



SAMPLE FORM – NOT VALID FOR SUBMISSION TO BUILDING DEPARTMENTS

CERTIFICATE OF INSTALLATION

Note: This table completed by HERS Registry.

Project Details

Field Name	Data Entry	Field Name	Data Entry
Project Name		Enforcement Agency	
Dwelling Address		Permit Number	
City and Zip Code		Permit Application Date	

A. General Information

Field	Field Name	Entry
01	Dwelling Unit Name	
02	Climate Zone	
03	Dwelling Unit Total Conditioned Floor Area (ft ²)	
04	Number of Space Conditioning Systems in this Dwelling Unit	
05	Certificate of Compliance Type	
06	Methods Used to Calculate HVAC Loads (See Section 160.3(b)1.)	
07	Calculated Dwelling Unit Sensible Cooling Load (Btu/h)	
08	Calculated Dwelling Unit Heating Load (Btu/h)	
09	Dwelling Unit Number of Bedrooms	

MCH-01b - Space Conditioning Systems Ducts and Fans - Prescriptive Alterations



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B. Space Conditioning (SC) System Information

Field	Field Name	Entry 1	Entry 2
01	SC System ID/Name from LMCC		
02	SC System Description of Area Served		
03	CFA served by this SC System (ft ²)		
04	Is the SC system a ducted system?		
05	Does work include installing a refrigerant containing component?		
06	Does work include installing new SC System components?		
07	Does work include installing more than 25 feet of ducts?		
08	Does work include installing entirely new duct system?		
09	Does work include installing entirely new SC system?		
10	Alteration Type		

Notes:

Entry



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C. Space Conditioning (SC) System Alterations Compliance Information

Field	Field Name	Entry 1	Entry 2
01	SC System ID/Name from LMCC		
02	SC System Description of Area Served		
03	Heating System Type		
04	Altered Heating Component		
05	Altered Heating Component		
06	Heating Minimum Efficiency Value		
07	Cooling System Type		
08	Altered Cooling Components		
09	Cooling Efficiency Type		
10	Cooling Minimum Efficiency Value SEER/SEER2		
10b	Cooling Minimum Efficiency Value EER/EER2/CEER		
11	Required Thermostat Type		
12	Number of Indoor Units for this System		
13	Number of Ducted Indoor Units for this System		



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14	Central Fan Integrated (CFI) Ventilation System Status		
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D. Installed Heating Equipment Information for Gas Furnace Indoor Unit, or Heat Pump Indoor Unit, or Packaged Unit (Gas Furnace or Heat Pump)

Field	Field Name	Entry 1	Entry 2
01	SC System ID/Name from LMCC		
02	SC System Description of Area Served		
03	Heating Efficiency Type		
04	Heating Efficiency Value		
05	Heating Unit Manufacturer		
06	Heating Unit Model Number		
07	Heating Unit Serial Number		
08	Rated Heating Capacity, Output (Btu/h)		
09	Multi-Split Systems only Indoor Unit Name or Description of Area Serve		
10	Multi-Split Systems only Indoor Unit Duct Status		

Notes:

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E. Installed Cooling Equipment Information for Outdoor Condenser or Package Unit (Air Conditioner or Heat Pump):

Field	Field Name	Entry 1	Entry 2
01	SC System ID/Name from LMCC		
02	SC System Description of Area Served		
03	Cooling Efficiency Type		
04	Cooling Efficiency Value		
05	Condenser or Package Unit Manufacturer		
06	Condenser or Package Unit Model Number		
07	Condenser or Package Unit Serial Number		
08	System Cooling Capacity at Design		
09	Condenser Nominal Capacity (tons)		

Notes:

Entry



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F. Altered Space Conditioning System Duct Information (<75% of duct system is altered; or duct system is not altered)

Field	Field Name	Entry 1	Entry 2
01	SC System ID/Name from LMCC		
02	SC System Description of Area Served		
03	Indoor Unit Name or Description of Area Served		
04	Was Any New Ducting Installed?		
05	Required New Duct R-Value		
06	Installed New Supply Duct Location		
07	Installed New Supply Duct R-Value		
08	Installed New Return Duct Location		
09	Installed New Return Duct R-Value		
10	Exception from Min R-Value		
10b	Can Approved Airflow Protocols be used to test this System?		
11	Indoor Unit Nominal Cooling Capacity (tons)		



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G. Installed New or Complete Replacement Duct System information

Field	Field Name	Entry 1	Entry 2
01	SC System ID/Name from LMCC		
02	SC System Description of Area Served		
03	Indoor Unit Name or Description of Area Served		
04	Indoor Unit Total Duct Length		
05	Required New Duct R-Value (Unconditioned Space)		
06	Supply Duct Location		
07	New or Replaced Supply Duct R-Value		
08	Return Duct Location		
09	New or Replaced Return Duct R-Value		
10	Exception from Min R-Value		
11	Method of Compliance with Airflow and Fan Efficacy Req's in 160.3(b)5L		
12	Number of Air Filter Devices on Indoor Unit		



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13	Can Approved Airflow Protocols be used to test this System?		
14	Can Approved Fan Efficacy Protocol be used to test this System?		
15	Indoor Unit Nominal Cooling Capacity (tons)		

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H. Installed Air Filter Device Information

Mandatory requirements for air filter devices are specified Section 160.2(b)1. The installer shall place a sticker in or near each filter grille that displays the design airflow rate for that filter grille/rack and the maximum allowed clean filter pressure drop at the design airflow rate. This will inform the occupant of the airflow vs pressure drop performance required for replacement air filters.

Field	Field Name	Entry 1	Entry 2
01	SC System ID/Name from LMCC		
02	SC System Description of Area Served		
03	Indoor Unit Name or Description of Area Served		
04	Air Filter Name or Description of Location		
05	Air Filter Rack Type		
06	Design Airflow Rate for Air Filter Device (cfm)		
07	Air Filter Nominal Depth (inch)		
08	Air Filter Nominal Length (inch)		
09	Air Filter Nominal Width (inch)		
10	Air Filter Calculated Nominal Face Area (inch ²)		
11	Air Filter Required Minimum Face Area (inch ²)		
12	Face Area Compliance		



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13	Design Allowable Pressure Drop for Air Filter Device		
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I. Air Filter Device Requirements

Mandatory Air Filter Device Requirements can be found in Section 160.2(b)1. Some mandatory requirements may apply in addition to those listed below.

01	All recirculated air and all outdoor air (including make up air) supplied to the occupiable space is filtered before passing through the system's thermal conditioning components.
02	The space conditioning system shall be designed to accommodate the clean-filter pressure drop imposed by the system air filter device(s). The design airflow rate and maximum allowable clean-filter pressure drop at the design airflow rate applicable to each air filter shall be determined by the system designer. The system installer shall affix a sticker/label to each system air filter grille/rack location that discloses the filter's design airflow rate and the filter's maximum allowable clean-filter pressure drop at the design airflow rate. The sticker/label shall be permanently affixed to the air filter grille/rack, readily legible, and visible to a person replacing the air filter.
03	All system air filter devices shall be located and installed in such a manner as to allow access and regular service by the system owner.
04	The system shall be provided with air filters having a designated efficiency equal to or greater than MERV 13 when tested in accordance with ASHRAE Standard 52.2, or a particle size efficiency rating equal to or greater than 50 percent in the 0.30-1.0 µm range and equal to or greater than 85 percent in the 1.0-3.0 µm range when tested in accordance with AHRI Standard 680.
05	The system shall be provided with air filters that have been labeled by the manufacturer to disclose efficiency and pressure drop ratings that conform to the efficiency and pressure drop requirements for the air filter grilles/racks.
06	Filter racks or grilles shall use gaskets, sealing, or other means to close gaps around inserted filters and prevent air from bypassing the filter.

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



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J. HERS Verification Requirements for Duct Systems

Field	Field Name	Entry 1	Entry 2
01	SC System Identification or Name		
02	SC System Description of Area Served		
03	Indoor Unit Name or Description of Area Served		
04	Exemption From Duct Leakage Requirements		
05	MCH-20 Duct Leakage Test		
06	MCH-21 Duct Location Verification		
07	MCH-22 AHU Fan Efficacy (W/cfm)		
08	MCH-23 AHU Airflow Rate (cfm/ton)		
09	MCH-28 Return Duct Design - Table 160.3-A or B		

Notes:

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K. HERS Verification Requirements for Space Conditioning Equipment

Field	Field Name	Entry 1	Entry 2
01	SC System ID/Name from LMCC		
02	SC System Description of Area Served		
03	MCH-25 Refrigerant Charge		

Notes:

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L. Space Conditioning Systems, Ducts and Fans – Mandatory Requirements and Additional Measures

Additional mandatory requirements from Section 160.3 that are not listed here may be applicable to some systems. These requirements may be applicable to only newly installed equipment or portions of the system that are altered. Existing equipment may be exempt from these requirements

Heating Equipment

Field	Field Description
01	Equipment Efficiency: All heating equipment must meet the minimum efficiency requirements of Section 110.1 and Section 110.2(a) and the Appliance Efficiency Regulations.
02	Controls: All unitary heating systems, including heat pumps, must be controlled by a setback thermostat. These thermostats must be capable of allowing the occupant to program the temperature set points for at least four different periods in 24 hours. See Sections 160.3(a), 110.2(c).
03	Sizing: Heating load calculations must be done on portions of the building served by new heating systems to prevent inadvertent undersizing or oversizing. See sections 160.3(b)1 and 2).
04	Furnace Temperature Rise: Central forced-air heating furnace installations must be configured to operate at or below the furnace manufacturer's maximum inlet-to-outlet temperature rise specification. See Section 160.3(b)4.
05	Standby Losses and Pilot Lights: Fan-type central furnaces may not have a continuously burning pilot light. Section 110.5 and Section 110.2(d).

Cooling Equipment

Field	Field Description
06	Equipment Efficiency: All cooling equipment must meet the minimum efficiency requirements of Section 110.1 and Section 110.2(a) and the Appliance Efficiency Regulations.
07	Refrigerant Line Insulation: All refrigerant line insulation in split system air conditioners and heat pumps must meet the R-value and protection requirements of Section 160.3(b)511, and Section 160.3(b)6.
08	Condensing Unit Location: Condensing units shall not be placed within 5 feet of a dryer vent outlet. See Section 160.3(b)3A.
09	Liquid Line Filter Drier: A liquid line filter drier shall be installed according to the manufacturer's specifications 160.3(b)3B.
10	Sizing: Cooling load calculations must be done on portions of the building served by new cooling systems to prevent inadvertent undersizing or oversizing. See Section 160.3(b)1 and 2.

Air Distribution System Ducts, Plenums and Fans

Field	Field Description
11	Insulation: The minimum duct insulation value is R-6 or ducts can be uninsulated if the duct system is located entirely in conditioned space. Note that higher values may be required by the prescriptive or performance requirements. See Section 160.3(b)5Aii for exceptions.
12	Connections and Closures: All installed air-distribution system ducts and plenums must meet the requirements of CMC Sections 601.0, 602.0, 603.0, 604.0, 605.0 and ANSI/SMACNA-006-2006.

Heat Pump Thermostat

Field	Field Description
13	A thermostat shall be installed that meets the requirements of Section 110.2(b) and Section 110.2(c).
14	The thermostat shall be installed in accordance with the manufacturers published installation specifications.
15	First stage of heating shall be assigned to heat pump heating.
16	Second stage back up heating shall be set to come on only when the indoor set temperature cannot be met.

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

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

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

SIGNATORY	Entry
Author Name	
Author Signature	
Company Name	
Date Signed	
CEA/HERS Certification Identification (if applicable)	
Address	
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:

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 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.
5. 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.

SIGNATORY	Entry
Builder/Installer Name	
Builder/Installer Signature	
Company Name	
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)	