Ventilation Checklist 1—Forced Air Systems

Use this Checklist where forced air heating system ducts intake and distribute ventilation air.

<table>
<thead>
<tr>
<th>Civic Address</th>
<th>Permit No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Climate Zone:</td>
<td>Number of Bedrooms (A)</td>
</tr>
<tr>
<td></td>
<td>ft² (B) Total Floor area of conditioned space</td>
</tr>
<tr>
<td></td>
<td>ft³ (C) Total Interior Volume of Dwelling</td>
</tr>
<tr>
<td></td>
<td>cfm (D) .5 ACH (air changes/hr) = Volume x 0.5 / 60 =</td>
</tr>
<tr>
<td></td>
<td>Exhaust appliances exceeding .5 ACH may require make-up air.</td>
</tr>
</tbody>
</table>

1. Principal Ventilation System Exhaust Fan Minimum Air-flow Rate
   Use the bedroom count from Box (A) and Total square footage from Box (B) above and Table 9.32.3.5 to determine
   Minimum Required Principal Exhaust System Capacity cfm (D)

2. Principal System Fan Choice
   a) Exhaust Fan continuous running Make __________ Model __________ Sone Rating __________
   Location: ____________________________
   Capacity at 0.2 ESP cfm (E) Must be ≥ than Box (D)
   If CEV, capacity @0.4ESP

3. Fan Duct Size and Equivalent Length
   Use actual fan cfm in Box(E) above and Table 9.32.3.8 (3) [See note at bottom of page for larger fan duct sizing].
   a) Length of duct ______ ft + Exterior hood 30 ft + number of 90° elbows ______ x 10 ft = ______ Equivalent Length
      Maximum Equivalent Length allowed in Table 9.32.3.8(3) = ______
   b) Fan Duct size: ______ inches Ø Duct type: ______ Rigid ______ Flex

4. Required Kitchen and Bathroom Exhaust Fans: Re-list below if Principal Exhaust Fan meets all or part of Kitchen/Bathroom spot Exhaust requirements.

<table>
<thead>
<tr>
<th>Room</th>
<th>Required Exhaust Rate Table 9.32.3.6</th>
<th>Exhaust Equipment</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Spot Exhaust Kitchen &amp; Bath Wall/Ceiling Fans</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Ex-Fan/CEV</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fan Make &amp; Model CFM @ 0.2 ESP (Maf Rated)</td>
<td>Duct Diameter (in) *Duct Sizing per Table 9.32.3.8(3)</td>
</tr>
<tr>
<td></td>
<td>rigid</td>
<td>flex</td>
</tr>
</tbody>
</table>

* For fan capacities exceeding 175 cfm in Table 9.32.3.8(3), follow manufacturer’s installation instructions or use good engineering practice to size duct.

See Ventilation Guidelines Appendix page 16-A

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5. Fresh Air must be ducted from outside to Return Air of furnace for distribution.
   a) Duct length from this connection to furnace cabinet must be 15 ft maximum and 10 ft minimum
      unless a flow control device is used. Duct length confirmed at _____ feet.
   b) Duct Size for Fresh Air intake to RA:
      4" Ø minimum for Rigid Duct. Must be insulated & vapour barriered for full length. ___ confirmed.
      5"Ø minimum for insulated, vapour barriered Flex Duct ___ confirmed.

6. Forced Air Furnace system ducted to supply air to every bedroom and any level without a
   bedroom___ confirmed.

7. If Heated Crawlspace present, state method of ventilating

MAKE-UP AIR Requirements

1. NAFFVA (Naturally Aspirated Fuel Fired Vented Appliance) or radon present in dwelling unit? Sentence 9.32.4.1
   ☐ Yes, Proceed to Step 2
   ☐ No, Omit Steps 2 & 3

2. Exhaust Appliance present which exceeds Box C 0.5 ACH:
   ☐ Yes, Proceed to Step 3  ☐ Yes, Commit to
   ☐ No such appliance. Omit Step 3

Depressurization Test (See CAUTION, TECA Vent Manual pg 24)

3. Use Active Make-up Air for Exhaust Appliance.
   Make-up Air Fan required: Exhaust Appliance Actual Installed Cfm ______
   Fan Make ______________ Model __________________ Make-up Air Fan Cfm ______
   Duct diameter _______ inches
   Fan Location __________ Fan ducted to

   a) Active Make-up Air delivered to an Unoccupied Area first (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 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 2012 B.C. Building Code, 2014
Section 9.32 Amendment.

Date ________________________________

Print Name ___________________________

Signature ___________________________

Company ____________________________

Phone _______________________________

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