

DOCKETED

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CERTIFICATE OF INSTALLATION		CF2R-MCH-32-H
Local Mechanical Exhaust		(Page 1 of 3)
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 Standard 62.2. 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. Local Mechanical Exhaust - General Information

01	Dwelling Unit Name	
02	Building Type	
03	Total Kitchen Floor Area	
04	Kitchen Average Ceiling Height	
05	Kitchen Total Conditioned Volume	
06	Kitchen Type	

B. Local Mechanical Exhaust System – Fan Selection and Duct Design Criteria for Compliance

Local mechanical exhaust fans shall be installed in each kitchen and bathroom. *Delivered local ventilation rates:*

- All local ventilation rates have been measured using a flow hood, flow grid, or other airflow measuring device and meet the requirements of 62.2 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 62.2 Table 5.3, or manufacturer's design criteria.

Table 5.1

Intermittent Local Ventilation Exhaust Airflow Rates

Application	Airflow	Notes
Kitchen	100 cfm	Vented range hood (including appliance-range hood combinations)
	300 cfm or 5 ACH capacity	Other kitchen exhaust fans, including downdraft
Bathroom	50 cfm	

Table 5.2

Continuous Local Ventilation Exhaust Airflow Rates

Application	Airflow	Notes
Kitchen	5 ACH	Based on kitchen volume
Bathroom	20 cfm	

Table 5.3

Prescriptive Duct Sizing Requirements

Duct Type	Flex Duct				Smooth Duct			
	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 62.2 Table 5.3 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.



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C. Kitchen Exhaust System

01	Manufacturer Name	
02	System Type	
03	HVI Directory Listed Model Number	
04	HVI Directory Listed Rated Airflow	
05	HVI Directory Listed Sound Rating	
06	Minimum Airflow (if different than rated airflow)	
07	Operation Schedule	
08	Required Minimum Ventilation Rate	
09	Maximum Sound Rating	
10	Compliance Statement	

D. Other Requirements

The items listed below correspond to the information given in ASHRAE 62.2. Refer also to Chapter 4.6 of the Residential Compliance Manual 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 if applicable.

01	Demand control exhaust systems shall be provided with at least one of the following: 1. A readily accessible occupant-controlled on-off control. 2. An automatic control that does not impede occupant on control.
02	Permitted automatic control devices include, but are not limited to: humidity sensors, shut-off timers, occupancy sensors, multiple speed fans, combined switching, IAQ sensors, etc.
03	Each continuous mechanical exhaust system shall be provided with a readily accessible manual on-off control. (Multifamily dwellings are exempt from readily accessible requirement.)
04	Continuous mechanical exhaust systems shall be designed to operate during all occupiable hours.
05	Exhaust fans in separate dwelling units shall not share a common exhaust duct. Exhaust inlets from more than one dwelling unit may be served by a single exhaust fan downstream of all the exhaust inlets if the fan is designated and intended to run continuously or if each inlet is equipped with a back-draft damper to prevent cross-contamination when the fan is not running.

The responsible person's signature on this compliance document affirms that all applicable requirements in this table have been met.



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DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

1. I certify that this Certificate of Installation documentation is accurate and complete.

Documentation Author Name:	Documentation Author Signature:
Documentation Author Company Name:	Date Signed:
Address:	CEA/HERS Certification Identification (if applicable):
City/State/Zip:	Phone:

RESPONSIBLE PERSON'S DECLARATION STATEMENT

I certify the following under penalty of perjury, under the laws of the State of California:

- The information provided on this Certificate of Installation is true and correct.
- I am either: a) a responsible person eligible under Division 3 of the Business and Professions Code in the applicable classification to accept responsibility for the system design, construction, or installation of features, materials, components, or manufactured devices for the scope of work identified on this Certificate of Installation and attest to the declarations in this statement, or b) I am an authorized representative of the responsible person and attest to the declarations in this statement on the responsible person's behalf.
- The constructed or installed features, materials, components or manufactured devices (the installation) identified on this Certificate of Installation conforms to all applicable codes and regulations and the installation conforms to the requirements given on the Certificate of Compliance, plans, and specifications approved by the enforcement agency.
- I understand that a HERS rater will check the installation to verify compliance and if such checking determines the installation fails to comply, I am required to offer any necessary corrective action at no charge to the building owner.
- I will ensure that a registered 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 registered copy of this Certificate of Installation is required to be included with the documentation the builder provides to the building owner at occupancy.

Responsible Builder/Installer Name:	Responsible Builder/Installer Signature:	
Company Name: (Installing Subcontractor or General Contractor or Builder/Owner)	Position With Company (Title):	
Address:	CSLB License:	
City/State/Zip:	Phone:	Date Signed:
Third Party Quality Control Program (TPQCP) Status:	Name of TPQCP (if applicable):	

CF2R-MCH-32-H User Instructions**Section A. Local Mechanical Exhaust - General Information**

1. Dwelling Unit Name: This field is filled out automatically and referenced from the MCH-01
2. Building Type: This field is filled out automatically and referenced from the CF1R.
3. Project Scope: This field is filled out automatically and referenced from the CF1R.
4. Total Kitchen Floor Area: Enter the total floor area for an enclosed kitchen or N/A for a non-enclosed kitchen.
5. Kitchen Average Ceiling Height: Enter the kitchen ceiling height for an enclosed kitchen or N/A for a non-enclosed kitchen.
6. Kitchen Total Conditioned Volume: This field is filled out automatically and calculated based on the kitchen area and ceiling height.
7. Kitchen Type: Enter the type of kitchen (enclosed or non-enclosed).

Section C. Kitchen Exhaust System

1. Manufacturer Name: Enter manufacturer name for the kitchen exhaust system.
2. System Type: Select the type of kitchen exhaust system. Options are vented range hood, downdraft, and other.
3. HVI Directory Listed Model Number: Enter the kitchen exhaust system model number matching the installed equipment and HVI directory.
4. HVI Directory Listed Rated Airflow: Enter the rated airflow listed in the HVI directory for the above model number.
5. HVI Directory Listed Sound Rating: Enter the sound rating listed in the HVI directory for the above model number.
6. Minimum Airflow (if different than rated airflow): Defaults to rated airflow from HVI directory, but editable if exhaust system minimum airflow rate is different than HVI listed value.
7. Operation Schedule: Select the kitchen exhaust system operation schedule. Options are demand control and continuous.
8. Required Minimum Ventilation Rate: This field is filled out automatically and is calculated based on the system operation schedule and type, and kitchen type.
9. Maximum Sound Rating: This field is filled out automatically and is calculated based the system operation schedule.
10. Compliance Statement: This field is filled out automatically based on the installed system HVI listed airflow rate and the minimum required ventilation rate.

Section D. Other Requirements

1. This field must be a true statement (or not applicable) for the system to comply.
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