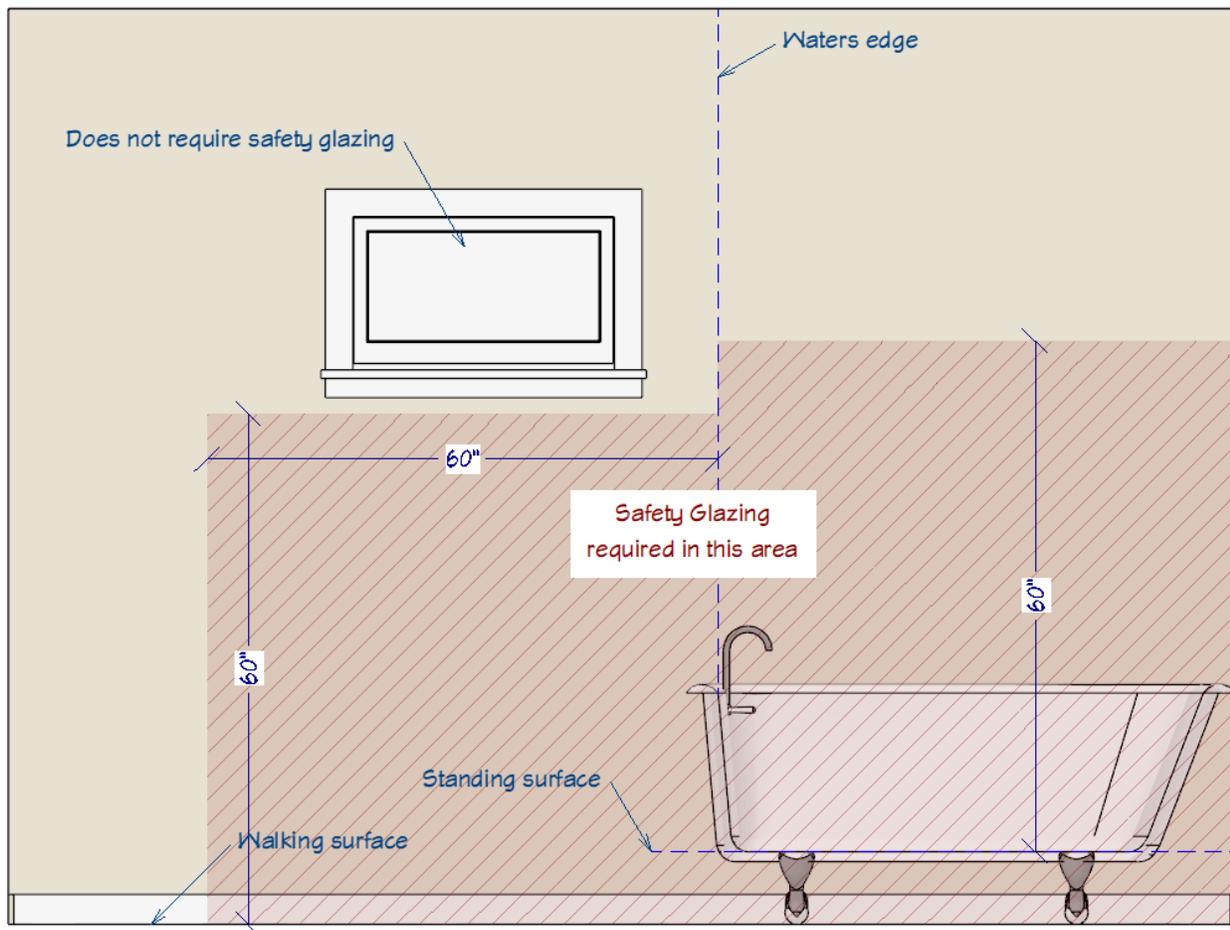# Safety Glazing
(Tempered Windows)

This handout describes when the Humboldt County Building Division requires safety glazing or tempered windows per the 2019 California Residential Code. Safety glazing is required to prevent injury caused by broken glass. In general, it is required around hazardous places such as wet areas, near doors, near stairs, windows close to walking surfaces, and windows in locations with a high wildfire risk.

Wet Surfaces | Safety Glazing

R308.4.5 Glazing and Wet Surfaces. This section applies to windows within walls containing OR facing hot tubs, spas, whirlpools, saunas, steam rooms, bathtubs, showers and indoor or outdoor swimming pools.
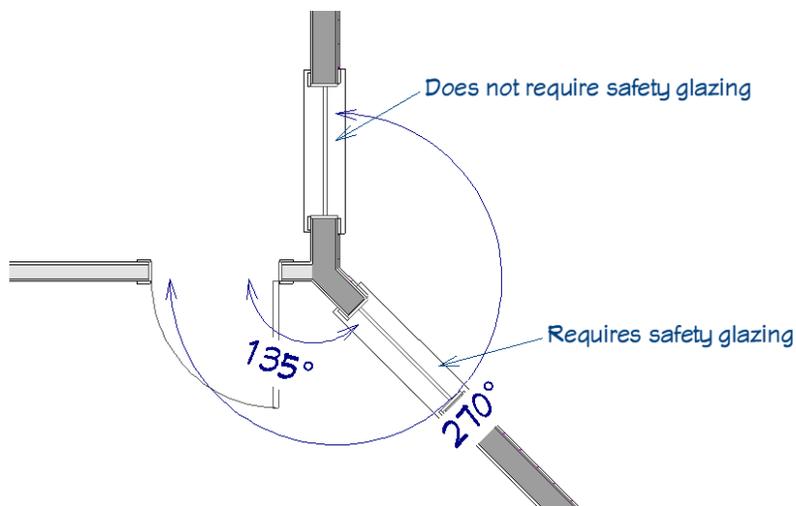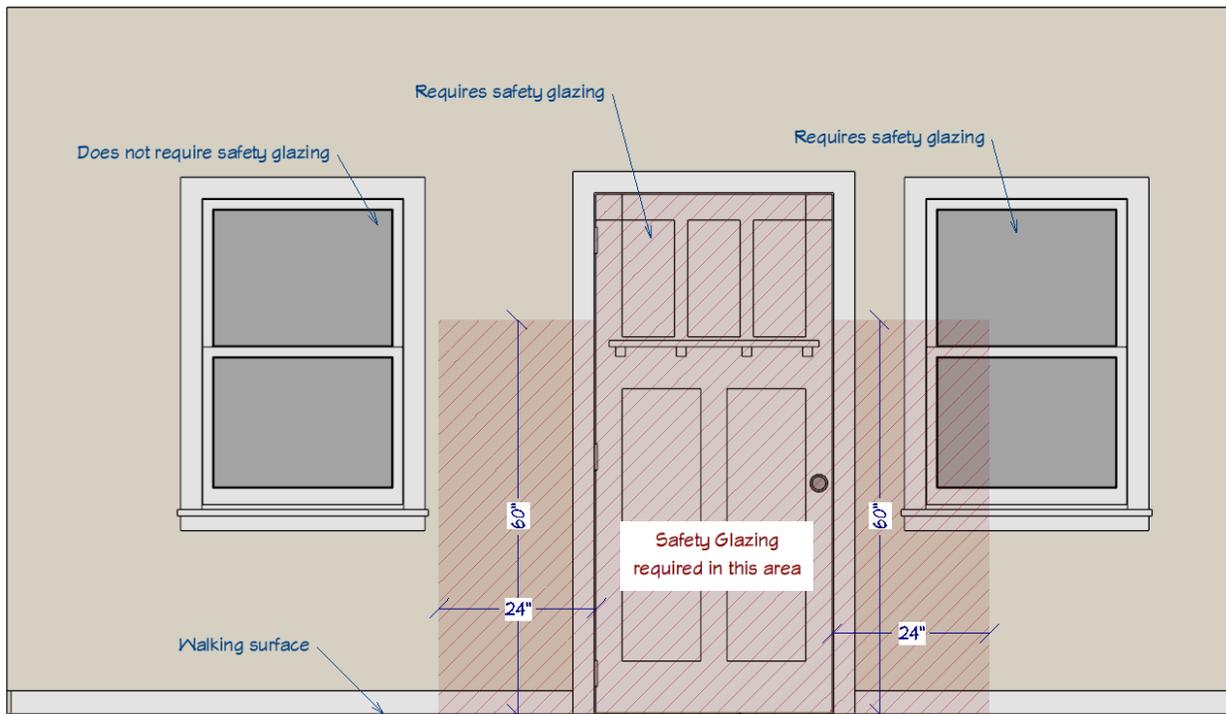

Exceptions

1. Glazing that is more than 60 inches (1524 mm), measured horizontally and in a straight line, from the water's edge of a bathtub, hot tub, spa, whirlpool, or swimming pool or from the edge of a shower, sauna, or steam room.

Adjacent to Doors | Safety Glazing

R308.4.2 Glazing Adjacent to Doors and R308.4.1 Glazing in Doors. If any part of the glass pane is within the red zone safety glazing will be required.
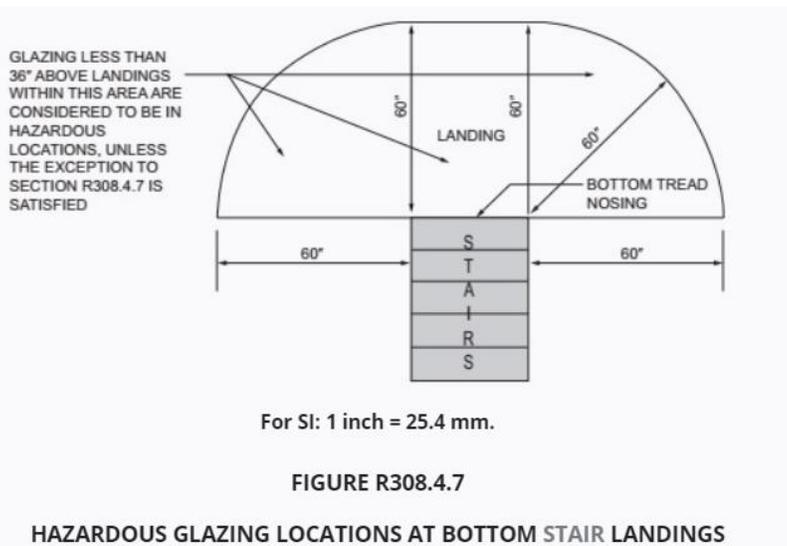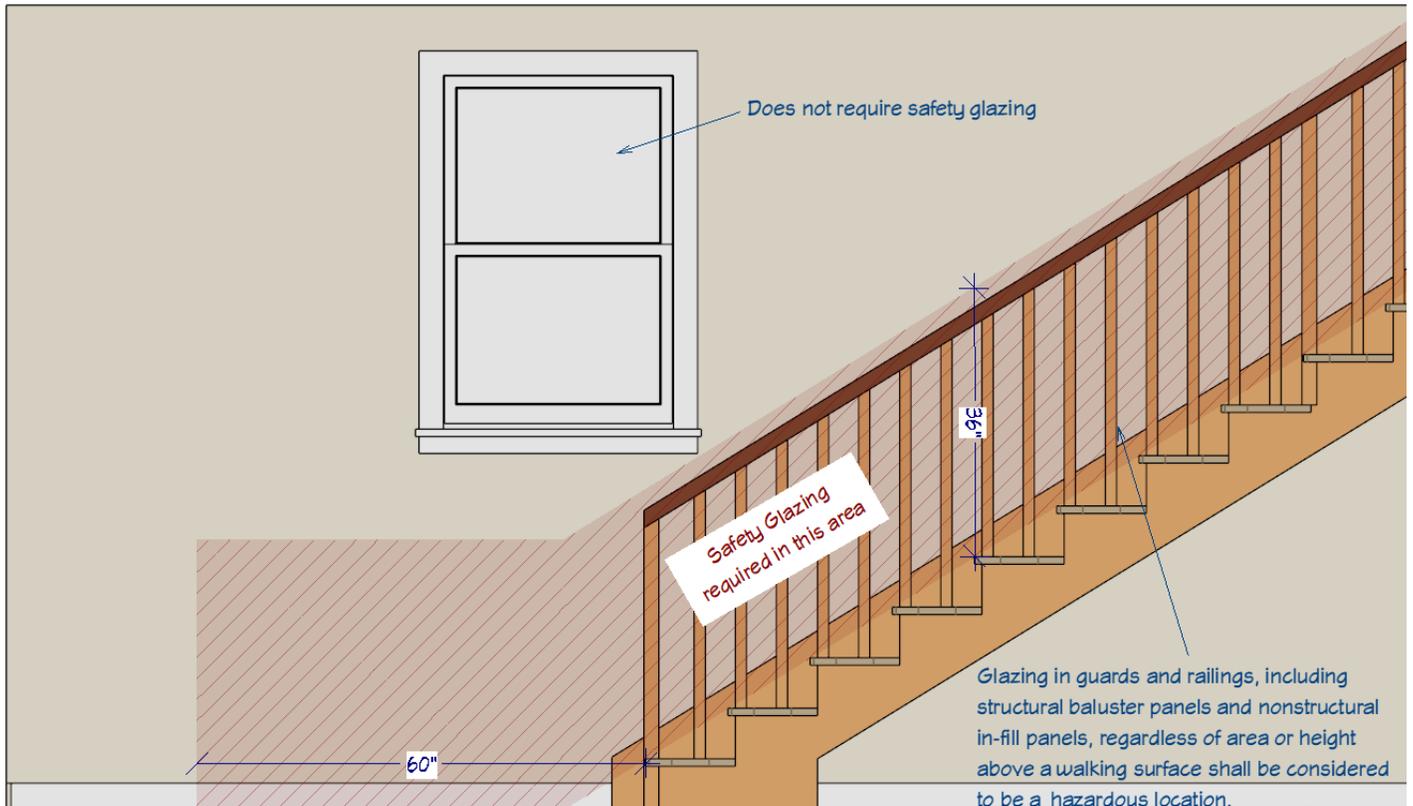

Exceptions

1. Decorative glazing.
2. Where there is an intervening wall or other permanent barrier between the door and the glazing.
3. Where access through the door is to a closet or storage area 3 feet (914 mm) or less in depth. Glazing in this application shall comply with Section R308.4.3.
4. Glazing that is adjacent to the fixed panel of patio doors.

Adjacent to Stairs | Safety Glazing

R308.4.6 Glazing Adjacent to Stairs and Ramps and R308.4.7 Glazing Adjacent to the Bottom Stair Landing. If any part of the glass pane is within the red zone safety glazing will be required.

Does not require safety glazing

36"

Safety Glazing required in this area

60"

Glazing in guards and railings, including structural baluster panels and nonstructural in-fill panels, regardless of area or height above a walking surface shall be considered to be a hazardous location.

GLAZING LESS THAN 36" ABOVE LANDINGS WITHIN THIS AREA ARE CONSIDERED TO BE IN HAZARDOUS LOCATIONS, UNLESS THE EXCEPTION TO SECTION R308.4.7 IS SATISFIED

60"

LANDING

60"

60"

BOTTOM TREAD NOSING

60"

STAIRS

60"

For SI: 1 inch = 25.4 mm.

FIGURE R308.4.7

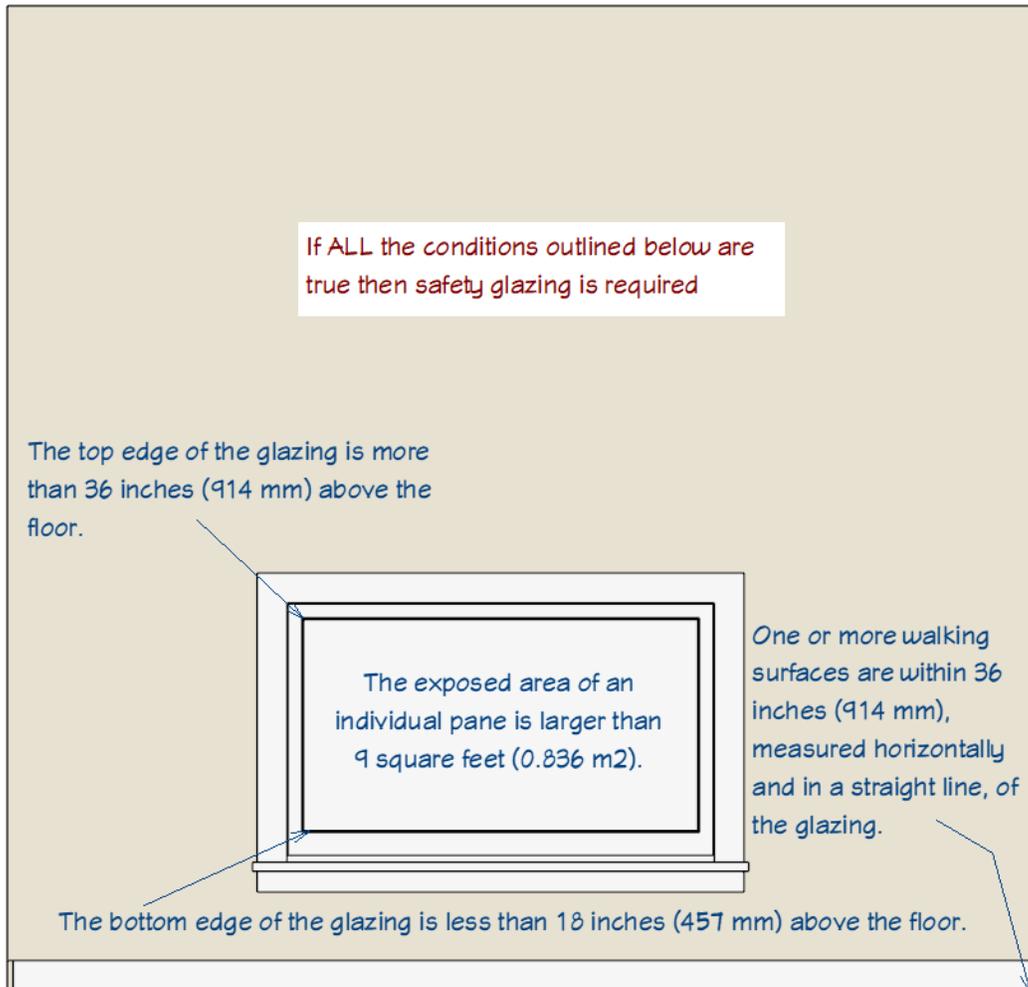**HAZARDOUS GLAZING LOCATIONS AT BOTTOM STAIR LANDINGS**

Exceptions

1. Where glazing is adjacent to a walking surface and a horizontal rail is installed at 34 to 38 inches (864 to 965 mm) above the walking surface. The rail shall be capable of withstanding a horizontal load of 50 pounds per linear foot (730 N/m) without contacting the glass and have a cross-sectional height of not less than 11/2 inches (38 mm).
2. Glazing 36 inches (914 mm) or more measured horizontally from the walking surface.

Close to Walking Surface | Safety Glazing

R308.4.3 Glazing in Windows. If all the conditions outlined in the image below are true, then safety glazing will be required.

If ALL the conditions outlined below are true then safety glazing is required

The top edge of the glazing is more than 36 inches (914 mm) above the floor.

The exposed area of an individual pane is larger than 9 square feet (0.836 m2).

One or more walking surfaces are within 36 inches (914 mm), measured horizontally and in a straight line, of the glazing.

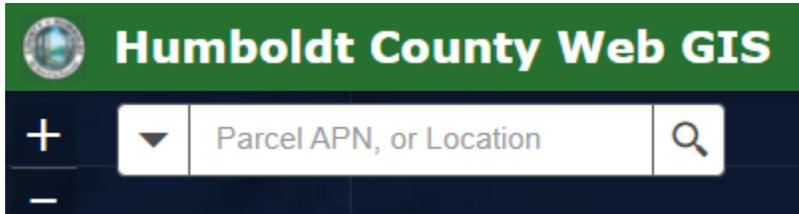The bottom edge of the glazing is less than 18 inches (457 mm) above the floor.

Exceptions

1. Decorative glazing.
2. Where glazing is adjacent to a walking surface and a horizontal rail is installed 34 to 38 inches (864 to 965 mm) above the walking surface. The rail shall be capable of withstanding a horizontal load of 50 pounds per linear foot (730 N/m) without contacting the glass and have a cross-sectional height of not less than 11/2 inches (38 mm).
3. Outboard panes in insulating glass units and other multiple glazed panels where the bottom edge of the glass is 25 feet (7620 mm) or more above grade, a roof, walking surfaces or other horizontal [within 45 degrees (0.79 rad) of horizontal] surface adjacent to the glass exterior.
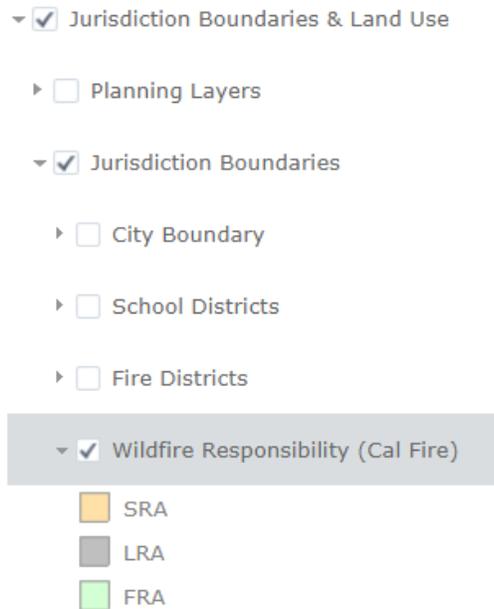
Wildland Urban Interface (WUI) | Safety Glazing

If your proposed development is required to comply with exterior wildlife exposure requirements then all your windows will be required to be tempered on at least one side. To see if this requirement pertains to your project follow the below steps.

1. Open Humboldt Counties Web GIS.
2. Input your accessor parcel number (APN) in the search bar.

3. Check the following layer list checkboxes.

4. If you see the below gradient covering your parcel, then you are in the SRA and you can proceed to the following step. If you are not in the SRA, you will not need to comply with WUI requirements.

5. Reference section R337.1.3 Application and R337.1.3.1 Application Date and Where Required of the California Residential Code to see if your proposed project fits the criteria. If it does you will need to comply with WUI requirements and provide tempered windows.