

# Forms – Which & When

In addition to a Permit, you will need the following forms applicable to your project.

## During Design:

- **CF1R-ALT-01-E: Certificate of Compliance for Residential Alterations**
  - Completed and signed by the designer, installing contractor or homeowner
  - Submitted to the building department during permit application
- **CF1R-ENV-02-E: (if necessary) – Area Weighted Average Calculation Worksheet**
  - Completed and signed by the designer, installing contractor or homeowner
  - Submitted with the **CF1R-ALT-01-E** when there is more than one type of window and one or more does not meet prescriptive compliance requirements
- **CF1R-ENV-03-E: (if necessary) – Solar Heat Gain Coefficient (SHGC) Worksheet**
  - Completed and signed by the designer, installing contractor or homeowner
  - Submitted with the **CF1R-ALT-01-E** only if exterior shading devices are used to meet the SHGC requirement

**Why?:** To show compliance with energy code for fenestration alterations

## During Construction:

- **CF2R-ENV-01-E: Fenestration Installation**
  - Completed by the installing contractor
  - Made available for the Inspector when onsite
- **CF2R-ALT-05-E: Prescriptive Alterations Simple Non HERS**
  - Completed by the installing contractor
  - Made available for the Inspector when onsite
- **CF3R-EXC-20-H: HERS Verification of Existing Conditions for Alterations**
  - Completed and signed by HERS Rater

**Why?:** To verify the field installation meets or exceeds energy code

## Product Labeling

Typically, manufactured windows come with labels indicating that the NFRC has certified the performance ratings of the window. **Leave the labels on the windows until the field inspection is done.**

Manufactured fenestration not certified by NFRC must:

- Use the CEC Default values found in [Table 110.6-A](#) and [Table 110.6-B](#) in the Energy Standards

**OR**

- Use the equations in [Reference Appendix NA6](#)

**World's Best Window Co.**  
Series "2000"  
Casement

Model: CW2000-100  
U-Factor: 0.35  
SHGC: 0.32

ENERGY PERFORMANCE RATINGS	
U-Factor (U.S. Units)	Solar Heat Gain Coefficient
<b>0.35</b>	<b>0.32</b>
ADDITIONAL PERFORMANCE RATINGS	
Visible Transmittance	Air Leakage (U.S. Units)
<b>0.51</b>	<b>0.2</b>