

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 your plans and worksheet to Building and Engineering's 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 proportional. A scale of 1/8" per foot will work for most residences.)

1. Show the property configuration and street/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 north arrow.

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.)

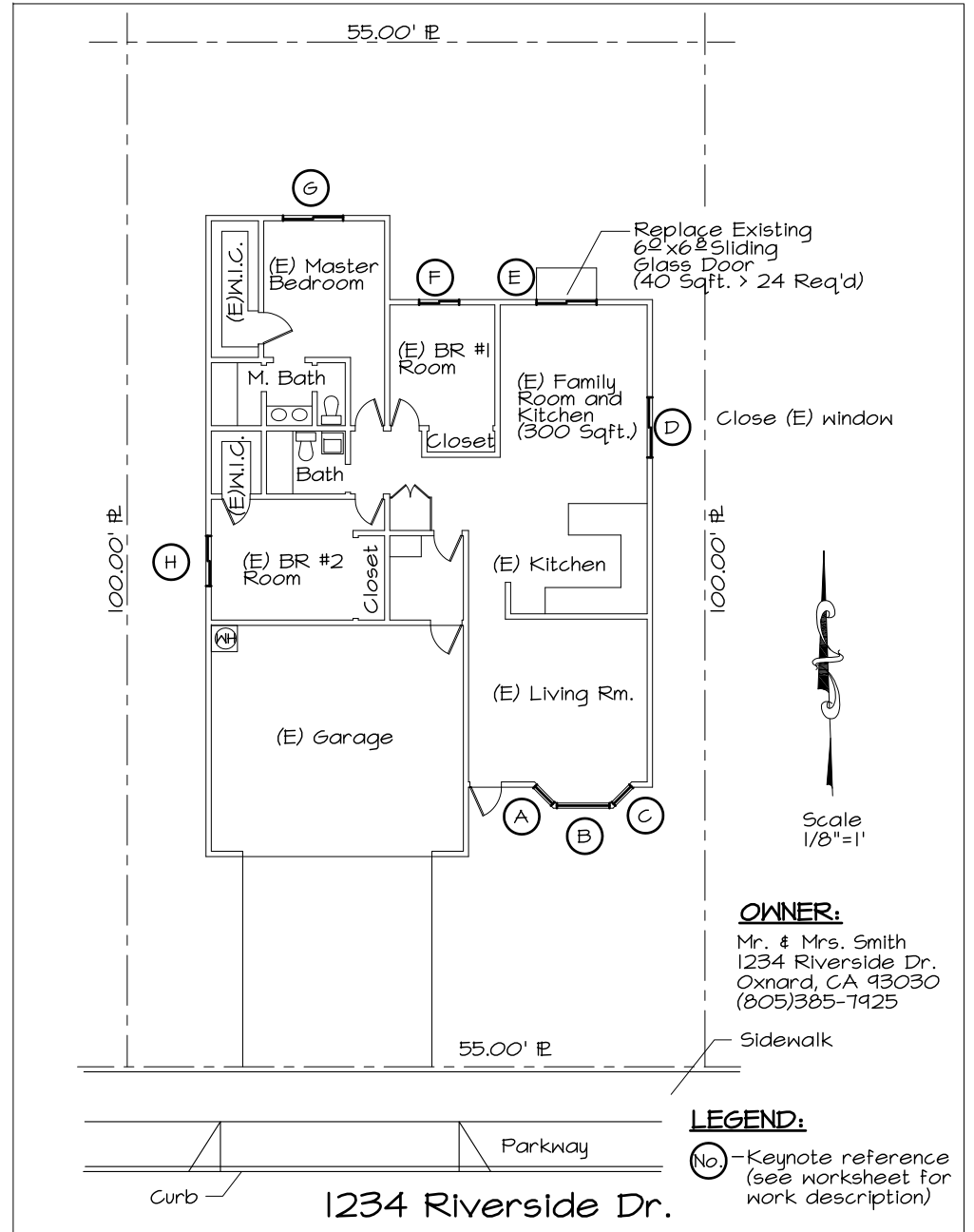
Removal of Windows

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



WINDOW REPLACEMENT - SAMPLE PLAN

**HELP FOR THE HOMEOWNER
BUILDING AND ENGINEERING**

Steve Newman 1/1/20
Deputy Building Official: Date
Date: 12/29/19 Sheet 1 of 5 B-251

INSTRUCTIONS:

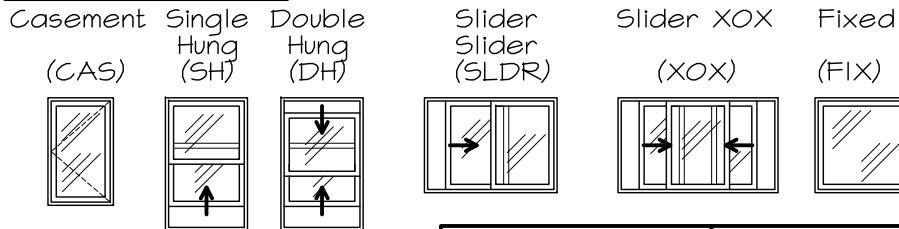
Completing the "Window Replacement Worksheet"

1. Show existing window size and type.
2. Show new window size and type.
3. Calculate and record new window area.
4. Confirm that your windows do not exceed the maximum allowable values for U-Factor and Solar Heat Gain Coefficient (SHGC.) If your windows exceed the maximum allowable values, you must attach energy calculations by a certified energy consultant.
5. Note room in which window is located.
6. Use the information on page 4 of the Worksheet to determine if the window is required to be tempered or safety glazing, and note if required.
7. Add up the total square footage of the windows being replaced and note total at the bottom of worksheet.
8. Attach additional sheets if needed for more windows.

Verify your proposed work complies with the requirements on sheets 4 and 5.

- Do not remove the labels showing U-Factor and SHGC from the replacement windows until after your final inspection.
- Verify that sufficient light and ventilation remains in rooms where windows are either being removed or their size reduced.
- Verify that at least one bedroom window or exterior opening meets the requirements for emergency egress.
- Verify if window fall prevention device is required for windows/doors above the 1st floor.
- If windows do not meet the maximum values for the U-Factor and SHGC, you must attach energy calculations by certified professional.

WINDOW TYPES:

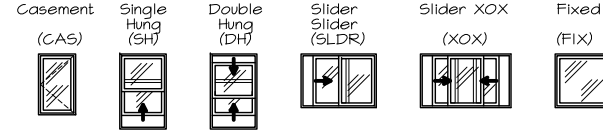


SAMPLE COMPLETED WORKSHEET

INSTRUCTIONS:

Complete the table below noting the complete scope of work. The lettering 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:



WORKSHEET

	ADDRESS:		PERMIT#:					
	EXISTING WINDOW SIZE & TYPE	NEW WINDOW SIZE & TYPE	WINDOW AREA	U-Factor 0.30 Max	SHGC 0.23 Max	LOCATION (ROOM)	SAFETY GLAZING (Yes/No)	EGRESS WINDOW (Yes/No)
(A)	26X50SH	26X50SH	12.5 ^{ft}	0.30	0.23	Liv RM	No	No
(B)	50X50 Fixed	50X50 Fixed	25 ^{ft}	0.30	0.23	Liv RM	No	No
(C)	26X50SH	26X50SH	12.5 ^{ft}	0.30	0.23	Liv RM	No	No
(D)	60X40SH	Closed	/	0.30	0.23	Fam. R	/	/
(E)	60X60SGD	60X60SGD	40 ^{ft}	0.30	0.23	Fam. R	Yes	No
(F)	40X40SLDR	40X40SLDR	16 ^{ft}	0.30	0.23	BR #1	No	Yes
(G)	60X40SLDR	60X40SLDR	24 ^{ft}	0.30	0.23	M. BR	No	Yes
(H)	50X40SLDR	50X40SLDR	20 ^{ft}	0.30	0.23	BR #2	No	Yes
(I)				0.30	0.23			
(J)				0.30	0.23			
(K)				0.30	0.23			
(L)				0.30	0.23			
(M)				0.30	0.23			
(N)				0.30	0.23			
(O)				0.30	0.23			
(P)				0.30	0.23			

Total Square Footage of Window Area 150^{ft}
 Submission of this form is not a guarantee that the above stated windows will meet the code requirements. The building inspector at time of inspection will verify the windows installed meet code requirements.
 I acknowledge and will meet the above requirements for windows egress per Section 1030 of the CA Bldg Code and Section 310 of the CA Residential Building Code and all other code requirements.

Applicant Signature: _____ Date: _____

CITY OF OXNARD CALIFORNIA

WINDOW REPLACEMENT WORKSHEET

HELP FOR THE HOMEOWNER
BUILDING AND ENGINEERING

Steve Newman 1/1/20
Deputy Building Official. Date
Date: 12/29/19 Sheet 1 of 2 B252

CITY OF OXNARD CALIFORNIA

WINDOW REPLACEMENT - SAMPLE PLAN

HELP FOR THE HOMEOWNER
BUILDING AND ENGINEERING

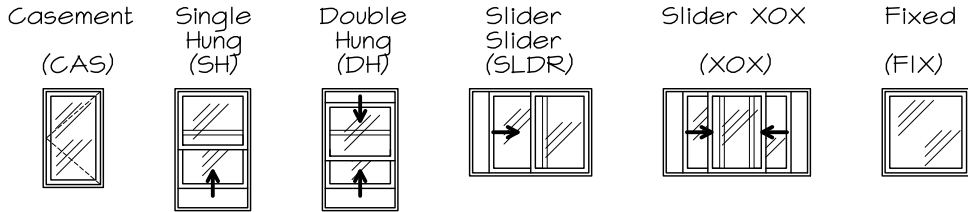
Steve Newman 1/1/20
Deputy Building Official. Date
Date: 12/29/19 Sheet 2 of 5 B-251

c:\steve\handouts\misc drawings\emergency window.dwg

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:



WORKSHEET

ADDRESS: _____ PERMIT#: _____

	EXISTING WINDOW SIZE & TYPE	NEW WINDOW SIZE & TYPE	WINDOW AREA	U-Factor 0.30 Max.	SHGC 0.23 Max.	LOCATION (ROOM)	SAFETY GLAZING (Yes/No)	EGRESS WINDOW (Yes/No)
(A)				0.30	0.23			
(B)				0.30	0.23			
(C)				0.30	0.23			
(D)				0.30	0.23			
(E)				0.30	0.23			
(F)				0.30	0.23			
(G)				0.30	0.23			
(H)				0.30	0.23			
(I)				0.30	0.23			
(J)				0.30	0.23			
(K)				0.30	0.23			
(L)				0.30	0.23			
(M)				0.30	0.23			
(N)				0.30	0.23			
(O)				0.30	0.23			
(P)				0.30	0.23			

Total Square Footage of Window Area _____

Submission of this form is not a guarantee that the above stated windows will meet the code requirements. The building inspector at time of inspection will verify the windows installed meet code requirements.

I acknowledge and will meet the above requirements for windows egress per Section 1030 of the CA Bldg Code and Section 310 of the CA Residential Building Code and all other code requirements.

Applicant Signature: _____ Date: _____

WINDOW REPLACEMENT WORKSHEET



**HELP FOR THE HOMEOWNER
BUILDING AND ENGINEERING**

Steve Newman 1/1/20
Deputy Building Official: _____ Date
Date: 12/29/19 Sheet 3 of 5 B251

CODE REQUIREMENTS:

I. LIGHT AND VENTILATION:

- **HABITABLE ROOMS** - All habitable rooms are required to have natural light (windows and skylights) sized to a minimum of 8% of the floor area of the room, and ventilation (openable portion of window or skylight) sized to a minimum of 4% of the floor area.
- **BATHROOMS, WATER CLOSET COMPARTMENTS, LAUNDRY ROOMS AND SIMILAR ROOMS** - shall be provided with aggregate glazing area in window of not less than 3 square feet, one half of which shall be openable. For exemption see code for lighting and ventilation requirements.
- **ADJOINING ROOMS** - To be considered to be a portion of an adjoining room where not less than one half of the area of the common wall is open and unobstructed and provides an opening of not less than one-tenth of the floor area of the interior room and not less than 25 square feet. To share light with an adjoining patio cover or sunroom the opening shall not be less than one-tenth of the floor area of the interior room and not less than 20 square feet.

2. EMERGENCY EGRESS WINDOWS:

Section 310 of the CA Residential Code and Section 1030 of the CA Building Code require that every sleeping room below the fourth story 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 (820.8 sq. in.);
- have a minimum net clear openable height 24 inches
- have a minimum net clear width of 20 inches; and
- have a finished sill height not more than 44 inches above the floor. Note: Houses built before 1976 may maintain a sill height up to 48 inches for replacement windows.

NOTE: Even though a window opening may meet the vertical and horizontal measurements, it may not meet the net opening requirement of 5.7 square feet. Measure carefully before installing windows.

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 meet emergency egress requirements.

Some crank type casement windows reduce the clear dimension as they open, so check your selected window.

EXEMPTION FOR SINGLE-FAMILY OR DUPLEX

Where windows are required to provide emergency escape and rescue openings, replacement windows shall be exempt to comply provided that the replacement window meets the following conditions:

- The replacement window is the manufacturer's largest standard size window that will fit within the existing frame or existing rough opening (no framing and stucco work.) The replacement window shall be permitted to be of the same operating style as the existing window or a style that provides for an equal or greater window opening area than the existing window.
- The replacement window is not part of a change of occupancy.
- Window opening control devices complying with ASTM F2090 shall be permitted for use on windows required to provide emergency escape and rescue openings.

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" of the floor;
- in windows in a stairwell or within 5' 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; or
- 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 side.



WINDOW REPLACEMENT WORKSHEET

HELP FOR THE HOMEOWNER
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Steve Newman 1/1/20
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Date: 12/29/19 Sheet 4 of 5 B251

4. ENERGY REQUIREMENTS

All new windows, window replacements, windows that are relocated, or windows that change in size must meet current State Law for energy codes. Windows shall have a max. U-Values of 0.30 and a maximum Solar Heat Gain Coefficient (SHGC) of 0.23. Windows will come labeled from the manufacturer with the values posted on the window, do not remove these labels until approved by the Building Inspector.

A detailed computer analysis of the structure by an energy consultant, with possible further modifications to the building, may allow number greater than the above (less energy efficient windows to be installed.)

5. INSPECTION PROCESS AND REQUIRED INSPECTIONS

Two inspections are typically required, inspection noted below. You can request an inspection by calling (805)385-7925.

ROUGH FRAME INSPECTION

- Inspection shall be scheduled when the new window is installed or an existing window opening is changed and before the exterior cover (stucco or siding) is added.

FINAL INSPECTION

- The inspection shall be scheduled when all the work is complete. Energy forms or evidence the windows meet a maximum U-factor per prescriptive values or meet the energy calculations reviewed and approved prior to the permit will need to be provided to the inspector. Verification of compliance to smoke and carbon monoxide detector installation requirements.

SPECIAL CASE - EXISTING WINDOW VERIFICATION INSPECTION

If using section R310.2.5, you must call for a pre-work inspection to verify existing conditions. The section requires "The replacement window is of the same operating style as the existing window or a style that provides for an equal or greater window opening area than the existing window.

6. SMOKE AND CARBON MONOXIDE DETECTORS

Smoke and carbon monoxide detectors are required for alterations, repairs, or additions exceeding one thousand dollars (\$1000.) These will be verified at the time of final inspection.

- Smoke and Carbon Monoxide Detectors: On the ceiling or wall outside of each separate sleeping area in the immediate vicinity of bedrooms or in each hallway outside of the rooms.
- Smoke Detectors: In each room used for sleeping purposes.
- Smoke and Carbon Monoxide Detectors: In each story, including habitable basements. (Note: In dwellings or dwelling units with split levels and without an intervening door between the adjacent levels, a smoke and carbon monoxide detectors be installed on the upper level shall suffice for the adjacent lower level provided that the lower level is less than one full story below the upper level.)

7. WINDOW FALL PROTECTION

Where window fall prevention devices are not provided, window opening control devices complying with ASTM F2090 shall be installed where an existing window is replaced where all the following apply to the replacement window:

- The window is operable.
- The window replacement includes replacement of the sash and the frame.
- The sill is at a height less than 24 inches above the finished floor.
- The window will permit openings that will allow passage of 4 inch diameter sphere where the window is in its largest opened position.
- The vertical distance from the sill to the finished grade or other surfaces below, on the exterior of the building, is greater than 72 inches.

The window opening control device, after operation to release the control device allowing the window to fully open, shall not reduce the minimum net clear opening area of the window unit.

"Sill" is defined as the lowest point of the clear opening of the window.



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