

<b>CERTIFICATE OF INSTALLATION</b>		<b>CF2R-MCH-01-H</b>
<b>Space Conditioning Systems Ducts and Fans</b>		<b>(Page 1 of 5)</b>
Project Name:	Enforcement Agency:	Permit Number:
Dwelling Address:	City:	Zip Code:

A. General Information					
1	Dwelling Unit Name		2	Number of Space Conditioning Systems in this dwelling unit	
3	Dwelling Unit Conditioned Floor Area (ft2)		4	Number of Space Conditioning Zones in this dwelling unit	
5	Certificate of Compliance Type		6	method used to calculate HVAC loads	
7	Calculated Cooling Load (Btuh)		8	Calculated Heating Load (Btuh)	

B. Space Conditioning Equipment Requirements from CF-1R <<table values referenced from the CF-1R>>										
1	2	3	4	5	6	7	8	9	10	11
System Identification or Name	Heating System Type	Heating Efficiency	Cooling System Type	Cooling Efficiency SEER	Cooling Efficiency EER	Duct System Name	Cooling Zoning Descriptor	Fan Type		

Notes:

C. Installed System information						
1	3	2	4	7	8	9
System Identification or Name	System Location or Area Served	# identical Systems	conditioned floor area served by the system (ft2)	Cooling Zoning Description	Method of compliance with 150.0(m)13	

Notes:

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**C. Installed Cooling Equipment information**

1	2	3	4	5	6	7	9
System Identification or Name	Cooling Efficiency SEER	Cooling Efficiency EER	Condenser or package unit manufacturer	Condenser or package unit serial number	AHRI Reference Number	Condenser Rated Cooling Capacity (BTUH)	Condenser Nominal Capacity (ton)

Notes:

**C. Installed Heating Equipment information**

1	4		5	6	7	8	9
System Identification or Name	Heating Efficiency AFUE	Heating Efficiency HSFP	Heating unit manufacturer	Heating Unit serial number	AHRI Reference Number	Rated Heating Capacity (BTUH)	

Notes:

Registration Number:

Registration Date/Time:

HERS Provider:

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**D. Installed Duct System information**

1	2	3	4		5	6	7	8	9
System Identification or Name		Return Duct System Type	Return Duct R-Value	Return Duct Location	Number of Air Filter Devices	Supply Duct System Name	Supply Duct R-Value	Supply Duct Location	

Notes:

**D. HERS Verification Requirements**

1	2	3	4	5	6	7	8	9	10	11	12
	MCH20	MCH20	MCH21	MCH22	MCH23 MCH24	MCH25	MCH26	MCH28	MCH29	MCH30	MCH31
HVAC System Name(s)	Duct Leakage Test Target (%)	Low Leakage Air Handler	Duct Location	AHU Fan Efficacy (W/cfm)	AHU Airflow Rate (cfm/ton)	Refrig. Charge	EER or SEER	Return Duct Design - Table 150.0-C or D	Supply Duct Surface Area, R-Value Buried Ducts	Ventilation Cooling Credit	Zoned Cooling System

Notes:

Registration Number:

Registration Date/Time:

HERS Provider:

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<b>Installer Certifies the Following Have Been Met</b>	
<ul style="list-style-type: none"> <li>• All Thermostats Shall be Installed per Section 110.2 (c) by having a clock mechanism that allows the building occupant to Program the temperature set points for at least four periods within 24 hours.</li> <li>• §150(j)2: Pipe insulation for cooling system refrigerant suction, chilled water and brine lines meets minimum requirements of Table 150-B and includes a vapor retardant or is enclosed entirely in conditioned space.</li> <li>• §150(m): Duct and Fans</li> <li>• All air-distribution system ducts and plenums installed, sealed and insulated to meet the requirements of CMC Sections 601, 602, 603, 604, 605 and Standard 6-5; supply-air and return-air ducts and plenums are insulated to a minimum installed level of R-4.2 or enclosed entirely in conditioned space. Openings shall be sealed with mastic, tape or other duct-closure system that meets the applicable requirements of UL 181, UL 181A, or UL 181B or aerosol sealant that meets the requirements of UL 723. If mastic or tape is used to seal openings greater than 1/4 inch, the combination of mastic and either mesh or tape shall be used; and</li> <li>• Building cavities, support platforms for air handlers, and plenums defined or constructed with materials other than sealed sheet metal, duct board or flexible duct shall not be used for conveying conditioned air. Building cavities and support platforms may contain ducts. Ducts installed in cavities and support platforms shall not be compressed to cause reductions in the cross-sectional area of the ducts.</li> <li>• Joints and seams of duct systems and their components shall not be sealed with cloth back rubber adhesive duct tapes unless such tape is used in combination with mastic and draw bands.</li> <li>• Exhaust fan systems have back draft or automatic dampers.</li> <li>• Gravity ventilating systems serving conditioned space have either automatic or readily accessible, manually operated dampers.</li> <li>• Protection of Insulation. Insulation shall be protected from damage, including that due to sunlight, moisture, equipment maintenance, and wind. Cellular foam insulation shall be protected as above or painted with a coating that is water retardant and provides shielding from solar radiation that can cause degradation of the material.</li> <li>• Flexible ducts cannot have porous inner cores.</li> </ul> <p><b>Heat Pump Thermostat Requirements</b> (only display when heat pump is system type selected in row 4 above)</p> <ul style="list-style-type: none"> <li>• A thermostat shall be installed that meets the requirements of Section 110.2(b) and Section 110.2(c);</li> <li>• The thermostat shall be installed in accordance with the manufacturers published installation specifications.</li> <li>• First stage of heating is set as heat pump.</li> <li>• Second stage back up heat set to come on only when the indoor set temperature cannot be met.</li> </ul>	
15.	By signing this document the installer certifies that the requirements above have been met.

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<b>DOCUMENTATION AUTHOR'S DECLARATION STATEMENT</b>		
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:	

<b>RESPONSIBLE PERSON'S DECLARATION STATEMENT</b>		
<p>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.</p> <p>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).</p> <p>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.</p> <p>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.</p> <p>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.</p> <p>6. <b>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.</b> I will ensure that all Certificates of Installation are registered with a HERS Provider Data Registry for projects that require HERS verification.</p>		
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)? <input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Name of TPQCP (if applicable):	

