

# Window and Door Fenestration Replacement

- Replacement of fenestrations (windows and exterior doors) requires a permit.
- Replacement of glass within an existing sash does not require a permit.
- A contractor's license is required for non-homeowner window/door installations where openings are modified/wider/not like for like.

### **Submittal Checklist**

<u>Permit Application</u> : Include the description of work, number of fenestrations to be replaced, and proposed U-Value and SHGC of the new fenestrations. (All documents must be in PDF format)
Stamped Structural plans or letter (if required).
Homeowner Affidavit or Owner Authorization (as required).
Payment (check, cash, credit card, or echeck).

### Residential like-for-like replacement fenestrations must meet the following conditions:

- 1. Meet the requirements of 2021 IECC section R503.1.1.1 "Replacement Fenestration" as follows:
  - a. Meet the requirements of 2021 IECC Table R402.1.2, Maximum Assembly U-Factor = .28
  - b. Meet the requirements of 2021 IECC Table R402.1.2, Maximum SHGC (Solar Heat Gain Coefficient) = .35
  - c. Where the proposed glazing area is more than 30% of the wall area by elevation, Maximum U-Factor = .25
  - d. When more than one fenestration is being replaced, an area weighted-average can be used to show compliance for U-Factor per 2021 IECC R402.3.1 or SHGC per 2021 IECC R402.3.2 or both as stated in IECC section R503.1.1.1.
- 2. Maintain all emergency escape window minimum opening sizes at bedrooms and basement per IRC R310.5.
- 3. Provide safety glazing where required per IRC section R308.
- 4. Meet the Historic Preservation requirements (see next page).

Note: A thermally isolated, enclosed, and heated sunroom or garage exterior vertical fenestration requires a Maximum Assembly U-Factor = .45 and skylights a Maximum U-Factor = .70 per 2021 IECC R402.3.5.

## Commercial like-for-like replacement fenestrations must meet the following conditions:

- 1. Meet the requirements of 2021 IECC Section C503.2.2.1 "Replacement Fenestration" as follows:
  - a. Meet the requirements of 2021 IECC Table C402.4, Maximum Assembly U-Factor:

Fixed Windows = .36, Operable Windows = .45, Entrance Doors = .63

b. Meet the requirements of 2021 IECC Table C402.4, Maximum SHGC (Solar Heat Gain Coefficient):

Projection Factor < 0.2: Fixed = .38, Operable = .33

Projection Factor  $0.2 \le PF < 0.5$ : Fixed = .46, Operable = .40

Projection Factor ≥ 0.5: Fixed = .61, Operable = .53

- 2. Provide safety glazing where required per IBC section 2406.
- 3. Meet the Historic Preservation requirements (see next page).



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#### Engineered, stamped, and signed structural plans or letter are required to be submitted for:

- 1. Modifications to existing door and window openings, or new openings where the structural header (beam) widths and sizes exceed the 2021 IRC code span charts.
- 2. Structural modifications or new openings in basement foundation walls.

### **Historic Preservation – Residential and Commercial Fenestration Replacement:**

For any residential and commercial properties designated as Fort Collins Landmarks and/or multifamily properties over fifty years of age, provide written approval from Historic Preservation Services that treatment meets the City's adopted preservation <a href="mailto:standards">standards</a> (https://library.municode.com/co/fort\_collins/codes/municipal\_code?nodeld=CH14LAPR)

Questions: Contact Historic Preservation at preservation@fcgov.com or 970-416-4250

https://www.fcgov.com/historicpreservation Land Use Code <u>Sec. 3.4.7</u>

#### **Inspections**

**Final** Inspection required. NOTE: labels/stickers need to be on windows for inspection (U-value and SHGC). <a href="https://www.fcgov.com/building/inspections.php">https://www.fcgov.com/building/inspections.php</a>

## **Building Services Links**

https://www.fcgov.com/building/codes

https://www.fcgov.com/building/residential-and-commercial-alterations