

### **Building Guides for Homeowners**

## 2018 IRC / 2012 IECC Window, Door and Skylight Installation or Replacement



# DID YOU KNOW?

- As "owner-builder" you are the responsible party of record on such a permit.
   If your work is being performed by a contractor, you may protect yourself from possible liability if the contractor applies for the proper permit in his or her name
- If you plan to do your own work, including all of the trade work then you may apply for the permit
- Frequent practices of unlicensed contractors is to secure an "owner-builder" building and trades permits, erroneously implying that the property owner is providing his or her own labor and material personally
- It would benefit you to hire a licensed contractor to perform the trade work
- Permits are valid for work to begin within six months

### Why Do I need a Permit?

There are many important reasons to obtain building permits and to have inspections performed for your construction project.

#### **Protects property values**

Your home is typically your largest investment. If your construction project does not comply with the building codes, your investment could lose value. If others in your neighborhood make unsafe or substandard changes to their homes, it could lower the resale values for the entire community.

#### **Saves Money**

Homeowners insurance policies may not pay for damages caused by work done without permits and inspections.

#### **Makes Selling Property Easier**

Listing associations require owners to disclose any home improvements or repairs and if permits were obtained. Many financial institutions will not finance a purchase without proof of a final inspection. If you decide to sell a home or building that has had modifications without a permit, you may be required to tear down the addition, leave it unoccupied or do costly repairs.

#### Improves safety

Your permit allows the building department to inspect for potential hazards and unsafe construction. By ensuring your project meets the minimum building code standards of safety, the building department can reduce the risk of fire, structural collapse and other issues that might result in costly repairs, injuries and even death. Inspections complement the contractor's experience and act as a system of checks and balances resulting in a safer project.

#### It's the Law

Permits are required by Ordinance. Work without a permit may be subject to removal or other costly remedies.

The purpose of this guide is to assist you in the permitting process. This handout is intended to cover information for a basic plan submittal and typical project under the building codes. It is not intended to cover all circumstances. Depending on the scope and complexity of your project, additional information may be required. Discuss your project with city staff to determine if it is subject to additional requirements.

#### What is REQUIRED for a Permit?

- Provide copies of a CONSTRUCTION PLAN
- Filled out "Window/Door Submittal" Form (Found on Page 4)

#### Note:

If any openings are created or enlarged to install a new window or door, a stamped set of structural plans are required at the time of submittal.



Permits are required for the replacement or installation of skylights, windows, and doors. Colorado State law and currently adopted codes require carbon monoxide alarms to be installed per the manufacturer's written installation instructions within 15 feet of the entry to each sleeping room when alterations or repairs requiring a building permit occur in homes having fuel fired appliances or an attached garage.

- **[R314.1] Smoke alarms shall be installed:** in each sleeping room; outside each separate sleeping area in the immediate vicinity of the bedrooms; on each addition story of the dwelling including basements; in accordance with the currently adopted building code; and in compliance with the manufacturer's installation instructions.
- [R315.1] Smoke and Carbon monoxide alarms shall be one of the following: fully battery powered; plug-connected into a dwelling's unswitched electrical outlet and include a battery backup; wired into a dwelling's electrical system and include a battery back-up; or connected to an electrical system via an electrical panel. Approved combination smoke/ carbon monoxide alarms may be used.

# Window, Door/ Skylight Replacement

R310.2.5 Replacement Windows. Replacement windows installed in buildings meeting maximum sill height requirements of section R310.2.2 and the requirements of section R310.2.1, provided that the replacement window meets the following conditions:

- 1. The replacement window is the manufacturer's largest standard size window that will fit within the existing frame or existing rough opening. The replacement window is of the same operating style equal or greater window opening area than the existing window.
- 2. 2. The replacement window is not part of a change of occupancy.

#### Referenced codes:

**R310.2.2 Window sill height**. Where a window is provided as the emergency escape and rescue opening, it shall have a sill height of not more than 44 inches (1118mm) above the floor; where the sill height is below grade, it shall be provided with a window well in accordance with section R310.2.3.

R310.2.1 Minimum opening area. Emergency and escape rescue openings shall have a net clear opening of not less than 5.7 square feet (0.530 m²). The net clear opening dimensions required by this section shall be obtained by the normal operation of the emergency escape and rescue opening from the inside. The net clear height of the opening shall be not less than 24 inches (610 mm) and the net clear width shall be not less than 20 inches (508mm).

#### Tips on hiring contractors

- ♦ Hire only licensed contractors
- ♦ Get at least 3 bids
- ♦ Get 3 references, and ask to see a project
- ♦ Get it in writing but before you sign the contract, make sure you completely understand
- ♦ Don't make final payment until you have a Certificate of Completion (CC) and you are satisfied
- ♦ Have the contractor apply for the required permits



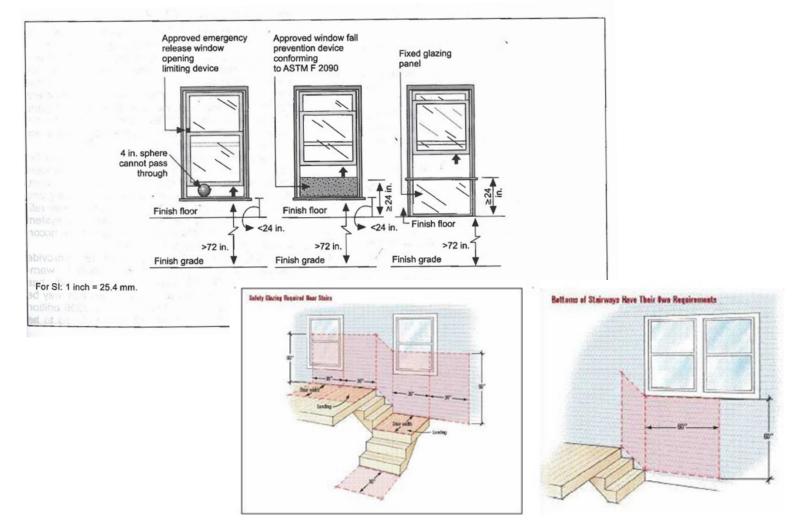


### **New Window Installation**

Complete window submittal form (Page 4) indicating the location of all new or replacement windows, including identification of each room. A sketch or drawing <u>may be</u> requested during review. For new installations or any change in opening size, plans shall include a sketch indicating the framing for the floor and roof above, the size of the opening, and any framing changes and headers to be installed. New or enlarged window openings in basement walls require an engineered plan for the proper support of the foundation during and after cutting.

**New doors, windows, and skylights** are required to meet the current standards for energy conservation {IECC Chapter 4 [RE] for Residential and Chapter 4 [CE] for Commercial applications) and shall be labeled to indicate compliance with MMA/WDMA/CSA 101/I.S.2/A440.

- 1. All openings shall be flashed to create a weather resistive barrier per IRC R703.1 and IBC 1403.2. Skylights may require a 4 inch high curb and/or screening below the skylight; see IRC R308.6.8 and IBC 2405.4.
- **2. Safety glazing** is required for all hazardous locations subject to human impact, per IRC Section 308.4 and IBC 2406 including but not limited to the following:
  - Within a 24" arc of either vertical edge of a door (except in a wall perpendicular to the door other than the wall toward which the door swings);
  - Within 5 feet of stairways and landings;
  - In bathtub & shower enclosures and adjacent to hot tubs, spas or pools or within 5 feet of any of these.





# **New Window Installation Submittal Form**

Date House was Built:

Permit Number:

Address:

Minimum opening area. Emergency and escape rescue openings shall have a net clear opening of not less than 5.7 SF. The net clear height opening shall be not less than 24" and the net clear width shall be not less than 20".

IRC 310.2.1

Window Door #	Floor Level	Room Name	Window Type: Single Hung, Double Hung, Slider, ETC.	Distance to Doors, Stairs, Tub and Shower R 308.4.2	Is Safety Glazing required for this window or door? R 308.4	Window Width	Window Height	What is the Net Clear Opening	Does this window have a window well? If so, depth?	Does this window well have a ladder?	What is the Thermal Transmit- tance U- Factor for this window?
1											
2											
3											
4											
5											
6											
7											
8											
9											

(	EXAMPLE										
Window Door #	Floor Level	Room Name	Window Type: Single Hung, Double Hung, Slider, ETC.	Distance to Doors, Stairs, Tub and Shower R 308.4.2	Is Safety Glazing required for this window or door?	Window Width	Window Height	What is the Net Clear Opening	Does this window have a win- dow well? If so, depth?	Does this window well have a ladder?	What is the Thermal Transmit- tance U- Factor for this window?
					R 308.4				R310.2.3		
1	1	Bedroom	GL	5'	NO	34 3/8	34 5/8	5.19			.31
2	1	Kitchen	GL	10'	NO	58 1/2	35 5/8	5.19			.32
3	1	Bedroom	GL	10'	NO	58 1/2	34 1/2	5.19			.30

