Project Name:	Enforcement Agency:	Permit Number:
Dwelling Address:	City	Zip Code

Title 24, Part 6, Section 150.0(o) **Ventilation for Indoor Air Quality.** All dwelling units shall meet the requirements of ANSI/ASHRAE Standard62.2. Ventilation and Acceptable Indoor Air Quality in Low-Rise Residential Buildings. ***Equation and table numbering on this form corresponds to the numbering for that information in the published ANSI/ASHRAE Standard 62.2-2010.***

A. General Information		
1	Type of Construction	
2	Whole-Building Ventilation Rate Calculation Method.	
3	Conditioned floor area of dwelling unit	
4	Number of bedrooms in home	

<<The following sections B and C only show up if "Fan Ventilation Rate Method (4.1.1) - Intermittent" is selected in Row A.2>>

B. Whole-Building Continuous Ventilation - Fan Ventilation Rate Method - A mechanical supply system, exhaust system, or combination thereof shall provide whole-building ventilation with outdoor air each hour at no less than the rate in equation 4.1a.		
1	Continuous Whole-Building Ventilation Rate (Q_{fan})	

C. Intermittent Ventilation: The effective ventilation rate of an **intermittent** system is the combination of its delivered capacity, its fractional on-time, cycle time, and the ventilation effectiveness from Table 4.2. <<This section is only printed if an intermittent strategy is chosen in row 1>>		
1	In a single on off cycle, what is the ON time in hours?	
2	In a single on off cycle, what is the OFF time in hours?	
3	System must operate at least once every 24 hours. (Row 6 + Row 7 must be less than or equal to 24 hours)	
4	Daily fractional on time (*f* used in Table 4.2).	
5	System must operate at least 10% of the time.	
6	Turnover (N used in Table 4.2)	
7	Ventilation effectiveness (e, from Table 4.2)	
8	Intermittent ventilation rate	

The whole-building ventilation rate and all user-entered data used to calculate it are to be field verified by a HERS Rater.

The Whole-Building Ventilation system has the following features: <<user will select all that apply. Only selected items will show up on final certificate.>>
☐ Whole-Building Ventilation fan(s) only push air into house (supply ventilation)
☐ Whole-Building Ventilation fan(s) only pull air out of house (exhaust ventilation)
☐ Ventilation fan(s) both push air into and pull air out of house (combination ventilation). Note: Only the greater of either supply or return airflow can be counted toward meeting the minimum ventilation air rate. The two cannot be added together.
☐ Whole-Building Ventilation System utilizes a central fan integrated (CFI) strategy
☐ Continuous local ventilation fans are used to supply some or all of the whole-building ventilation. <<can only be selected for continuous whole building ventilation (row 1).>>

LOCAL MECHANICAL EXHAUST SYSTEM
Local mechanical exhaust fans shall be installed in each kitchen and bathroom. The minimum airflow rates shall be at least the amount indicated in tables 5.1 and 5.2.

Table 5.1 **Intermittent Local Ventilation Exhaust Airflow Rates**			**Table 5.2** **Continuous Local Ventilation Exhaust Airflow Rates**		
Application	Airflow	Notes	Application	Airflow	Notes
Kitchen	100 cfm		Kitchen	5 ACH	
Bathroom	50 cfm		Bathroom	20 cfm	

LOCAL MECHANICAL EXHAUST SYSTEM DESIGN – Fan selection and duct design criteria for compliance

Delivered local ventilation rates: The airflow rates required in Tables 5.1 and 5.2 refer to the delivered airflow of the system.

☐ *All local ventilation rates have been measured using a flow hood, flow grid, or other airflow measuring device and meet the requirements of Tables 5.1 or 5.2. OR*

☐ *The airflow rating at a pressure of 0.25 in. w.c. of a certified fan is assumed because the local ventilation system duct sizing meets the prescriptive requirements of Table 5.3, or manufacturer's design criteria.* **Table 7.1 Prescriptive Duct Sizing Requirements**

Diameter, (in)	Flex Duct				Smooth Duct			
Fan Rating cfm @ 0.25 in. w.g.	50	80	100	125	50	80	100	125
	Maximum Allowable Duct Length (ft)							
Diameter, (in)	Flex Duct				Smooth Duct			
3	X	X	X	X	5	X	X	X
4	70	3	X	X	105	35	5	X
5	NL	70	35	20	NL	135	85	55
6	NL	NL	125	95	NL	NL	NL	145
7 and above	NL	NL	NL	NL	NL	NL	NL	NL

This table assumes no elbows. Deduct 15 ft of allowable duct length for each turn, elbow, or fitting. Interpolation and extrapolation in Table 7.1 is not allowed. For airflow values not listed, use the next higher value. This table is not applicable for airflow > 125 cfm.
NL = no limit on duct length of this size.
X = not allowed, any length of duct of this size with assumed turns, elbows, fittings will exceed the rated pressure drop.

OTHER REQUIREMENTS

The items listed below (6.1 through 6.8) correspond to the information given in ASHRAE 62.2 Section 6 "Other Requirements". Refer also to Chapter 4.6 of the Residential Compliance Manual (Section 4.6.5) for information describing these "Other Requirements". The signature of the Responsible Person in the declaration statement below certifies that the building complies with these requirements specified in ASHRAE 62.2 Section 6.1 through 6.8 if applicable.

☐ 6.1 Transfer Air <<add brief description>>

☐ 6.2 Instructions and Labeling <<add brief description>>

☐ 6.3 Cloths Dryers <<add brief description>>

☐ 6.4 Combustion and solid-fuel burning appliances <<add brief description>>

☐ 6.5 Garages <<add brief description>>

☐ 6.6 Ventilation Opening Area <<add brief description>>

☐ 6.7 Minimum filtration <<add brief description>>

☐ 6.8 Air Inlets <<add brief description>>

☐ 6.7 Carbon Monoxide Detectors <<add brief description>>

AIR-MOVING EQUIPMENT

The items listed below (7.1 through 7.3) correspond to the information given in ASHRAE 62.2 Section 7 "Air-Moving Equipment". Refer also to Chapter 4.6 of the Residential Compliance Manual (Section 4.6.5) for information describing these requirements in more detail. The signature of the Responsible Person in the declaration statement below certifies that the building complies with these requirements specified in ASHRAE 62.2 Section 7.1 through 7.3 if applicable.

☐ 7.1 **Selection and Installation.** Ventilation devices and equipment shall be tested and listed in accordance with specific standards. Installations of systems or equipment shall be carried out in accordance with manufacturers' design requirements and installation instructions.

☐ 7.2 **Sound Ratings for Fans.** Ventilation fans shall be rated for sound at no less than the minimum airflow rate required by this standard, as noted below. These sound ratings shall be at a minimum of 0.1 in. w.c. (25 Pa) static pressure.

- ☐ **7.2.1 Whole-Building or Continuous Ventilation Fans.** These fans shall be rated for sound at a maximum of 1.0 sone.
- ☐ **7.2.2 Intermittent Local Exhaust Fans.** Fans used to comply with Section 5.2 shall be rated for sound at a maximum of 3 sone, unless their maximum rated airflow exceeds 400 cfm (200 L/s). (Some exceptions may apply.)

☐ 7.3 **Multibranch Exhaust Ducting.** If more than one of the exhaust fans in a dwelling unit shares a common exhaust duct, each fan shall be equipped with a back-draft damper to prevent the recirculation of exhaust air from one room to another through the exhaust ducting system.

MULTIFAMILY BUILDINGS - Other Requirements <<only print this section if multi-family is selected in row X>>

The items listed below correspond to the information given in ASHRAE 62.2 Section 8 "Multifamily Buildings". Refer also to Chapter 4.6 of the Residential Compliance Manual (Section 4.6.5) for information describing these requirements in more detail. The signature of the Responsible Person in the declaration statement below certifies that the building complies with these requirements specified in ASHRAE 62.2 Section 8, if applicable.

☐ **8.4.1 Transfer Air.** Measures shall be taken to minimize air movement across envelope components separating dwelling units, including sealing penetrations in the common walls, ceilings, and floors of each unit and by sealing vertical chases adjacent to the units. All doors between dwelling units and common hallways shall be gasketed or made substantially airtight.

- ☐ **8.4.1.1 Compliance.** One method of demonstrating compliance with Section 8.4.1 shall be to verify a leakage rate below a maximum of 0.2 cfm per ft^2 (100 L/s per 100 m^2) of the dwelling unit envelope area (i.e., the sum of the area of the walls between dwelling units, exterior walls, ceiling and floor) at a test pressure of 50 Pa by a blower door test. The test shall be conducted with the dwelling unit as if it were exposed to outdoor air on all sides, top, and bottom by opening doors and windows of adjacent dwelling units.

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT	
1. I certify that this Certificate of Installation documentation is accurate and complete.	
Name:	Signature:
Company:	Date:
Address:	CEA or CEPE or HERS Certification # If Applicable:
City/State/Zip:	Phone:

RESPONSIBLE PERSON'S DECLARATION STATEMENT

1. I certify under penalty of perjury, under the laws of the State of California, the information provided on this form is true and correct.
2. I am eligible under Division 3 of the Business and Professions Code to accept responsibility for construction, or an authorized representative of the person responsible for construction (responsible person).
3. I certify that the installed features, materials, components, or manufactured devices identified on this certificate (the installation) conforms to all applicable codes and regulations, and the installation is consistent with the plans and specifications approved by the enforcement agency.
4. I reviewed a copy of the Certificate of Compliance (CF1R) approved by the enforcement agency that identifies the specific requirements for the installation. I certify that the requirements detailed on the CF1R that apply to the installation have been met.
5. **I will ensure that a completed, signed copy of this Certificate of Installation shall be posted, or made available with the building permit(s) issued for the building, and made available to the enforcement agency for all applicable inspections. I understand that a signed copy of this Certificate of Installation is required to be included with the documentation the builder provides to the building owner at occupancy.**

Company Name: (Installing Subcontractor or General Contractor or Builder/Owner)		
Responsible Person's Name:		Responsible Person's Signature:
CSLB License:	Date Signed:	Position With Company (Title):

User Instructions – MCH-27c: