

CEC-LMCI-MCH-33-H

SAMPLE FORM - NOT VALID FOR SUBMISSION TO BUILDING DEPARTMENTS

CERTIFICATE OF INSTALLATION

Note: This table completed by HERS Registry.

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

A. VCHP System Information

Procedures for verification of VCHP compliance credit eligibility are described in the Energy Code Reference Appendices Section RA3.4.4.3.

SC System ID/Name from LMCC	7.0
SC System Description of Area Served	
Conditioned Floor Area Served by the System (ft ²)	
Status: Refrigerant charge verification from MCH-25	
Verification: Is conditioned airflow supplied to all habitable rooms in accordance with the	
procedure in RA3.1.4.1.7?	000
	100
	SC System Description of Area Served Conditioned Floor Area Served by the System (ft²) Status: Refrigerant charge verification from MCH-25 Verification: Is conditioned airflow supplied to all habitable rooms in accordance with the

B. VCHP Indoor Unit Information

Ducted indoor units are required to be certified to the Energy Commission as low static systems, and included in the list of certified indoor units published on the Energy Commission website at https://www.energy.ca.gov/rules-and-regulations/building-energy-efficiency/manufacturer-certification-building-equipment

01	02	03	04	05	06	07	08	09
Indoor Unit Name	00	16.	Conditioned Floor	Number of Air	Indoor Unit Required Minimum System	Status: Airflow Rate	Is Field Verification of Default Non-Continuous Fan	Verification: Is Ducted Low Static
•	Installed Indoor Unit		Area Served By The	Filter Devices on	Airflow Rate	Verification from	Operation	Indoor Unit
Area Served	Type	Status	Indoor Unit (ft²)	Indoor Unit	(cfm)	MCH-23	Required?	Certified to CEC?
Notes:	(, 4	10						

Registration Number: Registration Date/Time: HERS Provider:



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C. Verification: Ducted Indoor Units Located Entirely in Directly Conditioned Space - RA3.1.4.3.8

Ducted indoor units shall be verified in accordance with the Verified Low Leakage Ducts in Conditioned Space procedure in Section RA3.1.4.3.8.

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01	02	03	04
Indoor Unit Name or Description of Area Served	A Visual Inspection Shall Confirm the Space Conditioning Distribution System Location(RA3.1.4.1.3)	Measured Duct Leakage to Outside (cfm) Using RA3.1.4.3.4	Compliance Statement:
	, , ,	, , ,	(0 1 0
		4.3	A 0
Notes:		24	

D. Verification: Ductless Indoor Units Located Entirely in Directly Conditioned Space - RA3.1.4.1.8

A visual inspection shall confirm that ductless indoor units are located entirely in conditioned space in accordance with the procedures of RA3.1.4.1.8.

01	02	03
Indoor Unit Name or Description of Area Served	Indoor Unit Installation Location Verification	Compliance Statement:
Alea Selveu	indoor offic histaliation Education Vernication	- Compliance Statement.
		160
Notes:		

E. Verification: Wall Mounted Thermostats - RA3.4.5

Field verification according to the procedure in RA3.4.5 shall confirm that VCHP space conditioning zones that are greater than 150 ft², are controlled by a permanently installed wall-mounted thermostat.

01	02	03	04	05
Indoor Unit Name or Description of Area Served	Is a Wall-mounted Thermostat Installed in the Zone Served by the Indoor Unit?	Does the Thermostat Control the Zone's Indoor Unit?	Is the Thermostat Mounted Permanently to the Wall?	Compliance Statement:
c0'	40			
Notes:				

Registration Number:



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F. Verification: Non-Continuous Fan Operation - RA3.4.6

If the certificate of compliance indicates non-continuous indoor unit fan operation was specified for compliance credit, then the system shall be field verified in accordance with the procedures in RA3.4.6 to confirm that the installed system's indoor unit + outdoor unit combination does not operate the fan continuously when the system thermostat is not calling for conditioning

01	02	03	04	05
Indoor Unit Name or Description of	Is Non-Continuous Default Fan Operation Shown in CEC Certification	Does Indoor Unit Air Distribution Fan Operate When There Is No Call	Does Indoor Unit Air Distribution Fan Operate When There Is No Call	10
Area Served	Listings?	For Heating?	For Cooling?	Compliance Statement:
			0.0	
			6 760	
Notes:		AU		

G. Verification: Installed Air Filter Sizing and Pressure Drop - RA3.1.4.7 and RA3.1.4.8

Nominal 2-inch or greater depth air filters shall be sized by the system designer to accommodate a maximum allowable clean-filter pressure drop of 0.1 inch W.C. at the air filter's design airflow rate as verified according to the procedures in RA3.1.4.8. Nominal one-inch minimum depth air filters shall be allowed if the filter face area is sized based on a maximum face velocity of 150 ft per minute at the air filter design airflow rate according to the procedures in RA3.1.4.7. In order to inform the occupant of the airflow and clean filter pressure drop performance required for replacement air filters, the installer shall place a sticker in or near the filter grille displaying the air filter design airflow rate and the maximum allowed clean filter pressure drop at the design airflow rate as required by Standards Section 160.2(b)1Biv

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01	02	03	04	05	06	07	08	09	10	11	12
			AU			11	1			Air Filter	
			100	0 6	N	137	le.			Rated	
Indoor Unit		- 48	Design	111	P /	- 1	Air Filter	Air Filter		Pressure	
Name or	Air Filter	1 m	Airflow Rate	Air Filter	Air Filter	Air Filter	Calculated	Required		Drop at	Air Filter
Description	Name or		for Air Filter	Nominal	Nominal	Nominal	Nominal	Minimum		Design	Pressure
of Area	Description	Air Filter	Device	Depth	Length	Width	Face Area	Face Area	Face Area	Airflow Rate	Drop
Served	of Location	Device Type	(cfm)	(inch)	(inch)	(inch)	(inch²)	(inch²)	Compliance	(inch W.C.)	Compliance
		6	-7-	1	AV						
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Notes:	73.3										

H. VCHP System Compliance Statement



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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

- 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 installation is true and correct.
 - 2. 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.
 - 3. 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.
 - 4. 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.
 - 5. I understand 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, and I will take the necessary steps to ensure this requirement is accomplished.
 - 6. 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, and I will take the necessary steps to ensure this requirement is accomplished.

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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):	

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

HERS Provider:

CERTIFICATE OF INSTALLATION – USER INSTRUCTIONS	LMCI-MCH-33-H
Variable Capacity Heat Pump (VCHP) Compliance Credit – MCH-33	(Page 1 of 3)

LMCI-MCH-33-H User Instructions

Section A. VCHP System Information

- 1. This field is filled out automatically. It is referenced from the LMCI-MCH-01 which must be completed prior to this document.
- 2. This field is filled out automatically. It is referenced from the LMCI-MCH-01 which must be completed prior to this document.
- 3. This field is filled out automatically. It is referenced from the LMCI-MCH-01 which must be completed prior to this document.
- 4. This field is filled out automatically. It is referenced from the LMCI-MCH-25 which must be completed prior to this document.
- 5. Perform the verification specified by RSC3.1.4.1.7 and select the value that describes the result of the verification.

Section B. VCHP Indoor Unit Information

- 1. This field is filled out automatically. It is referenced from the LMCI-MCH-01 which must be completed prior to this document.
- 2. This field is filled out automatically. It is referenced from the LMCI-MCH-01 which must be completed prior to this document.
- 3. This field is filled out automatically. It is referenced from the LMCI-MCH-01 which must be completed prior to this document.
- 4. Enter the conditioned floor area served by the indoor unit a value in ft².
- 5. This field is filled out automatically. It is referenced from the LMCI-MCH-01 which must be completed prior to this document.
- 6. This field is filled out automatically. It is referenced from the LMCI-MCH-23 which must be completed prior to this document.
- 7. This field is filled out automatically. It is referenced from the LMCI-MCH-23 which must be completed prior to this document.
- 8. This field is filled out automatically. It is referenced from the Certificate of Compliance which must be completed prior to this document.
- 9. Navigate to the URL for the Manufacturer certification listings and determine whether the installed system is included in the CEC listing, then select the value that describes the result of the verification.

Section C. Verification: Ducted Indoor Units Located Entirely in Directly Conditioned Space - RA3.1.4.3.8

- 1. This field is filled out automatically. It is referenced from a different section of this document.
- 2. Select the statement that best describes the location of the ducted distribution system.
- 3. Enter the leakage to outside airflow determined from the RA3.1.4.3.8
- 4. This field is filled out automatically

Section D. Verification: Ductless Indoor Units Located Entirely in Directly Conditioned Space - RA3.1.4.1.8

- 1. This field is filled out automatically. It is referenced from a different section of this document.
- 2. Select the statement that best describes the indoor unit installation location as determined according to RA3.1.4.1.8.
- 3. This field is filled out automatically

Registration Number: Registration Date/Time: CA Building Energy Efficiency Standards - 2022 Low-Rise Multifamily Compliance

HERS Provider:

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Section E. Verification: Wall Mounted Thermostats - RA3.4.5

- 1. This field is filled out automatically. It is referenced from a different section of this document.
- 2. Answer yes or no to the question: Is a wall-mounted thermostat installed in the zone served by the indoor unit?
- 3. Answer yes or no to the question: Does the thermostat control the zone's indoor unit?
- 4. Answer yes or no to the question: Is the thermostat mounted permanently to the wall?
- 5. This field is filled out automatically

Section F. Verification: Non-Continuous Fan Operation RA3.4.6

- 1. This field is filled out automatically. It is referenced from a different section of this document.
- 2. Select the best response to the question: Is non-continuous default fan operation shown in CEC certification listings?
- 3. Select the best response to the question: Does indoor unit air distribution fan operate when there is no call for heating?
- 4. Select the best response to the question: Does indoor unit air distribution fan operate when there is no call for cooling?
- 5. This field is filled out automatically

Section G. Verification: Installed Air Filter Sizing and Pressure Drop - RA3.1.4.7 and RA3.1.4.8

- 1. This field is filled out automatically. It is referenced from the LMCI-MCH-01 which must be completed prior to this document.
- 2. This field is filled out automatically. It is referenced from the LMCI-MCH-01 which must be completed prior to this document.
- 3. This field is filled out automatically. It is referenced from the LMCI-MCH-01 which must be completed prior to this document.
- 4. This field is filled out automatically. It is referenced from another section on this document, or from the LMCI-MCH-01 which must be completed prior to this document.
- 5. This field is filled out automatically. It is referenced from the LMCI-MCH-01 which must be completed prior to this document.
- 6. This field is filled out automatically. It is referenced from the LMCI-MCH-01 which must be completed prior to this document.
- 7. This field is filled out automatically. It is referenced from the LMCI-MCH-01 which must be completed prior to this document.
- 8. This field is filled out automatically by calculating the product of air filter length and air filter width.
- 9. This field is filled out automatically based on the depth of the filter.
- 10. This field is filled out automatically
- 11. Input the pressure drop at the design airflow rate from the performance data information published on the air filter label.
- 12. This field is filled out automatically

Section H. VCHP System Compliance Statement

1. This field is filled out automatically.

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Documentation Declaration Statements

- 1. The person who prepared the LMCI 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, will complete the fields for their name, company (if applicable), address, phone number, license number (if applicable), date and signature.