CERTIFICATE OF COMPLIANCE

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 25 feet (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 closed 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.

Project Details

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

A. GENERAL INFORMATION

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

C. Roof Replacement (Section 150.2(b)1H)

NOTES:

- *Roof area covered by building integrated photovoltaic (PV) panels and solar thermal panels are exempt from the above Cool Roof requirements.*
- *Liquid field applied coatings must comply with installation criteria from Section 110.8(i)4.*

Field	Field Name	Data Entry 1	Data Entry 2	Data Entry 3
01	Method of Compliance			
02	Roof Pitch			
03	Exception			
04	CRRC Product ID Number			
05	Product Type			
06	R-value Deck Insulation			
07	**Proposed** Initial Solar Reflectance			
08	**Proposed** Aged Solar Reflectance			
09	**Proposed** Thermal Emittance			
10	**Proposed** SRI (Optional)			
11	**Minimum Required** Aged Solar Reflectance			
12	**Minimum Required** Thermal Emittance			
13	**Minimum Required** SRI (Optional)			

CALIFORNIA ENERGY COMMISSION

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. 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 understand 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 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
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.

9. Climate Zone: From Reference Appendices, Joint Appendix, JA2.1.1.
10. Total Conditioned Floor Area: Enter the new conditioned floor area in square feet (ft^2), 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 square feet (ft^2).
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 or 24 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, Joint Appendix, 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. Joint 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. Joint 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.

NOTE: If one of the exceptions above has been selected then the rest of Section C. is not required.

4. CRRC Product ID Number: The CRRC Product ID Number is obtained from the Cool Roof Rating Council's Rated Product Directory. Products are listed by manufacturer, brand, type of installation, roofing material, and color, as well as product performance.
5. Product type: See Cool Roof Rating Council's directory. Generally product types include single-ply roof, wood shingles, asphalt roof, metal roof, tile roof.
6. R-value Deck Insulation: If one of the exceptions selected includes adding roof deck insulation, indicate the R-value of the insulation.
7. Proposed Initial Solar Reflectance: Based on the product chosen from the Cool Roof Rating Council's Rated Product Directory. If using default assumption indicate N/A since the Aged Solar Reflectance is available.
8. Proposed Aged Solar Reflectance: Value is from the Cool Roof Rating Council's Rated Product Directory. If the aged value is not available, calculate the Aged Solar Reflectance using the Solar Reflectance Index (SRI) Calculator located on the California Energy Commission website or the aging equation $\rho_{aged}=[0.2+\beta[\rho_{initial}-0.2]$, where $\rho_{initial}$ = the initial solar reflectance and soiling resistance β is listed by product type below.

VALUES OF SOILING RESISTANCE β BY PRODUCT TYPE

Product Type	CRRC Product Category	β
Field-Applied Coating	Field-Applied Coating	0.65
Other	Not A Field-Applied Coating	0.70

9. Proposed Thermal Emittance: From the product specification default value. If using a calculated Solar Reflectance Index (SRI) place the Thermal Emittance used to calculate SRI.
10. Proposed Solar Reflectance Index (SRI): It is optional to meet the SRI but if chosen to do so, use the Solar Reflectance Index (SRI) Calculator found on the California Energy Commission website.
11. Minimum Required Aged Solar Reflectance: Based on climate zone and roof slope.
12. Minimum Required Thermal Emittance: Based on climate zone and roof slope.
13. Minimum Required SRI: Based on climate zone and roof slope.

NOTE: If the cool roofing requirements will be met by a liquid field applied coating, Section 110.8(i)4 requires the coating be applied across the entire roof surface and meet the dry mil thickness or coverage recommended by the manufacturer.

~~D. Fenestration/Glazing Allowed Areas and Efficiencies~~