

Ventilation Checklist: Kitchen Reno only

Use page 2 only if conditions on page 2 are met.

Civic Address _____ Permit No. _____

Total Floor area of living space (B)

Total Interior Volume of Dwelling ft²

.5 ACH (air changes/hr) = Volume x 0.5 ÷ 60 = ft³ (C)

Total volume includes all heated interior spaces (including crawlspace if heated).

Exhaust appliances exceeding .5 ACH may require make-up air.

ROOM	REQUIRED EXHAUST RATE Table 9.32.3.6	EXHAUST EQUIPMENT				
		Spot Exhaust Kitchen WALL/CEILING FANS				
		Fan Make & Model	CFM @ 0.2 ESP Manf. Rated	*Duct Sizing per Table 9.32.3.8.(3)		Max. Equiv. Length per table
rigid	flex					
Kitchen	100		†			

† **60% Rule** per TECA Ventilation Committee, *TECA Ventilation Guidelines, 7th Edition*, page 22
 Where no manufacturer's rating (fan curve or performance table) is available for the kitchen exhaust appliance, assume that as stated in 9.32.4.1.(1), it "discharges air to the exterior at an installed rate" of 60% of the free air or claimed rating. For example, a kitchen range hood fan advertised as 1000 cfm would exhaust only approximately 600 cfm when properly installed.

MAKE-UP AIR Requirements

- 1. NAFFVA (Naturally Aspirated Fuel Fired Vented Appliance) present in dwelling unit?** (per Sentence 9.32.4.1)
 No, Omit Steps 2 & 3
 Yes, Proceed to Step 2
- 2. Exhaust Appliance present which exceeds Box C 0.5 ACH:**
 No such appliance. Omit Step 3
 Yes, Commit to Depressurization Test (See CAUTION, TECA Vent Manual pg 24) **See page 2**
 Yes, Proceed to Step 3

3. Use Active Make-up Air for Exhaust Appliance.

Make-up Air Fan required: Fan Make _____ Model _____

Exhaust Appliance Actual Installed Cfm _____

Make-up Air Fan Cfm _____

Duct diameter _____ inches Fan Location _____

Fan interconnected with exhaust appliance fan. Fan ducted to _____

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

Make-up Fan _____ cfm x 1.08 x (54° F - _____ °F winter design temp your location) = _____ (kw)
 3412 BTUH/kw Duct Heater

Installer Certification: (Not required if also submitting Page 2)

I hereby certify that the design and installation of the ventilation system complies with the 2018 B.C. Building Code, 2014 Section 9.32 Amendment.

2012 TECA Ventilation Certification Stamp

Date _____

Print Name _____

Signature _____

Company _____

Phone _____



Use this page only if:

- a) the dwelling unit incorporates NAFFVA as defined in Table A-9.32.4.1.(1) –A or –B, and
- b) the authority having jurisdiction has agreed in advance to the acceptability of this alternative method (equivalency) as proof that chimney safety to 9.32.4.1 is maintained.

Rational of Requirement: The safe operation of NAFFVA equipment depends on the thermal buoyancy of its vent products. That safety may be upset by the operation of a powerful (high cfm) kitchen exhaust fan when installed in a small and/or tightly built dwelling unit. This depressurization test will determine if the safe threshold of –5 Pa (–0.02” WC) is exceeded with the fan running.

Date of Test _____

Time of Test _____

Address of Dwelling Unit _____

TEST

1. Close ALL exterior doors, windows, hatches, fire-places. Open all combustion and make-up air ducts.
2. Zero the manometer.
3. Measure pressure with all exhaust equipment off: In WC **Box A**
4. Measure Pressure with large exhaust appliance on: In WC **Box B**
5. Measure pressure with all exhaust equipment off: In WC **Box C**
6. Net pressure with all exhaust equipment off
= $\frac{\text{Box A} + \text{Box C}}{2}$ = In WC **Box D**
7. Net pressure with large exhaust appliance on
= Box B – Box D In WC **Box E**
8. Check one option:
 - Box E is less than .02 In WC (5Pa). Make-up air for large exhaust appliance being tested is not required.
 - Box E is greater than .02 In WC (5Pa). Install a make-up air fan for full installed exhaust capacity (cfm) of large exhaust appliance being tested. See the Ventilation Checklist for this job.

Test Protocol

- Depressurization Test for Large Exhaust Fans from the *TECA Ventilation Guidelines Manual*. This test must be carried out exactly as outline in Steps 1 through 5 below. The repeated measurements in Steps 3 to 5 are required for accuracy when measuring very low pressures with a manometer.
- Use of the test must be acceptable to the Authority Having Jurisdiction. An Alternative Solution Fee may be charged.
- Renovator of dwelling unit accepts risk of retrofitting a Make-up Air System if the dwelling fails this test.

Installer/Tester Certification

I hereby certify that this Depressurization Test for Large Exhaust Appliance was performed to TECA's Ventilation Guidelines and the results are correctly recorded here.

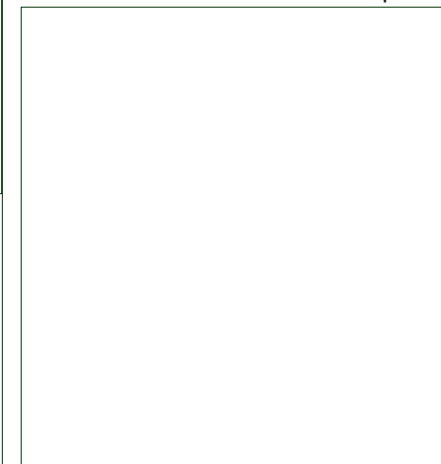
PRINT Name _____

Company _____

Phone _____

Signature _____

2012 TECA Certification Stamp



Note:
2012 TECA stamps may expire at next Code Change.



website: teca.ca
email: office@teca.ca