

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.)

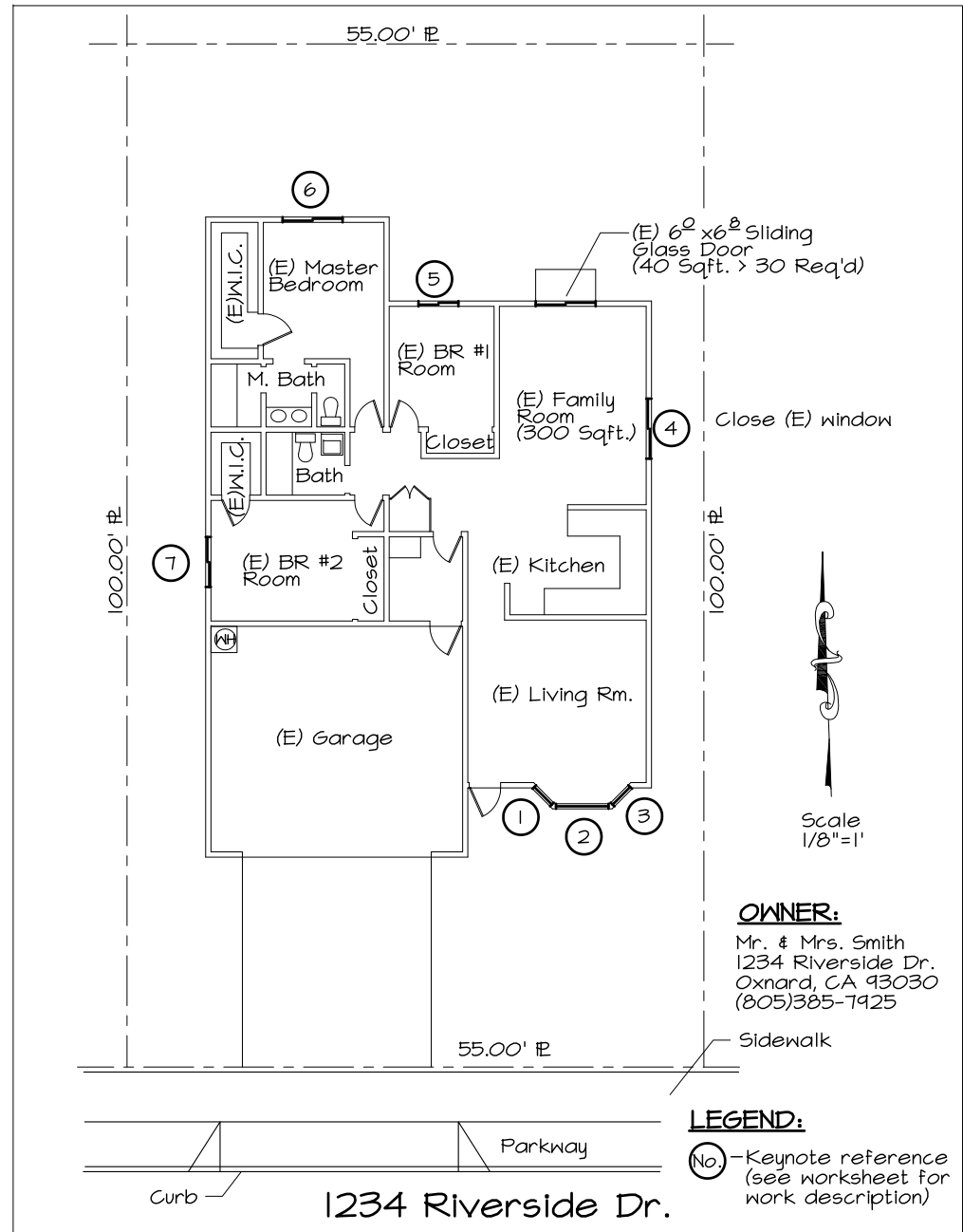
Removal of Windows

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



WINDOW REPLACEMENT - SAMPLE PLAN

**HELP FOR THE HOMEOWNER
DEVELOPMENT SERVICES**

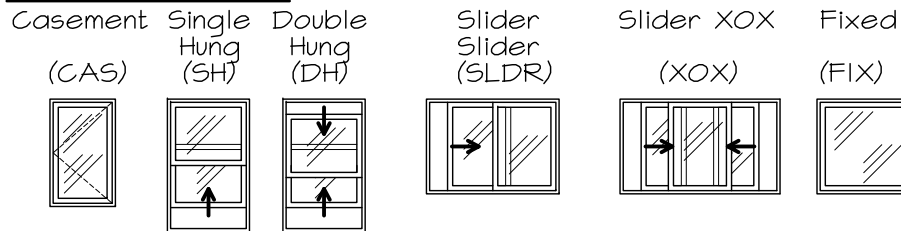
Steve Newman 7/1/14
Deputy Building Official: Date
Date: 6/27/14 Sheet 1 of 4 B-251

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. Note room in which window is located.
5. 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.
6. Verify that sufficient light and ventilation remains in rooms where windows are either being removed or their size reduced.
7. Verify that at least one bedroom window or exterior opening meets the requirements for emergency egress.
8. Add up the total square footage of the windows being replaced and note total at the bottom of worksheet.
9. If additional sheets are necessary to include more windows being replaced, attach additional worksheets.

WINDOW TYPES:

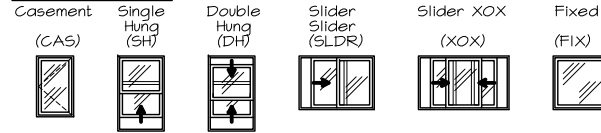


SAMPLE COMPLETED WORKSHEET

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 0.32 Max	SHGC 0.25 Max	LOCATION (ROOM)	SAFETY GLAZING (Yes/No)
①	26X50SH	26X50SH	12.5 ^{sq}	0.32	0.25	Liv RM	No
②	50X50 Fixed	50X50 Fixed	25 ^{sq}	0.32	0.25	Liv RM	No
③	26X50SH	26X50SH	12.5 ^{sq}	0.32	0.25	Liv RM	No
④	60X40SH	Closed		0.32	0.25	Fam. R	
⑤	40X40SLDR	40X40SLDR	16 ^{sq}	0.32	0.25	BR #1	No
⑥	60X40SLDR	60X40SLDR	24 ^{sq}	0.32	0.25	M. BR	No
⑦	50X40SLDR	50X40SLDR	20 ^{sq}	0.32	0.25	BR #2	No
⑧				0.32	0.25		
⑨				0.32	0.25		
⑩				0.32	0.25		
⑪				0.32	0.25		
⑫				0.32	0.25		
⑬				0.32	0.25		
⑭				0.32	0.25		
⑮				0.32	0.25		
⑯				0.32	0.25		

Total Square Footage of Window Area 110 ^{sq}

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 1029 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
DEVELOPMENT SERVICES

Building Official: _____ Date: _____
Date: 10/14/04 Sheet 1 of 2 B252



WINDOW REPLACEMENT - SAMPLE PLAN

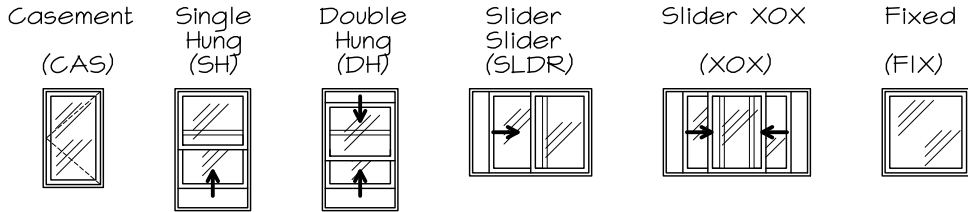
HELP FOR THE HOMEOWNER
DEVELOPMENT SERVICES

Steve Newman 7/1/14
Deputy Building Official: _____ Date: _____
Date: 6/27/14 Sheet 2 of 4 B-251

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 0.32 Max	SHGC 0.25 Max.	LOCATION (ROOM)	SAFETY GLAZING (Yes/No)
1				0.32	0.25		
2				0.32	0.25		
3				0.32	0.25		
4				0.32	0.25		
5				0.32	0.25		
6				0.32	0.25		
7				0.32	0.25		
8				0.32	0.25		
9				0.32	0.25		
10				0.32	0.25		
11				0.32	0.25		
12				0.32	0.25		
13				0.32	0.25		
14				0.32	0.25		
15				0.32	0.25		
16				0.32	0.25		

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 1029 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
DEVELOPMENT SERVICES**

Steve Newman 7/1/14
Deputy Building Official: _____ Date
Date: 6/27/14 Sheet 3 of 4 B251

CODE REQUIREMENTS:

I. LIGHT AND VENTILATION:

HABITABLE ROOMS:

- shall be provided with natural light by means of exterior glazed openings with an area not less than one tenth of the area of such rooms with a minimum of 10 square feet. The kitchen may be provided with artificial light.
- shall be provided with natural ventilation by means of openable exterior openings with an area not less than 1/20 of the area of such rooms with a minimum of 5 square feet.

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 1/20 of the floor area of such rooms with a minimum of 1-1/2 square feet.
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 five air changes an hour. (Discharge shall be at least 3' from any opening into the occupied portions of the building.)

2. EMERGENCY EGRESS WINDOWS:

Section 310 of the CA Residential Code and Section 1029 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.

Complying Window Sizes

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

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

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 meet 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" of the floor;
- in windows in a stairwell or within 5' of the landings and less than 60" 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.

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 0.32 and a maximum Solar Heat Gain Coefficient (SHGC) of 0.25. 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.)



WINDOW REPLACEMENT WORKSHEET

HELP FOR THE HOMEOWNER
DEVELOPMENT SERVICES

Steve Newman 7/1/14
Deputy Building Official: _____ Date
Date: 6/27/14 Sheet 4 of 4 B251