

Residential Window Replacements

General Requirements

A building permit is NOT required for the replacement of windows, subject to the following provisions:

- The replacement of windows with new windows of equal dimensions, which do not involve alteration of framing and which comply with applicable California Energy Code standards, does **not** require the issuance of a building permit. However, if framing is altered or if windows are being replaced in conjunction with any other alterations, additions, or other major improvements that require a building permit, the window replacement shall be included in the permit and be inspected as part of the project.
- Repairs to glazing are exempt from energy regulations and permitting requirements.
- Exemptions from the building permit requirement shall not be deemed to grant authorization for any work to be done in any manner contrary to the provisions of local codes or state laws.

“Exempt Window” Requirements:

- Property Owners shall be required to self-certify that replacement windows are in compliance with State energy standards by the completion and retention of the applicable State-mandated certification form(s). CF2R-ENV-01-E

http://www.energy.ca.gov/title24/2013standards/res_compliance_forms/CF2R/2013-CF2R-ENV-01-InsulationRoofingFenestrationSpecifications.pdf

Property owners may contact the Building Division for assistance in completing the form(s).

- The property owner has the option to submit a building permit application, but will not be required for projects that meet the criteria for exemption as noted above. Property owners will remain responsible for self-certification of compliance with State energy regulations.


Non-Exempt Window Requirements:

If a “Window Replacement” project involves the alteration of the existing building framing to accommodate the new windows and/or is part of another project that requires a Building Permit, the following apply:

Submittal requirements

- 1) Complete a building permit application.
- 2) Floor plan identifying windows to be replaced, sizes of windows, and use of room(s). (subject to review)
- 3) Required energy form(s) – see below
- 4) Construction / Demolition Recycling Form
- 5) Owner/Builder form (if applicable)

- Smoke/carbon monoxide detectors will required to be installed per Stockton Municipal Code Section 15.08.070

	<i>Building Division</i>		
	RESIDENTIAL WINDOW REPLACEMENT		
(209) 937-8561	345 N El Dorado St., Stockton CA 95202		
FAX: (209) 937-8603	09/22/14		1 of 11

Energy Forms Required

- 1) CF1R-ALT-01-E - Certificate of compliance submitted to the building department.
- 2) CF1R-ENV-02-E (if necessary) – Area weighted average calculation worksheet. Required when there is more than one type of window and one or more does not meet prescriptive compliance requirements.
- 3) CF1R-ENV-03-E (if necessary) – Solar Heat Gain Coefficient (SHGC) worksheet. Required only if exterior shading devices are used to meet SHGC requirement.
- 4) CF2R-ENV-01-E - Certificate of installation. Completed and signed by the installing contractor or home owner and made available for final inspection.

Bedroom Egress Window Requirements:

- <http://www.stocktongov.com/government/departments/permitCenter/buildBro.html>

Energy Requirements:


- Manufactured exterior doors and windows/skylights (window) products must be certified by the California Energy Commission. Glazing products will be labeled certifying the performance ratings. **Leave the labels on until field inspection is done.**
- Up to 75 sq. ft. of new added glazing (not replacement) is permitted without having to provide energy calculations justifying the change. The selected product must have a max. U-factor of 0.32 and a max. SHGC of 0.25.
- If more than 75 sq. ft. additional glazing is proposed, required energy form(s) above may be completed to show compliance. The max. fenestration area cannot exceed 20% of the conditioned floor area and the max. West-facing fenestration area cannot exceed 5%.
- Up to 75 sq. ft. of glazing is permitted to be replaced without having to provide energy calculations. The selected product must have a max. U-factor of 0.40 and a max. SHGC of 0.35.
- When replacing all glazing (greater than 75 sq. ft.), the selected product must have a max. U-factor of 0.32 and a max. SHGC of 0.25. When replacement is part of a building permit; provide energy form(s) above to show compliance.

Safety Glazing: (a permanent label must identify glazing subject to human impact)

- Laminated glass
- Fully Tempered Glass
- Heat-strengthened
- Wired Glass
- Approved Ridged Plastic

Safety Glazing is required when all of the following apply (2013 CRC Sections R308.3 & R308.4)

- The exposed area of an individual pane is greater than 9 square feet;
- The bottom edge of the glazing is less than 18” above the floor;
- The top edge of the glazing is more than 36” above the floor; and
- One or more walking surfaces are 36” measured horizontally and in a straight line of the glazing.

	<i>Building Division</i>		
	RESIDENTIAL WINDOW REPLACEMENT		
(209) 937-8561	345 N El Dorado St., Stockton CA 95202		
FAX: (209) 937-8603	09/22/14		2 of 11



CERTIFICATE OF COMPLIANCE

Prescriptive Residential Alterations

Project Name:

Date Prepared:

A. GENERAL INFORMATION	
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:	:

B. BUILDING INSULATION DETAILS (Section 150.2(b)1)											
Tag/ID	Assembly Type	Frame Type	Frame Depth (inches)	Frame Spacing (inches)	Proposed			Required			Comments
					Cavity R-value	Continuous Insulation R-value	U-factor	Appendix JA4 Reference Table	Cell	U-Factor	
01	02	03	04	05	06	07	08	09	10	11	

C. ROOF REPLACEMENT (Prescriptive Alteration, Section 150.2(b)1H)												
Method of Compliance	Roof Pitch	Exception	CRRC Product ID Number	Product Type	R-value Deck Insulation	Proposed			Minimum Required			
						Initial Solar Reflectance	Aged Solar Reflectance	Thermal Emittance	SRI (Optional)	SRI (Optional)	Thermal Emittance	SRI (Optional)
01	02	03	04	05	06	07	08	09	10	11	12	13

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(f)4.



CERTIFICATE OF COMPLIANCE

Prescriptive Residential Alterations

Project Name:

Date Prepared:

D. FENESTRATION/GLAZING AREAS ALLOWED (Section 150.2(b)1)			
01	02	03	04
Alteration Type	Orientation	Maximum Allowed ft2	Comments

E. FENESTRATION/GLAZING PROPOSED AREAS AND EFFICIENCIES (Section 150.2(b)1)														
01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
Tag/ ID	Fenestration Type	Frame Type	Dynamic Glazing	Orientation N, S, W, E, or Roof	Area Removed ft2	Area Added ft2	Net Added Area ft2	Maximum Allowed U-factor	U-factor	Source	SHGC	Source	Exterior Shading Device	Combined SHGC from CF1R-ENV-03
a	Net Added West-facing Fenestration Area													
b	Existing + Added West-facing Fenestration Area													
c	Maximum Allowed West-facing Fenestration Area													
d	Is West-facing Fenestration Area ≤ Maximum Allowed West-facing Fenestration Area													
e	Net Added Fenestration Area (all orientations)													
f	Existing + Added Fenestration Area (all orientations)													
g	Maximum Allowed Fenestration Area (all orientations)													
h	Is Existing + Added Fenestration Area ≤ Maximum Allowed Fenestration Area (all orientations)													



CERTIFICATE OF COMPLIANCE

Prescriptive Residential Alterations

Project Name:

Date Prepared:

F. SPACE CONDITIONING(SC) SYSTEMS – HEATING/COOLING (Prescriptive section 150.2(b))

01	02	03
Dwelling Unit Name	Dwelling Unit CFA (Ft2)	Comments

G. WATER HEATING SYSTEMS (Section 150.2(b)1G)

01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
Water Heating System Identification or Name	Water Heating System Type	Water Heater Type	# of Water Heaters in system	Water Heater Storage Volume (gal)	Fuel Type	Rated Input Type	Rated Input Value	Heating Efficiency Type	Heating Efficiency Value	Standby Loss (%)	Exterior Insul. R-Value	Back-Up Solar Savings Fraction	Central DHW System Distribution Type	Dwelling Unit DHW System Distribution Type

H. SPACE CONDITIONING SYSTEMS AND WATER HEATING SYSTEMS IN MULTIFAMILY DWELLING UNITS

01	02	03	04	05	06
Dwelling Unit Name	Dwelling Unit Total CFA (ft2)	Central Water Heating System Identification or Name	Dwelling Unit Water Heating System Identification or Name	Dwelling Unit: Alteration to the Space Conditioning System(s)?	Comments

Project Name: _____ Date Prepared: _____

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

- 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:

- The information provided on this Certificate of Compliance is true and correct.
- 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).
- 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.
- 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.
- 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.

AREA WEIGHTED AVERAGE CALCULATION WORKSHEET

CERTIFICATE OF COMPLIANCE		CF1R-ENV-02-E
Area Weighted Average Calculation Worksheet		(Page 1 of 1)
Project Name:	Date Prepared:	

A. Area-Weighted Average Calculation		
01	Project Name:	
02	Dwelling Name or Number:	
03	Feature Being Area Weighted Averaged	
04	Property Being Averaged:	

B. U-factor Area-Weighted Average Calculation		
01	02	03
Tag /Identification	Surface Feature Area (ft ²)	U-Factor Value
04	U-Factor Area-weighted Average:	

C. SHGC Area-Weighted Average Calculation		
01	02	03
Tag /Identification	Surface Feature Area (ft ²)	SHGC Value
04	SHGC Area-weighted Average:	

For information and data collection only. Not valid until registered with a HERS provider

SOLAR HEAT GAIN COEFFICIENT (SHGC) WORKSHEET

CEC-CF1F-ENV-03-E (Revised 06/14)

CALIFORNIA ENERGY COMMISSION



CERTIFICATE OF COMPLIANCE		CF1R-ENV-03-E
Solar Heat Gain Coefficient (SHGC) Worksheet		(Page 1 of 2)
Project Name:	Date Prepared:	

A. Product Information

1	2	3	4	5	6	7
Tag/ Identification	Orientation	Fenestration has a temporary or Site-built NFRC label certificate	SHGC value from NFRC label	Using site-built Default SHGC Table 110.6-B	Exterior Shading Device Type	Exterior Shading SHGC

B. Default Solar Heat Gain Coefficient Using Table 110.6-B

1	2	3	4	5	6	7
Tag/ Identification	Orientation	Frame Type	Product	Glazing	Number of Panes	Default Fenestration SHGC

C. Non-Rated Site-built Solar Heat Gain Coefficient Calculation Using Equation NA6-2 from Nonresidential Appendix NA6.3

1	2	3	4	5	6	7
Tag/ Identification	Center of Glass (COG) Solar Heat Gain Coefficient	Conditioned Floor Area	5% of the Condition Floor Area	Proposed Area of site-built Fenestration	Total Allowed Non-rated site-built Fenestration Area	Total Allowed SHGC of the Non-Rated Site-Built Fenestration

D. Combined Solar Heat Gain Coefficient Calculation and Shading Device Calculation

1	2	3	4
Tag/ Identification	$SHGC_{max} =$	$SHGC_{min} =$	The total combined adjusted SHGC with exterior shading device; ($SHGC_{total}$)

Registration Number:

Registration Date/Time:

HERS Provider:

CA Building Energy Efficiency Standards - 2013 Residential Compliance

June 2014

SOLAR HEAT GAIN COEFFICIENT (SHGC) WORKSHEET

CEC-CF1F-ENV-03-E (Revised 06/14)

CALIFORNIA ENERGY COMMISSION



CERTIFICATE OF COMPLIANCE		CF1R-ENV-03-E
Solar Heat Gain Coefficient (SHGC) Worksheet		(Page 2 of 2)
Project Name:	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:

- The information provided on this Certificate of Compliance is true and correct.
- 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).
- 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.
- 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.
- 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:

Registration Number:

Registration Date/Time:

HERS Provider:

CA Building Energy Efficiency Standards - 2013 Residential Compliance

June 2014

**CERTIFICATE OF INSTALLATION**

Fenestration Installation

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.

01	02	03	04	05	06	07	08	09	10	11
Tag/ID	Manufacturer / Brand	Fenestration Area (FT ²)	Orientation	Chromogenic	U-factor	SHGC	Source of U-factor and SHGC	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 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 - 2013 Residential Compliance

June 2014

**CERTIFICATE OF INSTALLATION**

Fenestration Installation

Project Name:	Enforcement Agency:	Permit Number:
Dwelling Address:	City:	Zip Code:

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:

1. The information provided on this Certificate of Installation is true and correct.
2. I am 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 (responsible builder/installer), otherwise I am an authorized representative of the responsible builder/installer.
3. 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 plans and specifications approved by the enforcement agency.
4. I reviewed a copy of the Certificate of Compliance approved by the enforcement agency that identifies the specific requirements for the scope of construction or installation identified on this Certificate of Installation, and I have ensured that the requirements that apply to the construction or installation have been met.
5. 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:

CA Building Energy Efficiency Standards - 2013 Residential Compliance

HERS Provider:

June 2014