

Prescriptive Residential Alterations That Do Not Require HERS Field Verification

CEC-CF1R-ALT-05-E (Revised 01/19)

COMMISSION

CALIFORNIA ENERGY



CERTIFICATE OF COMPLIANCE

CF1R-ALT-05-E

Prescriptive Residential Alterations That Do Not Require HERS Field Verification

(Page 1 of 8)

Project Name:

Page 1 of 8

Date Prepared:

This compliance document is only applicable to simple alterations that do not require HERS verification for compliance. When HERS verification is required, a CF1R-ALT-01 shall first be registered with a HERS Provider Data Registry.

Alterations to Space Conditioning Systems that are exempt from HERS verification requirements may use the CF1R-ALT-05 and CF2R-ALT-05 Compliance Documents. Possible exemptions from duct leakage testing include: less than 40 ft of ducts were added or replaced; or the existing duct system was insulated with asbestos; or the existing duct system was previously tested and passed by a HERS Rater. If space conditioning systems are altered and are not exempt from HERS verification, then a CF1R-ALT-02 must be completed and registered with a HERS Provider Data Registry.

Alterations that utilize close Cell Spray Polyurethane Foam (ccSPF) with a density of 1.5 to less than 2.5 pounds per cubic foot having an R-value greater than 5.8 per inch, or Open Cell Spray Polyurethane Foam (ocSPF) with a density of 0.4 to less than 1.5 pounds per cubic foot having an R-value of 3.6 per inch, shall complete and register a CF1R-ALT-01 with a HERS Provider Data Registry.

If more than one person has responsibility for installation of the items on this certificate, each person shall prepare and sign a certificate applicable to the portion of construction for which they are responsible. Alternatively, the person with chief responsibility for construction shall prepare and sign this certificate for the entire construction. All applicable Mandatory Measures shall be met. Temporary labels shall not be removed before verification by the building inspector.

A. General Information

01	Project Name:		02	Date Prepared:	
03	Project Location:		04	Building Front Orientation (deg or cardinal):	NA
05	CA City:	WASCO	06	Number of Altered Dwelling Units:	NA
07	Zip Code:	93280	08	Fuel Type:	NA
09	Climate Zone:	13	10	Total Conditioned Floor Area (ft ²):	NA
11	Building Type:	NA	12	Slab Area (ft ²):	NA
13	Project Scope:	NA			

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Date Prepared:

[illegible]

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Project Name:	Page 8 of 8	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:		
1. The information provided on this Certificate of Compliance is true and correct. 2. 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). 3. 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. 4. 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. 5. 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:	

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

CF1R-ALT-05-E User Instructions

NOTE: If more space is needed, print a duplicate page and fill in.

Minimum requirements for prescriptive alteration compliance can be found in Building Energy Efficiency Standards Section 150.2(b)1.

Completing these forms will require that you have the Reference Appendices for the 2019 Building Energy Efficiency Standards (P400-2018-020). This document contains the Joint Appendices which are used to determine climate zone and to complete the section for opaque surfaces. When the term CF1R is used it means the CF1R-ALT-05. Worksheets are identified by their entire name and subsequently by only the worksheet number, such as ENV-02.

Instructions for sections with column numbers and row letters are given separately.

If any part of the alteration does not comply, prescriptive compliance fails, in which case the performance compliance approach must be used in an attempt to achieve compliance.

A. General Information

1. Project Name: Identifying information, such as owner's name.
2. Date Prepared: Date of document preparation.
3. Project Location: Legal street address of property or other applicable identifying information.
4. Building Front Orientation: Building front orientation expressed in degrees, where North = 0, East = 90, South = 180, and West = 270. Indicate cardinal if it is a subdivision or multi-family project built in multiple orientations. The standards (section 100.1) include the following additional details for determining orientation:
 - Cardinal covers all orientations (for buildings that will be built in multiple orientations);
 - North is oriented to within 45 degrees of true north, including 45 degrees east of north;
 - East is oriented to within 45 degrees of true east, including 45 degrees south of east;
 - South is oriented to within 45 degrees of true south, including 45 degrees west of south;
 - West is oriented to within 45 degrees of true west, including 45 degrees north of west.
5. CA City: Legal city/town of property.
6. Number of Altered Dwelling Units: 1 for single-family, 1 or more for multifamily.
7. Zip Code: 5-digit zip code for the project location (used to determine climate zone).
8. Fuel Type: Natural Gas, Liquefied Propane Gas, or Electricity.

NOTE: Prescriptive compliance only allows electricity if natural gas is not connected to the building, or if the conditions of Section 150.2(b)1 are met. See instruction at section H for more information.

9. Climate Zone: From Joint Appendix JA2.1.1.
10. Total Conditioned Floor Area: Enter the new conditioned floor area in ft², as measured from the outside of exterior walls of the dwelling unit or building being altered.
11. Building Type: Single Family (includes duplex), or Multi-Family (a building that shares common walls and common floors or ceilings).
12. Slab Area: Area of the first floor slab (if any) in ft².
13. Project Scope: Insulation, Roof Replacement, Fenestration/Glazing, Heating System, Cooling System, Duct System, and/or Water Heating System alteration.

B. Building Insulation Details (Section 150.2(b)1)

1. Tag/ID: A label (if any) from the plans, such as A1.4 or wall.
2. Assembly Type: Roof, Ceiling, Wall, or Floor.
3. Frame Type: Wood or Metal.
4. Frame Depth: Nominal dimensions of framing material in inches such as 2x4, 2x6, 2x8, 2x10.
5. Frame Spacing: 16, 24, or 48 inches on center.

6. Proposed Cavity R-value: Insulation installed between framing.

Proposed Continuous Insulation R-value: R-value of rigid or continuous insulation (not interrupted by framing). See Table 4.3.4. of Reference Appendices for metal frame construction.

NOTE: Section 110.8(d) specifies that if adding insulation to an existing attic, the resulting attic insulation must total R-22. However, the amount of insulation required is limited to the amount of room available for insulation without conflicting with Building Code Section 1203.2.

7. Proposed U-factor: The U-factor for the entire assembly.
8. Appendix JA4 Reference Table: Table number used to determine the R-value or U-factor (e.g., an attic assembly is 4.2.1).
9. Appendix JA4 Reference Cell: Cell number used to determine the R-value or U-factor (e.g., an R-38 ceiling with 24-inch on center framing is A21).
10. Required U-factor: From the requirements in Sections 110.8 and 150.0.
11. Comments: Any notes regarding location, unique conditions, or attachments.

Requirements of the Standards apply to a heating and cooling system alteration based on the type of alteration and the system type (Section 150.2(b)1). A completely new system will meet all mandatory and prescriptive requirements, which vary by climate zone (based on Section 150.2(b)1C).

When parts of a system are replaced, it may trigger some of the same requirements that apply to new systems and duct alterations. A Certificate of Compliance for Alterations to Space Conditioning Systems (CF1R-ALT-02) is required for each dwelling unit with a space conditioning system alteration.

1. Dwelling Unit Name: Name of dwelling unit or any other identifying name.
2. SC System Identification or Name: Name of the space conditioning (SC) system or any other identifying name.
3. SC System Location or Area Served: Zone, or area, served by the space conditioning (SC) system.
4. Exemption from HERS Verification: Section 150.2(b)1E
 - a. Space Conditioning (SC) System was not altered.
 - b. Duct systems with less than 40 linear feet in unconditioned spaces as determined by visual inspection.
 - c. Existing duct systems constructed, insulated or sealed with asbestos
 - d. Duct systems that have been documented to have been previously sealed as confirmed through field verification and diagnostic testing in accordance with procedures in the Reference Residential Appendix RA3.1.

H. Water Heating Systems

Water heating compliance for an alteration is described in Section 150.2(b)1H. For a single dwelling unit, a gas or propane water heater can be used. If no natural gas is connected to the building, an electric water heater with an energy factor greater than or equal to the minimal energy factor required under the Appliance Efficiency Regulation, or an electric resistance storage type water heater with a storage capacity of less than 60 gallons can be used. For recirculation distribution systems, only demand recirculation systems with manual control pumps as specified in RA4.4 shall be used. If there is no natural gas connected to the building, an electric water heater may be replaced with another electric water heater. However, changing from gas to electric is not allowed. Multi-family central systems must use certified equipment as defined under Section 110.1 and 110.3.

1. Dwelling Unit Name: Name of dwelling unit or any other identifying name.
 2. Water Heating System Identification or Name: Name of the Water Heating System or any other identifying name.
 3. Water Heating System Location or Area Served: Zone, or area, served by the Water Heating System.
 4. Water Heating System Type: Domestic Hot Water (DHW), Hydronic, Combined Hydronic, or Central. DHW is for domestic hot water, hydronic is a water heating system used for space heating only; combined hydronic is when the water heater will provide both space conditioning and domestic hot water.
 5. Water Heater Type: For non-central systems only Small Storage or Small Instantaneous are allowed. For central systems pick from Large Storage, Small Storage, Heat Pump, Boiler, Large Instantaneous, Small Instantaneous or Indirect.
 6. Number of Water Heaters in System: In single-family and multi-family with water heaters in each dwelling unit the value is 1. For multi-family central systems serving multiple dwelling units enter the total number of water heaters.
 7. Water Heater Storage Volume: Tank capacity in gallons. For individual water heaters for a dwelling unit this will be 80 gallons or less. If instantaneous enter N/A. For multi-family central systems enter the total storage volume.
 8. Fuel Type: Gas, Propane, Electric (Only if natural gas is not connected, or if the conditions of Section 150.2(b)1Hiii are met)
- NOTE: The following table lists replacement heat pump water heating systems by climate zone that meet the requirements of 150.2(b)Hiii.