



# Window Replacement

# 145

## INSTRUCTIONS:

Complete the table below noting the complete scope of work. The numbering system can be used to reference locations of proposed work on the plan. Use the code information on the back of this sheet to verify that your proposed construction meets code requirements. If you need assistance see our "WINDOW REPLACEMENT- SAMPLE PLAN" handout or a permit technician.

## WINDOW TYPES:

Casement  
(CAS)



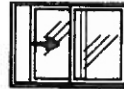
Single Hung  
(SH)



Double Hung  
(DH)



Slider  
(SLDR)



Slider fixed  
center panel  
(SLDR XO)



Fixed  
(FIX)



## WORKSHEET

ADDRESS \_\_\_\_\_ PERMIT # \_\_\_\_\_

	EXISTING WINDOW SIZE & TYPE	NEW WINDOW SIZE & TYPE	WINDOW AREA	LOCATION (ROOM)	SAFETY GLAZING (Yes/No)
①					
②					
③					
④					
⑤					
⑥					
⑦					
⑧					
⑨					
⑩					
⑪					
⑫					
⑬					
⑭					
⑮					
⑯					

Total Square Footage of Window Area \_\_\_\_\_

Submission of this form is not a guarantee that the above stated windows will meet the code requirements. Final determination will be made by the Building Official at the time of inspection.

## INSTRUCTIONS:

To aid in communication between yourself, the inspectors, and the plan checkers, we have prepared this sample plan to assist in the preparation of your plan for window replacement. Follow the instructions on sheets one and two, then submit this information to the Development Services Permit Center.

## PREPARATION OF PLAN:

On an 8-1/2"x11" sheet of paper show the following: (Although the plan is not required to be to scale, it should be close. A scale of 1/8" per foot will work for most residences.)

1. Show the property size, configuration, street, and alley location.
2. Show all buildings and/or structures on the property.
3. Draw the floor plan of the structure. Note the use of each room. If a window will be removed or the size changed, indicate the size of the room and the size & type of all other windows in the room.
4. Show all existing windows, and note which will be replaced. (Show their size and type. This can be done by keying each location to the table as shown on the sample plan.)
5. Show size and type of the new window.

## SPECIAL CASES:

Rooms are required by building code to meet minimum light and ventilation requirements. Sleeping rooms must have at least one window which meets emergency egress requirements. When making changes in size or removing windows, compliance to code requirements must be shown. (See the "Window Replacement Worksheet" for more specific details.)

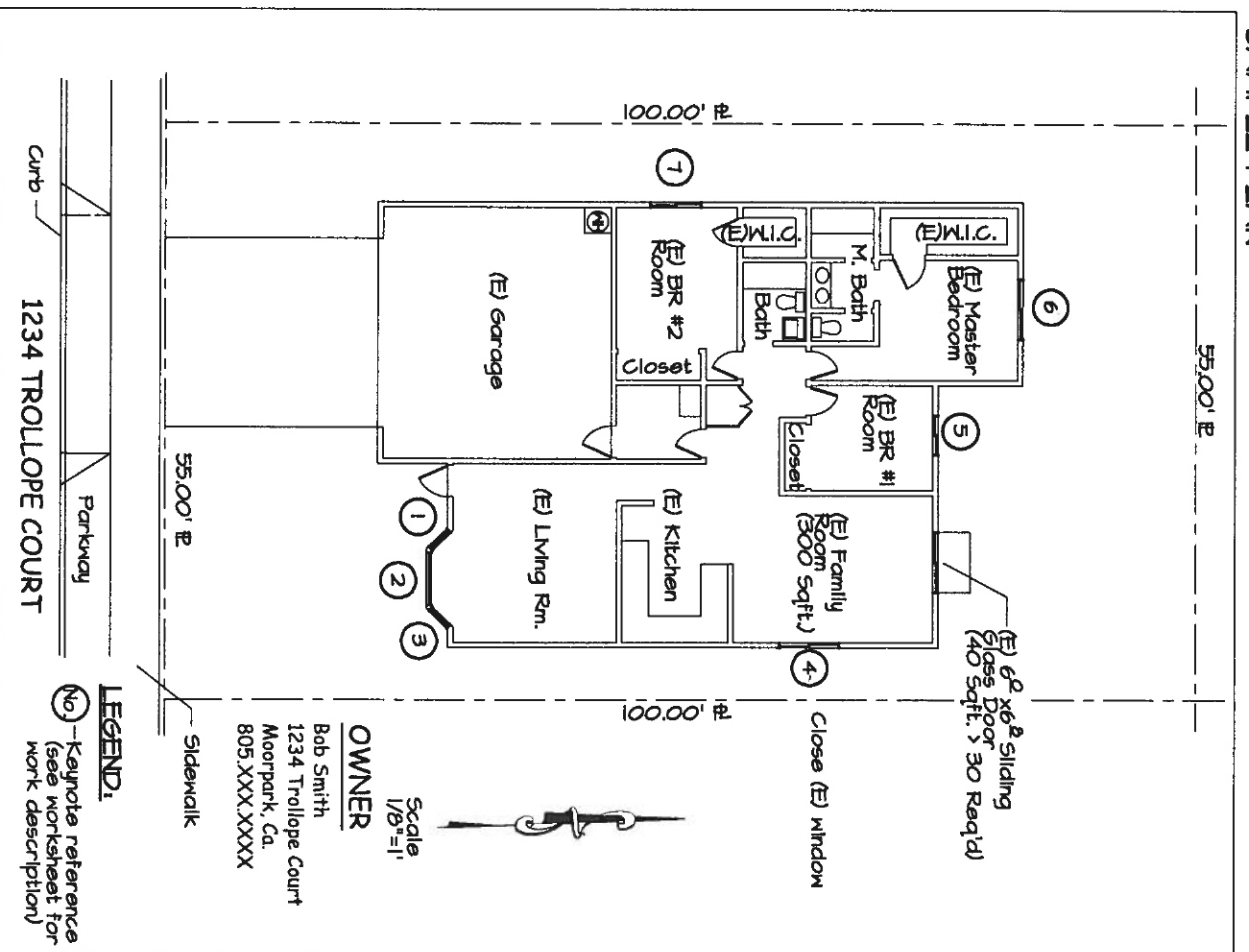
## Removal of Windows

1. Show room size and size of all other windows in the room. Remaining window must provide compliance to emergency egress requirements and light and ventilation requirements.

## Change in Window Size

1. Reduction - Show room size and size of all other windows in the room. Remaining window must provide compliance to emergency egress, light, and ventilation requirements.
2. Increase - More information is required for this type of work. For example, widening a window may require header and shearwall retrofit, or lowering a window may weaken shearwalls in some buildings. Other types of projects require more information (framing plans, etc...) Check with a Permit Technician regarding your specific case.

## SAMPLE PLAN



## CODE REQUIREMENTS:

### 1. LIGHT AND VENTILATION:

#### HABITABLE ROOMS:

- shall be provided with natural light by means of exterior glazed openings with an area not less than 8% of the floor area of such rooms. The kitchen may be provided with artificial light.
- shall be provided with natural ventilation by means of openable openings with an area not less than 4% of the floor area of such rooms.

#### NON-HABITABLE ROOMS (Bathrooms, water closet compartments, laundry rooms and similar rooms):

- shall be provided with natural ventilation by means of openable exterior openings with an area of not less than 4% of the floor area of such rooms.

Exemption: Bathrooms containing a bathtub shower or combination thereof; laundry rooms, and similar rooms, a mechanical ventilation system connected directly to the outside capable of providing an exhaust rate of 50 CFM may be used.

### 2. EMERGENCY EGRESS WINDOWS:

Section R310 requires that every sleeping room shall have at least one operable window or door approved for emergency escape or rescue that shall open directly into a public street, public alley, yard or exit court. The emergency door or window shall:

- be operable from the inside to provide a full, clear opening without the use of separate tools;
- have a minimum net clear openable area of 5.7 square feet/ 5 square feet at grade floor openings.
- have a minimum net clear openable height of 24 inches
- have a minimum net clear width of 20 inches
- have a finished sill height of not more than 44 inches above finish floor

NOTE: Even though a window may meet the vertical and horizontal measurements, it may not meet the opening requirements of 5.7/5.0 sq. ft. Close and accurate measurements must be taken before installing windows.

#### COMPLYING WINDOW SIZES

Window sizes shown will be the minimum allowed for egress unless manufacturer's data is supplied.

Single Casement:	Single/Double Hung:	Slider:	XOX Slider
2-4 x 4-0	3-0 x 5-0	4-0 x 4-0	8-0 x 4-0
2-6 x 3-6	3-4 x 5-0	5-0 x 3-6	10-0 x 4-0
Double Casement:		6-0 x 3-0	12-0 x 3-0
4-6 x 4-0			

Sizes shown are taken from data supplied by window manufacturers, however these are general dimensions. It is the owner's responsibility to verify that the actual windows installed meet the minimum egress requirements.

Awning, bay with fixed center glazing, single fixed combination window and other types not mentioned above require manufacturer's information if they are to be used to emergency egress requirements.

### 3. IMPACT OR HAZARD GLAZING (TEMPERED GLASS):

Tempered or safety glazing shall be required where glazing is:

- within a 24 inch arc on either side of a door
- in windows that are within 18 inches of the floor
- in windows in a stairwell or within 5 feet of the landings and less than 60 inches above the floor
- in a door
- enclosing a tub or shower where the bottom of the window is less than 60 inches above the tub or shower bottom
- in walls and fences used as a barrier for swimming pools and spas where the glazing is less than 60 inches above the pool deck and within 5 feet of the pool edge.

### 4. ENERGY REQUIREMENTS:

All new glazing must meet the following minimum energy requirements:

U-factor: .32

SHGC: .25