3 Ventilation Checklist 3—Distributed CRV Systems SENTENCE 9.32.3.4(5)

Use this Checklist when a ducted Central Recirculating Ventilator (CRV) is used to meet the fresh air intake and distribution requirements and a Principal Exhaust fan meets the exhaust requirements.

Civic Address_____ Permit No._____

Climate Zone: ____   Number of Bedrooms [   ] (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 [   ] ft² (B)

Total Interior Volume of Dwelling [   ] ft³   Total volume includes all heated interior spaces

.5 ACH (air changes/hr) = Volume x 0.5 ÷ 60 = [   ] 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 Prinicpal Exhaust System Capacity [   ] cfm (D)

2. Principal System Fan Choice

a) **Exhaust Fan continuous running** Make_____Model_____ Sone Rating ____

Location: _____
Must be ≥ than Box (D)

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

* 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) [   ]

5. CRV Recirculation and Fresh Air Intake Fan

Make_____ Model_____

Capacity @
0.4 ESP [_____] cfm (F)

Box F CFM: minimum 2 times Box D cfm for +5°F and warmer winter design temperature. Confirmed ☐
minimum 3 times Box D for less than +5°F winter design temperature. Confirmed ☐

Duct Size for Fresh Air intake into return air of CRV: Min 4"Ø rigid duct___, or 5", flex duct_____.

6. CRV Fresh Air circulation (Choose option a or b)

a) Draw air from bedrooms and Supply air to common area.

List location of supply grille _____ and location of each bedroom return grille

_____

b) Draw air from common area and Supply air to bedrooms.

List location of return grille _____ and location of each bedroom supply grille

_____

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: 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 _____

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