



CERTIFICATE OF COMPLIANCE	CF1R-ALT-02-E
Alterations to Space Conditioning Systems	(Page 1 of 5)
Project Name:	Date Prepared:

A. General Information			
CF1R-ALT-02 is applicable to multiple space conditioning systems contained within a single dwelling unit. When multiple dwelling units must be documented, use one CF1R-ALT-02 document for each dwelling unit.			
01	Project Name:	02	Date Prepared:
03	Project Location:	04	Building Type:
05	CA City:	06	Dwelling Unit Name:
07	Zip Code:	08	Dwelling Unit CFA (ft ²):
09	Climate Zone:	10	Number of Space Conditioning (SC) Systems in this Dwelling Unit:

B. Space Conditioning (SC) System Information									
01	02	03	04	05	06	07	08	09	10
SC System ID/Name	SC System Description of Area Served	CFA served by this SC System (ft ²):	Is the SC system a ducted system?	Installing a refrigerant containing component?	Installing new SC system components?	Installing more than 40 feet of ducts?	Installing entirely new duct system?	Installing entirely new SC system?	Alteration Type:

C. Extension of Existing Duct System, Greater Than 40 Feet (Section 150.2(b)1Diib)		
01	02	03
SC System ID/Name	SC System Description of Area Served	Required New Duct R-Value
<u>Required Documentation:</u> CF2R-MCH-01-E - Space Conditioning Systems -Duct insulation requirement for the new portions of supply-air and return-air ducts or plenums: R6 (CZ 1-10, 12 & 13) and R-8 (CZ 11 & 14-16). CF2R & CF3R-MCH-20-H – Duct Leakage Test -Leakage rate compliance: ≤ 15%, or ≤ 10% leakage to outside, or seal all accessible leaks <u>Exceptions:</u> Existing duct systems constructed, insulated or sealed with asbestos are exempt from MCH-20 duct leakage testing requirements		



CERTIFICATE OF COMPLIANCE	CF1R-ALT-02-E
Alterations to Space Conditioning Systems	(Page 2 of 5)
Project Name:	Date Prepared:

D. Altered Space Conditioning System (Sections 150.2(b)1E and F)												
01	02	03	04	05	06	07	08	09	10	11	12	13
SC System ID/Name	SC System Description of Area Served	Heating System Type	Altered Heating Component	Heating Efficiency Type	Heating Minimum Efficiency Value	Cooling System Type	Altered Cooling Components	Cooling Efficiency Type	Cooling Minimum Efficiency Value	Required Thermostat Type	New or Replaced Duct Length	New Duct R-Value

Required Documentation:
 CF2R-MCH-01-E - Space Conditioning Systems
 -Duct insulation requirement for the new portions of supply-air and return-air ducts or plenums: R6 (CZ 1-10, 12 & 13) and R-8 (CZ 11 & 14-16)
 CF2R & CF3R-MCH-20-H – Duct Leakage Test required when heating or cooling components are installed in ducted systems, or when more than 40 ft of duct length is replaced.
 -Leakage rate compliance: ≤ 15%, or ≤ 10% leakage to outside, or seal all accessible leaks.
 CF2R & CF3R-MCH-25-H Refrigerant Charge verification required when refrigerant containing components are installed or altered (applicable in CZ 2, 8-15).
 CF2R & CF3R-MCH-23 Airflow Rate ≥ 300 CFM/ton required when MCH-25 is required.

Exceptions:
 -Duct systems registered with HERS provider as previously sealed are exempt from MCH-20 Duct Leakage Testing requirements.
 -Heating-only systems and Air Handler/Furnace changes do not require verification of Air Flow MCH-23, or Refrigerant Charge MCH-25.
 -Existing duct systems constructed, insulated or sealed with asbestos are exempt from MCH-20 Duct Leakage Testing requirements.



CERTIFICATE OF COMPLIANCE	CF1R-ALT-02-E
Alterations to Space Conditioning Systems	
Project Name:	Date Prepared:

(Page 3 of 5)

E. Entirely New or Complete Replacement Duct System, with or without Equipment Changeout (Sections 150.2(b)1Diia and 150.2(b)1E, F)											
01	02	03	04	05	06	07	08	09	10	11	12
SC System <small>Identification or ID/Name</small>	SC System Description of Area Served	Heating System Type	Altered Heating Component	Heating Efficiency Type	Heating Minimum Efficiency Value	Cooling System Type	Altered Cooling Components	Cooling Efficiency Type	Cooling Minimum Efficiency Value	Required Thermostat Type	New Duct R-Value

Required Documentation:
 CF2R-MCH-01-E - Space Conditioning Systems
 -Duct insulation requirement for the new portions of supply-air and return-air ducts or plenums: R6 (CZ 1-10, 12 & 13) and R-8 (CZ 11 & 14-16)
 CF2R & CF3R-MCH-20-H Duct Leakage Test required.
 -Leakage rate compliance: $\leq 5\%$.
 CF2R & CF3R-MCH-22 Fan Efficacy
 CF2R & CF3R-MCH-23 Airflow Rate
 -Compliance: Fan Efficacy ≤ 0.58 W/cfm and System Airflow ≥ 350 cfm/ton.
 -Alternative Compliance: CF2R & CF3R-MCH-28 Return Duct Design verification is an alternative to MCH-22 and MCH-23 verification.
 CF2R & CF3R-MCH-25-H Refrigerant Charge verification required when refrigerant containing components are installed or altered (applicable in CZ 2, 8-15).

Exceptions:
 Heating-only systems are exempt from the 0.58 W/cfm and 350 cfm/ton requirements.

Note:
 An "entirely new or complete replacement duct system" means at least 75 percent of the duct system is new duct material, and up to 25 percent may consist of reused parts from the dwelling unit's existing duct system (e.g., registers, grilles, boots, air handler, coil, plenums, duct material) if the reused parts are accessible and can be sealed to prevent leakage



CERTIFICATE OF COMPLIANCE	CF1R-ALT-02-E
Alterations to Space Conditioning Systems	
Project Name:	Date Prepared:

(Page 4 of 5)

F. Entirely New or Complete Replacement Space Conditioning System (Section 150.2(b)1C)											
01	02	03	04	05	06	07	08	09	10	11	12
SC System ID/Name	SC System Description of Area Served	Heating System Type	Altered Heating Component	Heating Efficiency Type	Heating Minimum Efficiency Value	Cooling System Type	Altered Cooling Components	Cooling Efficiency Type	Cooling Minimum Efficiency Value	Required Thermostat Type	New Duct R-Value

Required Documentation:
 CF2R-MCH-01-E - Space Conditioning Systems
 -Duct insulation requirement for the new portions of supply-air and return-air ducts or plenums: R6 (CZ 1-10, 12 & 13) and R-8 (CZ 11 & 14-16)
 CF2R & CF3R-MCH-20-H Duct Leakage Test required.
 -Leakage rate compliance: $\leq 5\%$.
 CF2R & CF3R-MCH-22 Fan Efficacy
 CF2R & CF3R-MCH-23 Airflow Rate
 -Compliance: Fan Efficacy ≤ 0.58 W/cfm and System Airflow ≥ 350 cfm/ton.
 - Alternative Compliance: CF2R & CF3R-MCH-28 Return Duct Design verification is an alternative to MCH-22 and MCH-23 verification.
 CF2R & CF3R-MCH-25-H Refrigerant Charge verification required when refrigerant containing components are installed or altered (applicable in CZ 2, 8-15).

Exceptions:
 Heating-only systems are exempt from the 0.58 W/cfm and 350 cfm/ton requirements.

Note:
 An "entirely new or complete replacement duct system" means at least 75 percent of the duct system is new duct material, and up to 25 percent may consist of reused parts from the dwelling unit's existing duct system (e.g., registers, grilles, boots, air handler, coil, plenums, duct material) if the reused parts are accessible and can be sealed to prevent leakage



CERTIFICATE OF COMPLIANCE		CF1R-ALT-02-E
Alterations to Space Conditioning Systems		(Page 5 of 5)
Project Name:	Date Prepared:	

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT	
1. I certify that this Certificate of Compliance documentation is accurate and complete.	
Documentation Author Name:	Documentation Author Signature:
Company:	Signature Date:
Address:	CEA/HERS Certification Identification (if applicable):
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:	
<ol style="list-style-type: none"> The information provided on this Certificate of Compliance is true and correct. I am eligible under Division 3 of the Business and Professions Code to accept responsibility for the building design or system design identified on this Certificate of Compliance (responsible designer). That the energy features and performance specifications, materials, components, and manufactured devices for the building design or system design identified on this Certificate of Compliance conform to the requirements of Title 24, Part 1 and Part 6 of the California Code of Regulations. The building design features or system design features identified on this Certificate of Compliance are consistent with the information provided on other applicable compliance documents, worksheets, calculations, plans and specifications submitted to the enforcement agency for approval with this building permit application. I will ensure that a registered copy of this Certificate of Compliance shall be 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 registered copy of this Certificate of Compliance is required to be included with the documentation the builder provides to the building owner at occupancy. 	
Responsible Designer Name:	Responsible Designer Signature:
Company:	Date Signed:
Address:	License:
City/State/Zip:	Phone: