

# 3 Ventilation Checklist 3: CRV Systems

SENTENCE 9.32.3.4(5)

Use this Checklist when a **ducted CRV** (central recirculating ventilator) 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 living space _____		ft <sup>2</sup> (B)	
Total interior Volume of dwelling _____		ft <sup>3</sup>	Total volume includes all heated interior spaces (including crawlspace if heated).
0.5 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 airflow rate

Use bedroom count from box (A) & total square footage from box (B), & Table 9.32.3.5. to determine:

**Minimum required principal exhaust system capacity:** \_\_\_\_\_ cfm (D)

## 2. Principal exhaust fan selection:

**Continuous Exhaust fan:** Make: \_\_\_\_\_ Model: \_\_\_\_\_ Sone Rating: \_\_\_\_\_

Location: \_\_\_\_\_ Capacity @ 0.2 ESP: \_\_\_\_\_ cfm (E)  
 If CEV, capacity @ 0.4 ESP \_\_\_\_\_ Must be ≥ box (D)

## 3. Fan duct size and equivalent length:

Length of duct \_\_\_\_\_ ft. Using: eL (F) & volume (E), determine duct size \_\_\_\_\_ in. Ø  
 according to table 9.32.3.8 (3)

Hood termination + 30 ft.  
 \_\_\_\_\_ Elbows x 10 ft. each \_\_\_\_\_ ft. → Total equivalent length (eL) \_\_\_\_\_ ft. (F)

FLEX  RIGID

## 4. CRV fresh air intake & mixing fan minimum airflow rate and selection:

Winter Design Temperature: \_\_\_\_\_ °F Minimum Capacity:  if ≥ 5°F (Box E x 2), or  
 (select one)  if < 5°F (Box E x 3) \_\_\_\_\_ cfm

Make: \_\_\_\_\_ Model: \_\_\_\_\_ Sone Rating: \_\_\_\_\_

Location: \_\_\_\_\_ Capacity @ 0.4 ESP: \_\_\_\_\_ cfm (G)

OA intake duct to RA: Insulate & vapour barrier entire length, OA Pipe Size: 4"Ø rigid:  5"Ø flex:

## 5. CRV fresh air circulation (choose one)

Draw air from bedrooms & supply to common areas  Draw from common areas & supply air to bedrooms

## 6. If heated crawlspace present, (choose one)

Minimum of one RA grille in crawlspace  No RA grille in crawlspace: Option 1,2, or 3, BCBC 9.32.3.7(2)

## 7. Make-Up Air Requirements: Naturally Aspirated Fuel Fired Vented Appliance (NAFFVA) present? (9.32.4.1)

No, Omit Step 8  Yes, Proceed to Step 8

## 8. Exhaust appliance present which exceeds Box C 0.5 ACH:

No  Yes, Complete "Large Exhaust Make-up Air Checklist"

