

**DOCKETED**

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<b>Project Title:</b>	Residential Compliance Manual and Documents
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<b>Document Title:</b>	2016-CF2R-ENV-01-FenestrationInstallationpdf
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<b>Docketed Date:</b>	4/22/2020

**FENESTRATION INSTALLATION**

CEC-CF2R-ENV-01-E (Revised 09/18)

COMMISSION

CALIFORNIA ENERGY



CERTIFICATE OF INSTALLATION		CF2R-ENV-01-E
Fenestration Installation		(Page 1 of 2)
Project Name:	Enforcement Agency:	Permit Number:
Dwelling Address:	City:	Zip Code:

*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. The signer agrees that all applicable Mandatory Measures were met. Temporary labels are not to be removed before verification by the building inspector.*

**A. Fenestration/Glazing**

Includes all Windows, Skylights, Greenhouse/Bay Windows, and Glazed Doors.

Note: If meeting Exception 1 to 150.1(c)3A, Installing  $\leq 3\text{ft}^2$  glass in door, it is assumed to meet the minimum required U-factor (0.32) & SHGC (0.25).If meeting Exception 1 to 150.1(c)3A, Installing  $\leq 3\text{ft}^2$  tubular skylight, it is assumed to meet the minimum required U-factor (0.55) & SHGC (0.30).

01	02	03	04	05	06	07	08	09	10	11	12
Tag/ID	Manufacturer / Brand	Fenestration Area (ft <sup>2</sup> )	Orientation	Chromogenic	U-factor	Source	SHGC	Source	Fenestration Type	Exterior Shading Devices (Describe)	Comments/Special Features

**B. Fenestration Installation**

- |    |   |
|----|---|
| 01 | For new construction, installed window U-factor and SHGC values should be equal to or less than that listed on the CF1R.  |
| 02 | For existing buildings the U-factor and SHGC values should be the same or better than the required Energy Commission prescriptive requirements.   |
| 03 | Temporary labels should not be removed until verified by the building inspector.  |
| 04 | The fenestration product manufacturer's installation specifications shall be followed when installing these products. The space between the fenestration product and rough opening shall be completely filled with insulation. If batt insulation is used, it is cut to size and placed properly around the fenestration product. |

**The responsible person's signature on this compliance document affirms that all applicable requirements in this table have been met.**

Registration Number:

Registration Date/Time:

HERS Provider:

CA Building Energy Efficiency Standards - 2016 Residential Compliance

September 2018

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CEC-CF2R-ENV-01-E (Revised 09/18)

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CERTIFICATE OF INSTALLATION		CF2R-ENV-01-E
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Project Name:	Enforcement Agency:	Permit Number:
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**DOCUMENTATION AUTHOR'S DECLARATION STATEMENT**

1. I certify that this Certificate of Installation documentation is accurate and complete.

Documentation Author Name:	Documentation Author Signature:
Documentation Author Company Name:	Date Signed:
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:

- The information provided on this Certificate of Installation is true and correct.
- I am either: a) a responsible person eligible under Division 3 of the Business and Professions Code in the applicable classification to accept responsibility for the system design, construction, or installation of features, materials, components, or manufactured devices for the scope of work identified on this Certificate of Installation, and attest to the declarations in this statement, or b) I am an authorized representative of the responsible person and attest to the declarations in this statement on the responsible person's behalf.
- The constructed or installed features, materials, components or manufactured devices (the installation) identified on this Certificate of Installation conforms to all applicable codes and regulations and the installation conforms to the requirements given on the Certificate of Compliance, plans, and specifications approved by the enforcement agency.
- I will ensure that a registered copy of this Certificate of Installation shall be posted or 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 Installation is required to be included with the documentation the builder provides to the building owner at occupancy.

Responsible Builder/Installer Name:	Responsible Builder/Installer Signature:	
Company Name: (Installing Subcontractor or General Contractor or Builder/Owner)	Position With Company (Title):	
Address:	CSLB License:	
City/State/Zip:	Phone:	Date Signed:

Registration Number:

Registration Date/Time:

HERS Provider:

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September 2018

### CF2R-ENV-01-E User Instructions

Before installation of fenestration, the installer shall verify the fenestration product matches either the CF1R-NCB, CF1R-ADD, CF1R-ALT, or CF1R-PRF. If the efficiencies are worse (less efficient), then the windows cannot be installed until proof of compliance is shown with an updated certificate of compliance, or computer energy compliance run, documenting the less efficient windows. If the installed fenestration is better (more efficient) than the documentation shows, no updated documentation is required and installation is allowed.

#### A. Fenestration/Glazing

1. **Tag/ID:** The labeling format used in the plans ensures each unique type is used consistently throughout the plan set (elevations, finish schedules, etc.) to identify each matching fenestration product, such as: Window-1, Skylight-1 etc. It should also be consistently used on the other forms in the same compliance documentation.
2. **Manufacturer/Brand:** Provide the manufacturer and brand name which identifies the fenestration product being installed.
3. **Fenestration Area (ft<sup>2</sup>):** Indicate the total installed surface area (ft<sup>2</sup>) of the fenestration.
4. **Orientation:** Indicate the orientation of the same like fenestration. Use different lines if the orientation of the same fenestration varies. Enter N, S, E, or W.
5. **Chromogenic:** Is the glazing product chromogenic? Yes/No
6. **U-factor:** Indicate the specified U-factor of the fenestration product(s) being installed. Do not mix different types on the same line.

NOTES: (1) For the exceptions - up to 3 ft<sup>2</sup> of tubular skylights and up to 16 ft<sup>2</sup> of skylight area, enter 0.55.

(2) For the exception – up to 3 ft<sup>2</sup> of glass in door, enter 0.32.

7. **Source:** NFRC, CEC Default, NA6 Alternative, or Area-Weighted Average Worksheet (CF1R-ENV-02). Enter the appropriate temporary label certificate identified as NFRC, CEC Default, NA6, or Area-Weighted Average Worksheet (CF1R-ENV-02). All fenestration products installed must have a label certificate which identifies the product's efficiencies. NFRC rated products have a temporary label that can be looked up in the NFRC product directory (<http://search.nfrc.org/search/searchDefault.aspx>).
8. **SHGC:** Indicate the specified SHGC that is being installed of the fenestration product(s). Do not mix different types on the same line.

NOTES: (1) For the exceptions - up to 3 ft<sup>2</sup> of tubular skylights and up to 16 ft<sup>2</sup> of skylight area, enter 0.30.

(2) For the exception – up to 3 ft<sup>2</sup> of glass in door, enter 0.25.

9. **Source:** NFRC, CEC Default, NA6 Alternative, or Area-Weighted Average Worksheet (CF1R-ENV-02). Enter the appropriate temporary label certificate identified as NFRC, CEC Default, NA6, or Area-Weighted Average Worksheet (CF1R-ENV-02). All fenestration products installed must have a label certificate which identifies the product's efficiencies. NFRC rated products have a temporary label that can be looked up in the NFRC product directory (<http://search.nfrc.org/search/searchDefault.aspx>).
10. **Fenestration Type:** Provide a description of the product; for instance, the frame material, coatings, whether it is operable or fixed.
11. **Exterior Shading Devices:** If exterior shading devices are installed in conjunction with fenestration then indicate the type used (e.g. sunscreens, vertical roller or shades, retractable or drop arm or operable awnings, or roll down blinds or slats); or if an overhang is, or will be installed.
12. **Comments/Special Features:** Additional information for the field inspector.