



City of Los Alamitos

Community Development: Building & Safety Division
3191 Katella Ave.
Los Alamitos, CA 90720-5600
(562) 431-3538

WINDOW AND DOOR REPLACEMENTS

RESIDENTIAL PROPERTIES

All window and exterior door replacements require a building permit. A simple floor and plot plan is required for review and permit issuance. Show existing windows and replacement window sizes and type. Replacement windows shall be exempt from maximum sill height requirements if the replacement window is the manufacturer's largest standard size window that will fit within the existing frame or rough opening and same operating style. **CRC 310.2.5**

MINIMUM WINDOW REQUIREMENTS

- All rooms used for sleeping purposes shall have one complying Escape/Rescue window meeting ALL the following minimum requirements. **CRC 310.2:**
 - Net clear openable space of 5.7 sq ft (5.0 sq ft min at grade floor openings)
 - Net clear openable height of 24 inches
 - Net clear openable width of 20 inches
 - Maximum finished sill height of 44 inches
- All habitable rooms shall have windows with their total areas equaling at least 8% or a minimum of the room's floor area and with their total openable area equaling at least 4% of the room's floor area **CRC 303.1.**
- All new windows and window replacements must meet the following minimum energy requirements:
 - U-factor – 0.30 Max
 - SHGC – 0.23 Max
- NFRC Labels are required to remain on windows for verification by the building inspector.
- Maintain or replace weather resistive barriers. Inspection is required to verify compliance.
- Bay windows and similar assemblies require the manufacturer's listed (UL, ICC, or equiv.) installation instructions for permit issuance.
- Safety glazing or tempered glass is required in hazardous locations per **CRC 308.4:**
 - Glazing in fixed, swinging, sliding & bifold doors.
 - Glazing in an individual fixed or operable panel adjacent to a door where the bottom edge of the glazing is less than 60" above the floor surface and meets either condition:
 - Glazing is within 24" of either side of door.
 - Glazing is on a wall less than 180 degrees from the plane of the door & within 24" of the hinge side of an in-swinging door.
 - Glazing in an individual fixed or operable window panel that meets all of the following:
 - Windows larger than 9 SF.
 - Bottom edge less than 18" above floor.

- “Identification. each pane of glazing installed in hazardous location as defined in Section **CRC 308.4** shall be provided with a manufacturer’s designation that is visible in the final installation. The designation shall be acid etched, sandblasted, ceramic-fired, laser etched, embossed, or be of a type which once applied cannot be removed without being destroyed **CRC 308.1**.
- All exterior doors require an exterior light switched from inside **CEC 210.70(A)(1)**.
- Additional requirements when changing a window to a sliding door are **CRC 311.3**:
 - A landing is required. A minimum of 3 ft out and at least the door width.
 - A door may swing over a landing that is level with interior.
 - Exterior lighting required. A switch and weather-proof light with photocell and motion sensor is required outside each outdoor entrance or exit **CEC 210.70(A)(1)**.

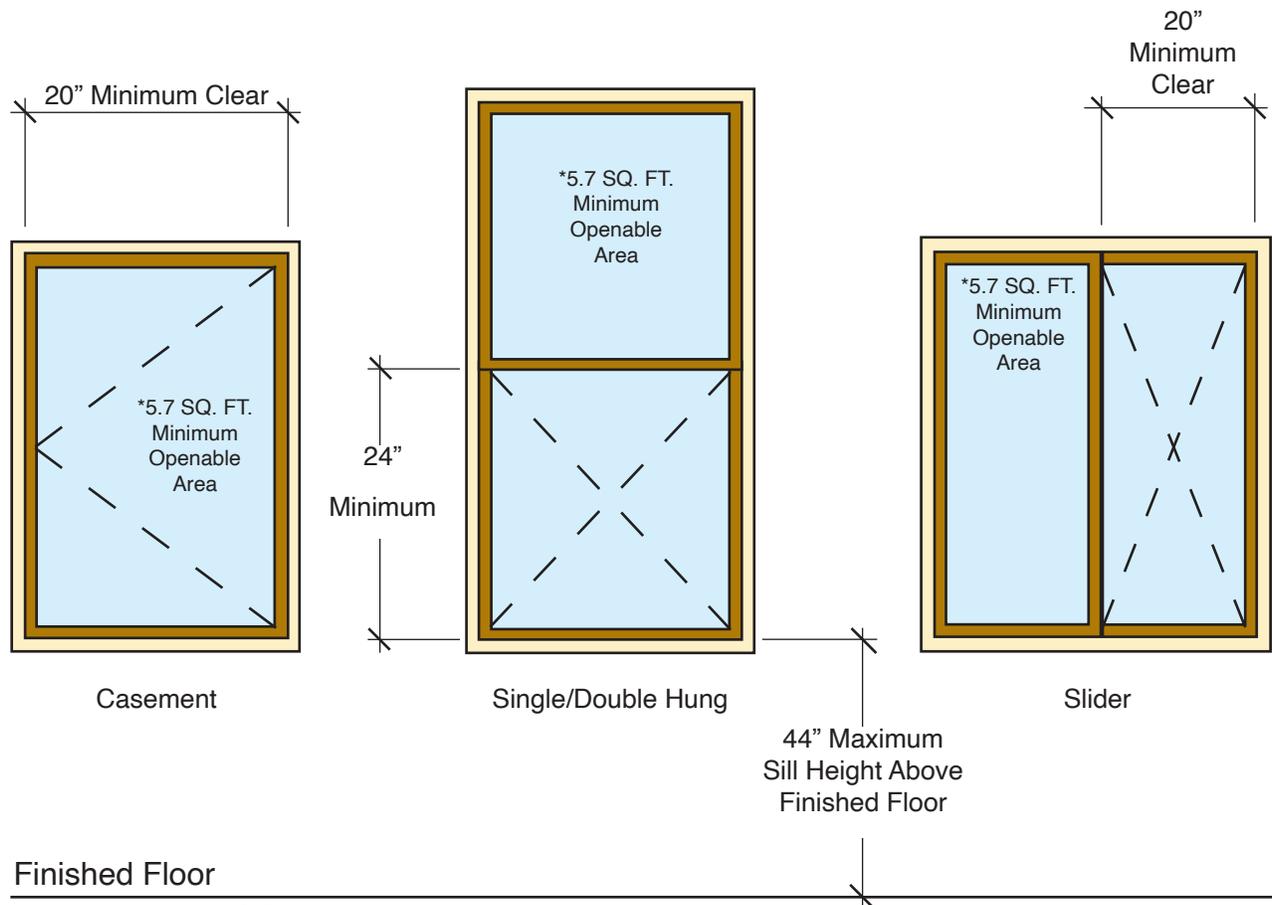
Moving the electrical wiring and adding lighting will require an electrical permit.

INSPECTIONS:

- Framing and window flashing
- Stucco lath repair
- Rough electrical, if moving outlet or adding a switch and outside light prior to covering with insulation and/or drywall.
- Final inspection

NOTE:

Using both the minimum sizes for width and height will not obtain the required minimum area (5.7 sq ft; 5.0 sq ft at grade).



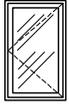
*Exception: 5.0 SQ. FT. allowed if located at grade.

INSTRUCTIONS:

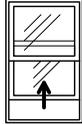
Complete the table below noting the complete scope of work. The numbering system can be used to reference locations of proposed work on the plan. Use the the code information on the back of this sheet to verify that your proposed construction meets code requirements. If you need assistance see our "WINDOW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

WINDOW TYPES:

Casement (CAS)



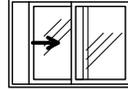
Single Hung (SH)



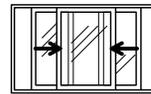
Double Hung (DH)



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.



WINDOW REPLACEMENT WORKSHEET

HELP FOR THE HOMEOWNER
LOS ALAMITOS BUILDING AND SAFETY

Paul Melby 7/15/10
Building Official: Date:
DATE: 1/1/08 SHEET 1 OF 3 B252

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 1026 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 (820.8 sq. in.)
- 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 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 windows and window replacement must meet the following minimum energy requirements:

U-factor: All climate zones maximum u-factor of .40

SHGC: Climate zones 2 and 4-14 maximum SHGC of .40

Climate zone 15 maximum SHGC of .35

Climate zones 1,3 and 16 SHGC N/R



WINDOW REPLACEMENT WORKSHEET

HELP FOR THE HOMEOWNER
LOS ALAMITOS BUILDING AND SAFETY

Paul Melby
Building Official:

7/15/10
Date:

DATE: 1/1/08

SHEET 2 OF 3

B252