

# 4 Ventilation Checklist 4—Exhaust Fan & Passive Inlets SENTENCE 9.32.3.4(6)

Use this checklist for small ( $\leq 1800$  sqft), single level, non-forced air heated dwellings located in coastal climate areas where winter design temperature is warmer than  $-13^{\circ}\text{F}$ .

Civic Address _____		Permit No. _____	
Climate Zone: ____	Number of Bedrooms	<input type="text"/>	(A) A bedroom is a room with an openable window (minimum dimensions apply), a closet and a closing interior door.
Total Floor area of conditioned space		<input type="text"/> ft <sup>2</sup>	(B)
Total Interior Volume of Dwelling		<input type="text"/> ft <sup>3</sup>	Total volume includes all heated interior spaces
.5 ACH (air changes/hr) = Volume x 0.5 ÷ 60 =		<input type="text"/> cfm	(C) Exhaust appliances exceeding .5 ACH may require make-up air.

### 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  $\geq$  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 30ft + 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: \_\_\_ Smooth \_\_\_ 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.

ROOM	REQUIRED EXHAUST RATE Table 9.32.3.6	EXHAUST EQUIPMENT						Principal System CFM
		Spot Exhaust Kitchen & Bath WALL/CEILING FANS					Ex.Fan/CEV	
		Fan Make & Model	CFM @ 0.2 ESP Manf. Rated	*Duct Sizing per Table 9.32.3.8.(3)		Max. Equiv. Length per table	Installed Equiv. Length	
rigid	flex							

\* For fan capacities **exceeding** 175cfm 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

TOTAL (must = Box E)	
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**5. Required Inlets for passive Ventilation Air Supply**

a) Location: High wall (minimum 6 ft above floor) \_\_\_\_\_

List all rooms with inlets: Required in each bedroom, and at least one common area

b) Inlet Size: Free Area must be greater than or equal to 4 Sq In

**6. 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:**

Date \_\_\_\_\_

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.

**2014 TECA Ventilation Certification Stamp**

Print Name \_\_\_\_\_

Signature \_\_\_\_\_

Company \_\_\_\_\_

Phone \_\_\_\_\_

