A

Mechanical Ventilation Checklist A—Non-Distributed

Use this checklist with Non-Distributed Systems such as those usually found in dwellings with electric or hot water radiant or baseboard heating systems or where duct systems do not distribute ventilation air.

Civic Address

<table>
<thead>
<tr>
<th>Permit No.</th>
</tr>
</thead>
</table>

Number of Bedrooms (A)

Total Interior Volume of Dwelling ft³

\[
.5 \text{ ACH (air changes/hr)} = \text{Volume} \times 0.5 \div 60 = \text{cfm (B)}
\]

1. Principal Fan
   a) Exhaust Rate: Use the bedroom count from Box (A) above and Table 9.32.3.3.A. to determine Minimum Rate. Maximum Rate of 110 cfm if NAFFVA/Radon present.
   
   The Principal Exhaust Fan will be controlled automatically with an interval timer OR run continuously.
   
   Minimum required rate: Interval Timer Continuous
   
   cfm (C) cfm (D)

   b) Principal Fan CFM & Sone Rating:
   
   Make Model
   
   Sones: Interval Continuous
   
   Maximum rating: Interval Timer 1.5 Sones Continuous 1.0 Sone

   Box E Maximum allowed is 110 cfm if Make-up Air Required in Step 4.

   Fan Location: 

   c) Principal Fan Duct Size: Use actual fan cfm in Box E above and Table 9.32.3.9.

   Fan Duct size: inches. Duct type: Smooth Flex

2. Required Kitchen and Bathroom Exhaust Fans:

<table>
<thead>
<tr>
<th>Room</th>
<th>Fan Make &amp; Model</th>
<th>Fan CFM</th>
<th>Duct Diameter (in)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Code Req'd Min</td>
<td>actual Fan CFM</td>
</tr>
<tr>
<td></td>
<td></td>
<td>@ 2 W.C. per Table 9.32.3.8</td>
<td>@ 2 W.C. per Man. Rating</td>
</tr>
</tbody>
</table>
   
   * For fan capacities exceeding Table 9.32.3.9, follow manufacturer’s installation instructions or use good engineering practice to size duct. See Ventilation Guidelines Appendix page 24-A.
3. NAFFVA (Naturally Aspirated Fuel Fired Vented Appliance) and/or Radon Gas present in dwelling unit?
☐ Yes, Proceed to Step 4 & 5
☐ No, Omit Steps 4 to 7.

4. Passive Make-Up Air Duct for Principal Fan: Use the Box E installed cfm and Table 9.32.3.8.
Make-up air duct diameter _______ inches. Location ________________________________

5. Exhaust Appliance present which exceeds Box B 0.5 ACH:
☐ Yes, Proceed to Step 6.
☐ No such appliance. Omit Steps 6 to 7.

6. Use Passive Make-up Air for Exhaust Appliance with actual installed exhaust rate of 126 cfm or less:

Appliance Cfm _______ Passive Make-up Air Duct Sized to Table 9.32.3.8: _______ inches

7. Use Active Make-up Air for Exhaust Appliance with actual installed exhaust rate of more than 126 cfm.

Make-up Air Fan required:
Fan Make __________________ Model ____________________________
Duct diameter _______ inches
Fan Location ___________________________ Fan ducted to ________________________________

A) Active Make-up Air delivered to an Unoccupied Area (not directly to room containing the appliance).
Tempering Required per 9.32.4.1.(4)(a):
Show calculation & describe how make-up air will be tempered to at least 34°F (1°C) before entering unoccupied area.

Transfer Grill Required: Size to Table 9.32.3.8 (or 1 sq in of gross area per 2 cfm):
Transfer grill size _______ sq. in. Location ________________________________
Additional Tempering Required per 9.32.4.1.(4)(b) before transfer to occupied area: Show calculation and describe how make-up air will be further tempered to at least 54°F (12°C).

B) Active Make-up Air delivered to an Occupied Area: Tempering Required. Show calculation and describe how make-up air will be tempered to at least 54°F (12°C).

Installer Certification:
Date __________________
I hereby certify that the design and installation of the ventilation system complies with the 2006 B.C. Building Code.

Print Name ________________________________
Signature ________________________________
Company ________________________________
Phone ________________________________

2006 TECA Ventilation Certification Stamp

Checklist A2
This Checklist is for use with forced air heating systems where the heating duct system distributes ventilation air.

### 1. Principal Fan

**a) Exhaust Rate:** Use the bedroom count from Box (A) above and Table 9.32.3.3.A. to determine Minimum Rate. (Maximum Rate of 110 cfm if NAFFVA/Radon present.)

Minimum required rate:

<table>
<thead>
<tr>
<th>Interval Timer</th>
<th>Continuous</th>
</tr>
</thead>
<tbody>
<tr>
<td>cfm (C)</td>
<td>cfm (D)</td>
</tr>
</tbody>
</table>

**b) Principal Fan CFM & Sone Rating:**

<table>
<thead>
<tr>
<th>Make</th>
<th>Model</th>
<th>CFM (E)</th>
</tr>
</thead>
</table>

Sones: Interval ______  Continuous ______

Maximum allowed: Interval timer 1.5 sones  Continuous 1 sone

Fan Location: ____________________________

**c) Principal Fan Duct Size:** Use actual fan cfm in Box E above and Table 9.32.3.9 for Duct.

Fan Duct size: _______ inches.  Duct type: Smooth Flex

### 2. Required Kitchen and Bathroom Exhaust Fans:

<table>
<thead>
<tr>
<th>Room</th>
<th>Fan Make &amp; Model</th>
<th>Fan CFM</th>
<th>Duct Diameter (in)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Code Req'd Min.</td>
<td>actual Fan CFM</td>
<td>Smooth  Flex</td>
</tr>
<tr>
<td></td>
<td>@ 2 W/C per Tab.9.32.3.3B</td>
<td>per Manuf. Rating</td>
<td></td>
</tr>
</tbody>
</table>

* For fan capacities exceeding Table 9.32.3.9, follow manufacturer’s installation instructions or use good engineering practice to size duct. See Ventilation Guidelines Appendix page 24-A.
3. NAFFVA (Naturally Aspirated Fuel Fired Vented Appliance) and/or Radon Gas present in dwelling unit?
   ☐ Yes, Proceed to Step 4 & 5
   ☐ No, Omit Steps 4 to 7.

4. Active Make-Up Air Duct for Principal Fan: Per Sec 9.32.3.8. (2) (b) (ii & iii) Install a 4"Ø outdoor air duct into the furnace return air plenum not more than 15ft (unless a flow control device is used) or less than 10ft from the furnace cabinet. In locations with winter design temperature less than −10°C, this duct must have a motorized damper interconnected with principal ventilation air fan. **Interconnect in place:** Prinicipal Fan & Furnace Blower ☐ Yes & Damper (if present) ☐ Yes

   Damper make _______ Voltage _______

5. Exhaust Appliance present which exceeds Box B 0.5 ACH:
   ☐ Yes, Proceed to Step 6.
   ☐ No such appliance. Omit Steps 6 to 7.

6. Use Passive Make-up Air for Exhaust Appliance with actual installed exhaust rate of 126 cfm or less:

   Appliance Cfm _______ Passive Make-up Air Duct Sized to Table 9.32.3.8: _______inches

7. Use Active Make-up Air for Exhaust Appliance with actual installed exhaust rate of more than 126 cfm.

   Make-up Air Fan required:
   *Exhaust Appliance Cfm _______
   *Fan Cfm _______
   Fan Make ___________ Model ___________
   Duct diameter _______ inches
   Fan Location ___________, Fan ducted to ___________

   a) Active Make-up Air delivered to an Unoccupied Area (not directly to room containing the appliance).
      i) Tempering Required per 9.32.4.1.(4)(a):
      Show calculation & describe how make-up air will be tempered to at least 34°F (1°C) before entering unoccupied area.

      ii) Transfer Grill Required: Size to Table 9.32.3.8 (or 1 sq in of gross area per 2 cfm).
      Transfer grill size _______ sq. in.
      Location ___________

      iii) Additional Tempering Required per 9.32.4.1.(4)(b) before transfer to occupied area: Show calculation and describe how make-up air will be further tempered to at least 54°F (12°C).

   OR b) Active Make-up Air delivered to an Occupied Area: Tempering Required. Show calculation and describe how make-up air will be tempered to at least 54°F (12°C).

Installer Certification:

I hereby certify that the design and installation of the ventilation system complies with the 2006 B.C. Building Code.

Print Name ___________________________ 2006 TECA Ventilation Certification Stamp

Signature ___________________________

Company ___________________________

Phone ___________________________
Mechanical Ventilation Checklist C—Distributed or Non-Distributed

Use this checklist when a centrally ducted exhaust ventilation systems such as an HRV (heat recovery ventilator) or a CEV (central exhaust ventilator) is used to meet principal fan requirements.

<table>
<thead>
<tr>
<th>Permit No.</th>
<th>Permit No.</th>
</tr>
</thead>
</table>

**Number of Bedrooms**

- A bedroom is a room with an operable window (minimum dimensions apply), a closet and a closing interior door.

**Total Interior Volume of Dwelling**

- Total volume includes heated interior joist spaces and heated crawl spaces.

**.5 ACH (air changes/hr) = Volume x 0.5 ÷ 60 = cfm**

1. Use the bedroom count from Box (A) above and Table 9.32.3.3.A. to determine the minimum Principal Exhaust Rate provided by the system.

   Minimum Required Rate: 

2. HRV or CEV Equipment: Make ___________________________ Model ___________________________

3A. HRV Capacity: CFM @ .4" W.C.  Box D must meet Box C Minimum Requirement. 

3B. CEV Capacity: CFM @ .4" W.C.  Box E must meet Box C Minimum Requirement. 

   a) The fan must be controlled either with an interval timer or run continuously:

   - [ ] Continuous Operation
   - [ ] Intermittent Operation

   b) The Principal Fan Rate may be set lower than its full Box E Capacity if installation is in a NAFFVA home where the principal fan cfm rate must not exceed 110 cfm per 9.32.3.3.(2). If this applies, indicate fan cfm setting in Box F.

   Box F must meet Box C Minimum Requirement.

4. Required Kitchen and Bathroom Exhaust:

<table>
<thead>
<tr>
<th>ROOM</th>
<th>EXHAUST RATE Required per Table 9.32.3.3.B</th>
<th>EXHAUST EQUIPMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Additional WALL/CEILING FANS</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Make &amp; Model</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Manf. Rated</td>
</tr>
</tbody>
</table>

* Use Table 9.32.3.9. For fan capacities exceeding Table 9.32.3.9, follow manufacturer's installation instructions or use good engineering practice to size duct. See Ventilation Guidelines Appendix pg 24-A.

Checklist C1
5. NAFFVA (Naturally Aspirated Fuel Fired Vented Appliance) and/or Radon Gas present in dwelling unit?

☐ Yes, Proceed to Step 6 if CEV or Step 7 if HRV.  ☐ No, Omit Steps 6 to 9.

6. CEV only—Make-Up Air Duct for Principal Fan: Choose (a) or (b) and proceed to Step 7.

☐ a) Non-Distributed system—Passive make-up air duct: Use Box E or F installed cfm and Table 9.32.3.8.

Make-up air duct diameter ______ inches. Location ________________________________

☐ b) Distributed system—Active Make-Up Air Duct for Principal Fan: Per Sec 9.32.3.8. (2) (b) (ii & iii)
Install a 4"Ø outdoor air duct into the furnace return air plenum not more than 15ft (unless a flow control device is used) or less than 10ft from the furnace cabinet. In locations with winter design temperature less than -10°C, this duct must have a motorized damper interconnected with principal ventilation air fan.

Interconnect in place: Principal Fan & Furnace Blower ☐ Yes & Damper (if present) ☐ Yes

7. Exhaust Appliance present which exceeds Box B —0.5 ACH:

☐ Yes, Proceed to Step 8.  ☐ No such appliance. Omit Steps 8 to 9.

8. Use Passive Make-up Air for Exhaust Appliance with actual installed exhaust rate of 126 cfm or less:

Appliance Cfm ______ Passive Make-up Air Duct Sized to Table 9.32.3.8: ______ inches

9. Use Active Make-up Air for Exhaust Appliance with actual installed exhaust rate of more than 126 cfm.

Make-up Air Fan required:

Fan Make __________________ Model __________________ *Exhaust Appliance Cfm ________ Fan Cfm ________

Duct diameter ______ inches *must equal actual installed exhaust rate of appliance.

Fan Location __________________ Fan ducted to ________________________________

a) Active Make-up Air delivered to an Unoccupied Area (not directly to room containing the appliance).

i) Tempering Required per 9.32.4.1.(4)(a):
Show calculation & describe how make-up air will be tempered to at least 34°F (1°C) before entering unoccupied area.

ii) Transfer Grill Required: Size to Table 9.32.3.8 (or 1 sq in of gross area per 2 cfm):
Transfer grill size ______ sq. in. Location ________________________________

iii) Additional Tempering Required per 9.32.4.1.(4)(b) before transfer to occupied area: Show calculation and describe how make-up air will be further tempered to at least 54°F (12°C).

OR b) Active Make-up Air delivered to an Occupied Area: Tempering Required. Show calculation and describe how make-up air will be tempered to at least 54°F (12°C).

Installer Certification:

Date ______________

I hereby certify that the design and installation of the ventilation system complies with the 2006 B.C. Building Code.

Print Name ____________________________ 2006 TECA Ventilation Certification Stamp

Signature ______________________________

Company ______________________________

Phone ________________________________

Checklist C2
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