

Prescriptive Residential Alterations That Do Not Require HERS Field VerificationCEC-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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Prescriptive Residential Alterations That Do Not Require HERS Field Verification

(Page 6 of 8)

Project Name:

Page 6 of 8

Date Prepared:

G. Space Conditioning (SC) Systems – Heating/Cooling (Prescriptive Section 150.2(b))

Alterations to Space Conditioning Systems shall be exempt from HERS verification requirements as prerequisite for use of the CF1R-ALT-05 and CF2R-ALT-05 Compliance Documents. If new space conditioning systems are installed or existing systems are altered and are not exempt from HERS verification, then a CF1R-ALT-02 shall be completed and registered with a HERS Provider Data Registry. In each row below for each dwelling unit in the building, check the box that indicates the exemption from HERS verification compliance:

- ☐ a: space conditioning system was not altered;
☐ b: less than 40 ft of ducts were added or replaced;
☐ c: (exempt from duct leakage testing) if: the existing duct system was insulated with asbestos;
☐ d: (exempt from duct leakage testing) if: the existing duct system was previously tested and passed by a HERS Rater.

01	02	03	04
Dwelling Unit Name	SC System Identification or Name	SC System Location or Area Served	Exemption from HERS Verification
			☐ a ☐ b ☐ c ☐ d
			☐ a ☐ b ☐ c ☐ d
			☐ a ☐ b ☐ c ☐ d
			☐ a ☐ b ☐ c ☐ d
			☐ a ☐ b ☐ c ☐ d
			☐ a ☐ b ☐ c ☐ d
			☐ a ☐ b ☐ c ☐ d
			☐ a ☐ b ☐ c ☐ d
			☐ a ☐ b ☐ c ☐ d

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CERTIFICATE OF COMPLIANCE		CF1R-ALT-05-E
Prescriptive Residential Alterations That Do Not Require HERS Field Verification		(Page 8 of 8)
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.

CERTIFICATE OF COMPLIANCE – USER INSTRUCTIONS	CF1R-ALT-05-E
Prescriptive Residential Alterations That Do Not Require HERS Field Verification	(Page 1 of 10)

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)1H 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.

CERTIFICATE OF COMPLIANCE – USER INSTRUCTIONS	CF1R-ALT-05-E
Prescriptive Residential Alterations That Do Not Require HERS Field Verification	(Page 2 of 10)

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-38ceiling 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.

For the exceptions – up to 3ft² of tubular skylights and up to 3ft² of glazing in a door, enter N/A; up to 16ft² of skylight, enter 0.30. If any products (other than the exceptions) have a higher SHGC than required by Table 150.1-A or Table 150.1-B, first complete a form CF1R-ENV-02 to calculate the area-weighted average SHGC and attach it to this CF1R.

12. Proposed SHGC Source: NFRC, Table 110.6-B, Equations NA6-2, or Area-Weighted Average Worksheet (ENV-02). The source of the SHGC data for the fenestration product.
13. Exterior Shading Device: If exterior shading devices are used to meet the SHGC requirement, indicate the type of device (from Table S-1 of CF1R-ENV-03 Solar Heat Gain Coefficient Worksheet) and attach an ENV-03.

NOTES: (1)An exterior shading device is not used for products with an NFRC rated U-factor and SHGC; based on a factory integrated shading device.
(2)If using an overhang for south-facing glazing, the glazing must be fully shaded at solar noon on August 21 and substantially exposed to direct sunlight at solar noon on December 21 (see Residential Manual, Section 3.5.5).

14. Combined SHGC from CF1R-ENV-03: If exterior shading devices are combined with the SHGC value of the fenestration to meet the prescriptive SHGC requirements (as indicated by a value in column F. 13), indicate the SHGC calculated on form CF-1R-ENV-03 and attach the form for each window with an exterior shading device.

To determine compliance with allowable fenestration areas, complete rows 15-30.

15. Net Added West-facing Fenestration Area: If limited, enter the total amount of west-facing fenestration ONLY that will be added to the dwelling unit when alterations are complete.
16. Is Net Added Fenestration Area ≤ 0 for west-facing fenestration? Indicate Yes or No. If No, the project fails prescriptive compliance – specified west-facing fenestration areas must be reduced, or compliance may be attempted using the performance approach.
17. Net Added Fenestration Area (all orientations): This field is to show the net area of added fenestration for all orientations.
18. Is Net Added Fenestration Area ≤ 0 for all orientations? Indicate Yes or No. If No, the project fails prescriptive compliance – specified fenestration areas must be reduced, or compliance may be attempted using the performance approach.
19. Proposed Fenestration U-factor (Windows): If necessary, enter the area-weighted average U-factor from the completed CF1R-ENV-02. Otherwise, report the single largest associated value from F09.
20. Required Fenestration U-factor (Windows): From Section D., report the value of column 05a.
21. Is the Proposed Fenestration U-factor $\leq$ the Required Fenestration SHGC? Indicate Yes or No. If No, the project fails prescriptive compliance – specified fenestration U-factor must be reduced, or compliance may be attempted using the performance approach.
22. Proposed Fenestration SHGC (Windows): If necessary, enter the area-weighted average SHGC from the complete CF1R-ENV-02. Otherwise, report the single largest associated value from columns F11 or F14.
23. Required Fenestration SHGC (Windows): From Section D., report the value of column 06a.
24. Is the Proposed Fenestration SHGC $\leq$ the Required Fenestration SHGC? Indicate Yes or No. If No, the project fails prescriptive compliance – specified fenestration SHGC must be reduced, or compliance may be attempted using the performance approach.
25. Proposed Fenestration U-factor (Skylights): If necessary, enter the area-weighted average U-factor from the completed CF1R-ENV-02. Otherwise, report the single largest associated value from F09.
26. Required Fenestration U-factor (Skylights): From Section D., report the value of column 05b.
27. Is the Proposed Fenestration U-factor $\leq$ the Required Fenestration U-factor? Indicate Yes or No. If No, the project fails prescriptive compliance – specified fenestration U-factors must be reduced, or compliance may be attempted using the performance approach.
28. Proposed Fenestration SHGC (Skylights): If necessary, enter the area-weighted average SHGC from the completed CF1R-ENV-02. Otherwise, report the single largest associated value from columns F11 or F14.
29. Required Fenestration SHGC (Skylights): From Section D., report the value of column 06b.
30. Is the Proposed Fenestration SHGC $\leq$ the Required Fenestration SHGC? Indicate Yes or No. If No, the project fails prescriptive compliance – specified fenestration SHGC must be reduced, or compliance may be attempted using the performance approach.

G. Space Conditioning (SC) Systems – Heating/Cooling