

RESIDENTIAL MECHANICAL VENTILATION DESIGN SUMMARY

for design and performance of residential ventilation systems to NBC 2020 - 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 °C @ _____ CFM
 _____ % Sensible Efficiency @ -25 °C @ _____ CFM

(If HRV/ERV is used, the system must also comply with 9.36.3.9)

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 NBC-2020 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

