STATE OF CALIFORNIA

Prescriptive Residential Alterations That Do Not Require HERS Field Verification

CEC-CF1R-ALT-05-E (Revised 01/20)

	ENERGY COMMISSIO
CALIFORNIA ENERGY COMMISSION	

CERTIFICATE OF COMPLIANCE	CF1R-ALT-05-E
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Project Name:	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. 6	A. General Information				
01	Project Name:	02 Date Prepared:			
03	Project Location:		04	Building Front Orientation (deg or cardinal):	
05	CA City:	Gardena	06	Number of Altered Dwelling Units:	
07	Zip Code:		08 Fuel Type: Natural Gas		Natural Gas
09	Climate Zone:	8	10 Total Conditioned Floor Area (ft²):		
11	Building Type:	Single Family 12 Slab Area (ft²)			
13	Project Scope (Select all that apply):				
	B. Insulation D. & E. Fenestration/Glazing - ADD G. Space Conditioning System (Heating, Cooling, Duct system) Lighting				
	C. Roof Replace	ment D. & F. Fenestration/Glazing - REPLACE H. Wa	ter H	eating System Include Mandatory	Measures?

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. Roof Replac	cement (Preso	criptive Alterat	ion, Section 150).2(b)1H)								2	
01	02	03	04	05	06	07	08	09	10	11	12	13	
							Proposed				Minimum Required		
Method of Compliance	Roof Pitch	Exception	CRRC Product ID Number	Product Type	R-value Deck Insulation	Initial Solar Reflectance	Aged Solar Reflectance	Thermal Emittance	SRI (Optional)	Aged Solar Reflectance	Thermal Emittance	SRI (Optional)	
Add Row	Delete Row												

NOTES:

- Roof area covered by building integrated photovoltaic 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.

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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				
 designer). That the energy features and performance specifications, materials, components, and manu Compliance conform to the requirements of Title 24, Part 1 and Part 6 of the California Code The building design features or system design features identified on this Certificate of Comp worksheets, calculations, plans and specifications submitted to the enforcement agency for I will ensure that a registered copy of this Certificate of Compliance shall be made available for all applicable inspections. I understand that a registered copy of this Certificate of Compowner at occupancy. 	e of Regulations. liance are consistent with the information provided on other applicable compliance documents, approval with this building permit application. with the building permit(s) issued for the building, and made available to the enforcement agency pliance is required to be included with the documentation the builder provides to the building			
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.

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CALIFORNIA ENERGY COMMISSION

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Building Envelo	pe Measures:
§ 110.6(a)1:	Air Leakage. Manufactured fenestration, exterior doors, and exterior pet doors must limit air leakage to 0.3 cfm/ft² or less when tested per NFRC-400 or ASTM E283 or AAMA/ WDMA/CSA 101/I.S.2/A440-2011.
§ 110.6(a)5:	Labeling. Fenestration products and exterior doors must have a label meeting the requirements of § 10-111(a).
§ 110.6(b):	Field fabricated exterior doors and fenestration products must use U-factors and solar heat gain coefficient (SHGC) values from TABLES 110.6-A, 110.6-B, or JA4.5 for exterior doors. They must be caulked and/or weather stripped.
§ 110.7:	Air Leakage. All joints, penetrations, and other openings in the building envelope that are potential sources of air leakage must be caulked, gasketed, or weather stripped.
§ 110.8(a):	Insulation Certification by Manufacturers. Insulation must be certified by the Department of Consumer Affairs, Bureau of Household Goods and Services (BHGS).
§ 110.8(g):	Insulation Requirements for Heated Slab Floors. Heated slab floors must be insulated per the requirements of § 110.8(g).
§ 110.8(i):	Roofing Products Solar Reflectance and Thermal Emittance. The thermal emittance and aged solar reflectance values of the roofing material must meet the requirements of § 110.8(i) and be labeled per §10-113 when the installation of a cool roof is specified on the CF1R.
§ 110.8(j):	Radiant Barrier. A radiant barrier must have an emittance of 0.05 or less and be certified to the Department of Consumer Affairs.
§ 150.0(a):	Ceiling and Rafter Roof Insulation. Minimum R-22 insulation in wood-frame ceiling; or the weighted average U-factor must not exceed 0.043. Minimum R-19 or weighted average U-factor of 0.054 or less in a rafter roof alteration. Attic access doors must have permanently attached insulation using adhesive or mechanical fasteners. The attic access must be gasketed to prevent air leakage. Insulation must be installed in direct contact with a continuous roof or ceiling which is sealed to limit infiltration and exfiltration as specified in § 110.7, including but not limited to placing insulation either above or below the roof deck or on top of a drywall ceiling.
§ 150.0(b):	Loose-fill Insulation. Loose fill insulation must meet the manufacturer's required density for the labeled R-value.
§ 150.0(c):	Wall Insulation. Minimum R-13 insulation in 2x4 inch wood framing wall or have a U-factor of 0.102 or less, or R-20 in 2x6 inch wood framing or have a U-factor of 0.071 or less. (R-19 in 2x6 or U-factor of 0.074 or less). Opaque non-framed assemblies must have an overall assembly U-factor not exceeding 0.102, equivalent to an installed value of R-13 in a wood framed assembly. Masonry walls must meet TABLE 150.1-A or B.
§ 150.0(d):	Raised-floor Insulation. Minimum R-19 insulation in raised wood framed floor or 0.037 maximum U-factor.
§ 150.0(f):	Slab Edge Insulation. Slab edge insulation must meet all of the following: have a water absorption rate, for the insulation material alone without facings, no greater than 0.3%; have a water vapor permeance no greater than 2.0 perm/inch; be protected from physical damage and UV light deterioration; and, when installed as part of a heated slab floor, meet the requirements of § 110.8(g).
§ 150.0(g)1:	Vapor Retarder. In Climate Zones 1-16, the earth floor of unvented crawl space must be covered with a Class I or Class II vapor retarder. This requirement also applies to controlled ventilation crawl space for buildings complying with the exception to § 150.0(d).
§ 150.0(g)2:	Vapor Retarder . In Climate Zones 14 and 16, a Class I or Class II vapor retarder must be installed on the conditioned space side of all insulation in all exterior walls, vented attics, and unvented attics with air-permeable insulation.
§ 150.0(q):	Fenestration Products . Fenestration, including skylights, separating conditioned space from unconditioned space or outdoors must have a maximum U-factor of 0.58; or the weighted average U-factor of all fenestration must not exceed 0.58.