INDOOR AIR QUALITY AND MECHANICAL VENTILATION

CALIFORNIA ENERGY COMMISSION

CEC-NRCV-MCH-27

SAMPLE FORM – NOT VALID FOR SUBMISSION TO BUILDING DEPARTMENTS

CERTIFICATE OF VERIFICATION

Note: This table completed by HERS Registry.

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

Title 24, Part 6, Section 160.2(b)2 **Ventilation and Indoor Air Quality for Attached Dwelling Units.** All dwelling units shall meet the requirements of ANSI/ASHRAE Standard 62.2-2019 Ventilation and Acceptable Indoor Air Quality in Residential Buildings subject to the amendments specified by Title 24, Part 6, Section 160.2(b)2A.

A. Whole-Dwelling Mechanical Ventilation - General Information

	<u> </u>	
01	Dwelling Unit Name	
02	Building Type	·0, ·N.
03	Project Scope	Colla
	Total Conditioned Floor Area of Dwelling Unit	0
04	(For addition projects the conditioned floor area equals	x 0 .0.
	existing area plus addition area)	100
	Number of Bedrooms in Dwelling Unit	70. 00.
05	(For addition projects the number of bedrooms equals the	10
	existing bedrooms plus addition bedrooms)	7 15
06	Ventilation System Type	0.
07	Ventilation Operation Schedule	.0.0

B. Ventilation - Total Ventilation Rate - MCH-27b - High-rise Residential Multifamily Ventilation

A mechanical supply system, exhaust system, or combination thereof shall provide whole-dwelling ventilation with outdoor air each hour at no less than the rate in 160.2(b)2Aiv

01	Total Required Ventilation rate,	(Qtot)

C. Installed Ventilation - Total Ventilation Rate

A mechanical supply system, exhaust system, or combination thereof shall provide whole-dwelling ventilation with outdoor air each hour at no less than the rate in 160.2(b)2Aiv

01	02	03	04	05
Fan Name	Fan Location	Runtime (Min/Hr)	Installed Mechanical Ventilation Rate (CFM)	Equivalent Continuous Ventilation (CFM)
70				
101.	194			
06	06 Total Installed Equivalent Continuous Ventilation (CFM)			

D. Additional Envelope Requirements

01	Envelope Leakage	

E. Additional Central Ventilation System Balancing Requirements

01 Maximum Ventilation Flow (CFM)

F. Compliance Statement

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01				

Registration Number: Registration Date/Time: HERS Provider:
CA Building Energy Efficiency Standards - 2022 Residential Compliance January 2022

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G. Determination of HERS Verification Compliance

All applicable sections of this document shall indicate compliance with the specified verification protocol requirements in order for this Certificate of Verification as a whole to be determined to be in compliance

For information and data collection a provider only. Not valid until registered with a only.

Registration Number: Registration Date/Time: HERS Provider:
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DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

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

1. I certify that this Certificate of Verification documentation is accurate and complete.		
Documentation Author Name:	Documentation Author Signature:	
Company:	Date Signed:	
55pa	Succession and the succession an	
Address:	CEA/HERS Certification Information (if applicable):	
City/State/Zip:	Phone:	
	. ^	

RESPONSIBLE PERSON'S DECLARATION STATEMENT

- 2. I certify the following under penalty of perjury, under the laws of the State of California:
 - 1. The information provided on this Certificate of Verification is true and correct.
 - 2. I am the certified HERS Rater who performed the verification identified and reported on this Certificate of Verification (responsible rater).
 - 3. The installed features, materials, components, manufactured devices, or system performance diagnostic results that require HERS verification identified on this Certificate of Verification comply with the applicable requirements in Reference Nonresidential Appendices NA1 and NA2, and the requirements specified on the Certificate of Compliance for the building approved by the enforcement agency.
 - 4. The information reported on applicable sections of the Certificate(s) of Installation (NRCI), signed and submitted by the person(s) responsible for the construction or installation conforms to the requirements specified on the Certificate(s) of Compliance (NRCC) approved by the enforcement agency.
 - 5. I understand that a registered copy of this Certificate of Verification 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, and I will take the necessary steps to accomplish this requirement.
 - 6. I understand that a registered copy of this Certificate of Verification is required to be included with the documentation the builder provides to the building owner at occupancy, and I will take the necessary steps to accomplish this requirement.

BUILDER OR INSTALLER INFORMATION AS SHOWN ON THE CERTIFICATE OF INSTALLATION

Company Name (Installing Subcontractor, General Contractor, or Builder/Owner):			
Responsible Builder or Installer Name:	CSLB License:		
HERS PROVIDER DATA REGISTRY INFORMATION			
Sample Group Number (if applicable):	Dwelling Test Status in Sample Group (if applicable):		
HERS RATER INFORMATION			
HERS Rater Company Name:			
Responsible Rater Name:	Responsible Rater Signature:		
Responsible Rater Certification Number w/ this HERS Provider:	Date Signed:		

For assistance or questions regarding the Energy Standards, contact the Energy Hotline at: 1-800-772-3300

CERTIFICATE OF VERIFICATION – USER INSTRUCTIONS	NRCV-MCH-27-H
Indoor Air Quality and Mechanical Ventilation – MCH-27b	(Page 1 of 2)

NRCV-MCH-27b-H User Instructions

Section A. General Information

- 1 Dwelling Unit Name: User input text from the NRCC-PRF-01 (Performance) or NRCC-MCH-01 (Prescriptive). This is the unique identifier for this dwelling unit. Needed for high-rise residential dwelling units. Ventilation is calculated and provided for each dwelling unit individually.
- 2 Building Type: Fixed value equal to high-rise residential.
- 3 Project Scope: User select from following new, addition, or alteration. Based on project scope from the NRCC-PRF-01 (Performance) or NRCC-MCH-01 (Prescriptive).
- 4 Total Conditioned Floor Area of Dwelling Unit: User input number based on the information from NRCC-PRF-01 (Performance) or NRCC-MCH-01 (Prescriptive).
- Number of Bedrooms in Dwelling Unit: User input number based on the information from NRCC-PRF-01 (Performance) or NRCC-MCH-01 (Prescriptive).
- 6 Ventilation system Type: This is a user selected value from list of ventilation types Supply, Exhaust, Balanced, Balanced ERV, Balanced HRV, Central Fan Integrated (CFI), Central Ventilation System Supply and Central Ventilation System Exhaust and Central Ventilation System Balanced.
- 7 Ventilation operation schedule: This is a user selected value from list of Continuous, Short-Term Average, Scheduled and Real-time Control.
 - Note if "Ventilation System Type" (A06) = Central Fan Integrated & "Ventilation Operation Schedule" (A07) = Continuous; then user will not be allowed to proceed.

Section B. Ventilation - Total Ventilation Rate - High-rise Residential Multifamily Ventilation

1 This value is automatically calculated using equation 160.2-B from the Energy Standards.

Section C. Installed Ventilation – Total Ventilation Rate Method

- 1. User input text identifying the fan name for each installed ventilation fan.
- 2. User input text identifying the fan location for each installed ventilation fan.
- 3. Runtime (Min/Hr): This value may be filled out automatically or be user input.
 - If ventilation operation schedule from section A = "continuous", then value of 60 will be automatically entered.
 - If ventilation operation schedule from section A = "short term average", then user enter value of less than or equal to 60 for each installed ventilation fan.
- 4. User to enter CFM value from test procedures described in NA7.18.1 for each installed ventilation fan.
- 5. Equivalent continuous ventilation CFM is automatically calculated for each ventilation fan.
- 6. Total installed equivalent continuous ventilation CFM is automatically calculated based on the installed ventilation fans.

Section D. Additional Envelope Requirements

1. Envelope Leakage: This field is filled out automatically. It is referenced from the NRCC-MCH-24, which must be completed prior to this document.

Section E. Additional Central Ventilation System Balancing Requirements

1. Maximum Ventilation Flow (CFM): This field is filled out automatically calculated.

Registration Number: Registration Date/Time: HERS Provider:
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CERTIFICATE OF VERIFICATION – USER INSTRUCTIONS	NRCV-MCH-27-H
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Documentation Declaration Statements

- 1. The person who prepared the NRCV will sign and complete the fields for their name, company (if applicable), address, phone number, certification information (if applicable), date and signature.
- 2. The person who is assuming responsibility for the project being built to comply with Title 24, Part 6, e, C. company, date signed. will complete the fields (if applicable) for their company, responsible builder or installer name, CSLB license number, sample group number, dwelling test status in sample group, HERS Rater company