: ________

Manufacturer: ____________

Model: ____________ ☐ HVI Rated

Design Airflow: ________ CFM ESP: ________ "w.c.

- ☐ Supplemental Fan
- ☐ Supply Fan for Principal Exhaust
- ☐ Circulation Fan
- ☐ Make-up Air Fan for ________

11. Designer Consent

I ____________ certify this ventilation system is designed to be in accordance with OBC-2024 9.32

Date: ____________ Signature: ____________

Conversion note: 1 L/s = 2 CFM (For hard conversion, use 1 L/s = 2.118 CFM)

Note: Secondary suite ventilation system requires a separate design

HRAI

RESIDENTIAL MECHANICAL VENTILATION RECORD

For Certification of Design and Performance of Residential Ventilation Systems

W2

A — ADDRESS

Municipality: ______________________

Civic Address: ______________________

B — BUILDER

Name: ______________________

Address: ______________________

City: __________ Postal Code: __________

Ph: __________ Fax: __________

C — DESIGNER

Name: ______________________

Address: ______________________

City: __________ Postal Code: __________

Ph: __________ Fax: __________

E-mail: ______________________

HRAI #: ______________________

D — HEATING SYSTEM/ COMBUSTION APPLIANCES

☐ Forced Air ☐ Non Forced air

☐ Electric ☐ Gas ☐ Oil ☐ Other

☐ No Combustion Appliances — *No Dep limit*

☐ Solid Fuel (including Fireplaces) — *5 Pa Dep limit*

☐ Direct Vent (sealed combustion) — *No Dep Limit*

☐ Induced Draft/Power Vent — ______ *Pa Dep limit*

☐ Natural Draft or B-Vented — *5 Pa Dep limit*

Lowest Depressurization Limit ______ Pa.

E — CEC EQUIPMENT

☐ Clothes Dryer(s) — (150 cfm default)

☐ Downdraft Cook Top — (220 cfm default)

☐ Other (exhaust) — (over 150 cfm)

Depressurization test required? See W-3C worksheet

F — TOTAL VENTILATION CAPACITY (TVC)

Bsmt & Master Bedroom	______	@ 20 cfm	______	cfm
Other Bedrooms	______	@ 10 cfm	______	cfm
Bathrooms & Kitchens	______	@ 10 cfm	______	cfm
Other Hab. Rooms	______	@ 10 cfm	______	cfm
Total Ventilation Capacity (TVC)			______	cfm

Depressurization test required? See W-3A or W-3B

G — EXHAUST CAPACITY

Continuous — Minimum Continuous Exhaust

Kitchen(s)	______	@ 60 cfm	=	______	cfm
Bathroom(s)	______	@ 20 cfm	=	______	cfm
		Total		______	cfm

Intermittent — Minimum Intermittent Exhaust

Kitchen(s)	______	@ 100 cfm	=	______	cfm
Bathroom(s)	______	@ 50 cfm	=	______	cfm
		Total		______	cfm

H — TVC SYSTEM

☐ HRV/ERV ☐ Central In-line Fan ☐ Bath Fan

Location: ______________________

Manufacturer: ______________________

Model: ______________________ ☐ HVI Rated

Design Airflow:

High: ______ CFM ESP: ______ "w.c

Low: ______ CFM Sones: ______

For HRV/ERV:

______ % SRE @ 0 ºC @ ______ CFM

______ % SRE @ -25 ºC @ ______ CFM

I — ADDITIONAL EQUIPMENT

Location: ______________________

Manufacturer: ______________________

Model: ______________________ ☐ HVI Rated

Design Airflow: ______ CFM ESP: ______ "w.c.

☐ TVC ☐ Exhaust ☐ Make-up Air ☐ Recirc

Location: ______________________

Manufacturer: ______________________

Model: ______________________ ☐ HVI Rated

Design Airflow: ______ CFM ESP: ______ "w.c.

☐ TVC ☐ Exhaust ☐ Make-up Air ☐ Recirc

Location: ______________________

Manufacturer: ______________________

Model: ______________________ ☐ HVI Rated

Design Airflow: ______ CFM ESP: ______ "w.c.

☐ TVC ☐ Exhaust ☐ Make-up Air ☐ Recirc

Location: ______________________

Manufacturer: ______________________

Model: ______________________ ☐ HVI Rated

Design Airflow: ______ CFM ESP: ______ "w.c.

☐ TVC ☐ Exhaust ☐ Make-up Air ☐ Recirc

J — DESIGNER CONSENT

I, ______________________ certify this ventilation system design to be in accordance with CSA F326:

Date: __________ Signature: __________

Conversion note: 1 L/s = 2 CFM (For hard conversion, use 1 L/s = 2.118 CFM)