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

Note: Each system requiring refrigerant charge verification will be documented on its own certificate.

System Information

1	Date of Refrigerant Charge Verification	
2	This Refrigerant Charge Verification performed by:	
3	System Name or Identification/Tag	
4	System Location or Area Served	
5	Condenser (or package unit) make or brand	
6	Condenser (or package unit) model number	
7	Nominal tonnage of Condenser	
8	Condenser (or package unit) serial number	
9	Type of Refrigerant	
10	This is system _____ of _____ systems to be verified under the CF-1R for this project	
11	Compliance for new or altered system?	
12	Refrigerant charge verification method used?	
13	What was the lowest outdoor air temperature that occurred during the data collection?	

Measurement Access Hole (MAH) Verification

Procedures for installing MAH are specified in Reference Residential Appendix RA3.2.2.3

14	Method used to demonstrate compliance with the Measurement Access Hole (MAH) requirement	

Minimum System Airflow Verification

Procedures for verifying minimum system airflow are specified in Reference Residential Appendix RA3.2.2.7.

15	Minimum Required System Airflow	
16	Measured system airflow using one of the methods specified in RA3.3. One of the following must be checked.	
	☐ Fan flow meter and plenum pressure matching	
	☐ Flow Grid	
	☐ Powered Flow Capture Hood	
	☐ Traditional Flow Capture Hood	
17	Measured airflow is greater than or equal to minimum, or Line 18 checked.	
18	Measured system airflow is less than minimum. All remedial actions have been taken as described in RA3.2.2.7.3. HERS rater to verify. Verification using Sampling Groups is not allowed. All of the following must be checked.	
	☐ Air filter media is clean.	
	☐ Registers and dampers all open and free of obstructions.	
	☐ No accessible ducts that are crushed, blocked or restricted.	
	☐ Evaporator coil is clean and free of obstructions.	

	☐ Cooling mode set to highest fan speed. Blower wheel and motor operating properly.	
	☐ Return grille and duct properly sized for desired airflow.	

Winter Setup for Standard Charge Verification Procedure

HERS verification procedure for the Winter Setup is in Reference Residential Appendix RA1.2

Winter Setup Procedures Prior to Standard Charge Verification Procedure

	Manufacturer has specified that this procedure may be used on this specific model of equipment and under the temperatures present during test. Written evidence may be requested.	
	Condenser outlet air restrictor installed so it does not interfere with the inlet airflow to the condenser.	
	High side pressure during test (psi)	
	Low side pressure during test (psi)	
	Pressure difference (psi)	
	Pressure difference within range for refrigerant type specified.	

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

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 Certificate of Installation 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 understand that a HERS rater will check the installation to verify compliance, and that if such checking identifies defects, I am required to take corrective action at my expense. I understand that Energy Commission and HERS provider representatives will also perform quality assurance checking of installations, including those approved as part of a sample group but not checked by a HERS rater, and if those installations fail to meet the requirements of such quality assurance checking, the required corrective action and additional checking/testing of other installations in that HERS sample group will be performed at my expense.
5. 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.
6. **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.** I will ensure that all Certificates of Installation are registered with a HERS Provider Data Registry for projects that require HERS verification.

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):
Is this installation monitored by a Third Party Quality Control Program (TPQCP)? ☑Yes ☑No		Name of TPQCP (if applicable):

Instructions MCH-25e: <more detail to be provided>

Line	
1	Enter the date that refrigerant charge verification took place.
2	Designate who performed the RCV, rater or installer
3	Assign the system being verified a name, if not done so already. This is used to distinguish it from other systems in the house. Examples: AC1, AC2, HP1, FURN1, etc
4	Describe the approximate area served by the system being verified. This is used to distinguish it from other systems in the house. Examples: upstairs, downstairs, living area, bedroom areas
5	Enter the make, brand or manufacturer name of the condenser or package unit
6	Enter the model number of the condenser or package unit
7	Enter the serial number of the condenser of package unit
8	Enter the nominal tonnage of the condenser for the system being verified
9	Indicate the type of refrigerant used in the system being verified.
10	Indicate which number the system being tested is in relation to other systems being tested in the same newly constructed home. The sequence does not matter as long as it is complete. For example, if a new house has three systems being tested, make sure one is designated 1 of 3, one is designate 2 of 3, and one is designated 3 of 3. For alterations, systems are tested as individual units and this line will always be designated as 1 of 1.
11	Select whether this system being verified is an altered system or entirely new system
12	Select which verification method was used to verify the refrigerant charge
13	Enter the lowest outdoor temperature that occurred during the verification process. Outdoor temperature should at least be measured at the beginning and end of the test. Use the lower number.
14	Select which method was used to demonstrate compliance with the measurement access hole (MAH) requirement. The first box is checked if the MAH was able to be installed consistent with Figure 3.2-1. Note: the airhandler can be any orientation (upflow, downflow or horizontal) and the hole can be on any of the four sides. The second box is checked for the special situation where the air entering the return side of the equipment is the same temperature as the air entering the return grill. Because of conduction and leakage this can only occur when the entire return side is located within conditioned space or when the return grill is integral to the air handler. The third box is checked in the rare case that the MAH cannot be installed in the location shown in figure 3.2-1 due to accessibility or unusual equipment design. An alternative location must be provided that allows for an accurate measurement of the return air dry-bulb temperature of the air as it enters the return side of the equipment.
15	This line is calculated by multiplying the tonnage in line 7 by 350 cfm/ton for entirely new systems, or by 300 cfm/ton for altered systems. The resulting value will be in cfm.
16	Enter the system airflow measured using one of the methods indicated. The value will be in cfm.
17	This line is checked when the system passes because the measured cfm is greater than or equal to the minimum required system airflow.
	The winter setup procedure can only be used on equipment where the manufacturer has specified that this procedure may be used on this specific model of equipment and under the temperatures present

	during test. Written evidence may be requested by the HERS rater, the HERS provider or the local enforcement agency.
	The protocols require that the outlet air restrictor be installed so that it does not restrict the inlet airflow in any way. Acknowledge here that this was verified during test.
	Enter the high side pressure from your gauge here.
	Enter the high side pressure from your gauge here.
	This line is calculate automatically
	The pressure difference must be between 160 psi and 220 psi (inclusive) for R-410a and between 100 psi and 145 psi (inclusive) for R-22. If this is true, this line will show “Pass”.