Town of Portola Valley
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# Understanding the 50 Percent Rule

The Town of Portola Valley has adopted a threshold level for construction projects whose scope is an addition, alteration or addition and alteration to an existing building to be considered a new building for the implementation of the Wildland Urban Interface requirements. This handout is intended to explain the criteria for the determination as to whether or not a construction project exceeds the threshold to be considered new construction.

Additions, alterations and additions that include alterations to existing buildings are defined as newly constructed when a building permit or permits have been issued within any 12-month period that collectively exceeds more than:

- 50 percent of the existing floor area;
- 50 percent of the existing wall area; or
- The combination of the percentages of affected floor area and affected wall area exceeds 50 percent are considered new buildings.

### Calculation of Percentage of Floor Area (PFA)

The calculation of the percentage of floor area is based on the square footage the proposed scope of work (SFP) and the square footage existing building (SFE). The floor area of the proposed scope of work includes the square footage of:

- All additions;
- All rooms affected by any addition such as changing an existing window to a door or the construction of a wall to create access to the addition; and
- All rooms affected by structural changes made in the building, such as walls, columns, beams or girders, floor or ceiling joists and coverings, roof rafters, roof diaphragms, footings, piles or retaining walls or similar components.

**Example 1:**

A building permit was issued to add 1,000 square feet to an existing 3,000 square foot building on January 4, 2021. The scope of work is to add 1,000 square feet to a 200 square foot kitchen to create an open kitchen/living area. A beam is required to be installed the full length of the kitchen to create the opening. The total SFP is 1,200 square feet because structural changes are being made to the kitchen.

| Percent Floor Area Affected (PFA) Calculation Table | |
|---|---|
| Sq. Ft. of Proposed work (SFP) | 1,200 sq. ft. |
| Sq. Ft. of Existing Building (SFE) | 3,000 sq. ft. |
| **Percent affected (SFP/SFE) X 100** | **40%** |



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The proposed scope of work in this example will not trigger the WUI requirements be implemented for the entire building.

The existing building's square footage (SFE) is the building's square footage at the time of filing for a planning or building permit application and includes attached garages and enclosed porches. Unenclosed porches and carports are not included in the calculation. However, if an addition, alteration or an addition that included an interior alteration was completed in the previous 12 months of the filing of a planning or building permit application, then the existing building's square footage is the square footage before the previous work was undertaken.

**Example 2:**

A building permit was issued to add 1,000 square feet to an existing 3,000 square foot building on January 4, 2021 (example 1). The work was completed and received an approved final inspection on June 18, 2021. If a planning or building permit application is filed on or before June 18, 2022 the square footage of the existing building is 3,000 square feet. If a planning or building permit application is filed after June 18, 2022 the square footage of the existing building is 4,000 square feet.

**Calculation of Percentage of Affected Wall Area (PWA)**

The calculation of the percentage of affected wall area is based on the wall area (length of wall X height of wall) affected by the proposed scope of work (WAP) and the wall area of the existing building (WAE). The calculated wall area affected includes all interior and exterior walls where:

- Some or all studs are proposed to be removed; and/or
- The surface of both sides of the studs are proposed to be removed such that one can see through the wall.

The length of wall where some or no studs are to remain for **exterior walls** is based on the length of room(s) the alteration affects. The length of wall where some or no studs are to remain for **interior walls** is based on the length of room(s) the alteration affects.

The WAE is calculated by:

- The length times the height including doors and windows of the exterior walls; plus
- The length time the height of each interior wall.

**Example 3:**

The wall area based on the building plans below is as follows:

| **Existing Wall Area Calculation Table** | |
|---|---|
| Exterior Walls | Front; 24' X 8' = **192 sq. ft.**<br>Back; 24' X 8' = **192 sq. ft**.<br>Left Side: 16' X 8" = **128 sq. ft**.<br>Right Side: 16' X 8" = **128 sq. ft.** |
| Interior Walls | Utility/Bath: 5' X 8' = **40 sq. ft**.<br>Shower: 3' X 8' = **24 sq. ft.**<br>Bdrm./Bath & Utility: 9 X 8 = **72 sq. ft.**<br>Closet/Bdrm.: 2.5' X 8' = **20 sq. ft.** |

| | |
|---|---|
| | Closet Door/Bdrm.: 3’ X 8’ = **24 sq. ft.**<br>Kit. & Liv./Bdrm. & Bath:<br>**15 X 8 = 144 sq. ft.** |
| **Total Existing Wall Area** | **964 sq. ft.** |

Assumes 6” wall thickness and 8’ wall heights


**Example 4:**

Using the building plans above, a building permit application is submitted with the following scope:

- Change the exterior front window to a 3-foot exterior door in the bedroom;
- Change the front living room window to outswing French doors;
- Relocate the interior bedroom sliding barn door from its current location to the other end of the bedroom;
- Close off the door from the kitchen into the bathroom;
- Demolish the closet and install a door from the bedroom into the bathroom; and
- Build a new same sized closet located at the front exterior wall of the house.

The WAP for this project is as follows:

| **Proposed Wall Area Calculation Table** | |
|---|---|
| Exterior Walls | Front Bedroom; 10’ X 8’ = **80 sq. ft.**<br>Front Living Room; 12’ X 8’ = **96 sq. ft**. |
| Interior Walls | Bdrm./Bath 7 X 8 = **56 sq. ft.**<br>Closet/Bdrm.: 2.5’ X 8’ = **20 sq. ft.**<br>Closet Door/Bdrm.: 3’ X 8’ = **24 sq. ft.** |

| | |
|---|---|
| | Kit. Bath: 5 X 8 = **40 sq. ft.** |
| **Total Wall Area Proposed** | **316 sq. ft.** |

Assumes 6" wall thickness and 8' wall heights

The percentage of wall are affected is as follows

| **Percent Wall Area Affected Calculation Table** | |
|---|---|
| Sq. Ft. of Wall Area Proposed (WAP) | 316 sq. ft. |
| Sq. Ft. of Existing Wall Area (WAE) | 964 sq. ft. |
| **Percent affected (SFP/SFE) X 100** | **33%** |

The proposed scope of work in this example will not trigger the WUI requirements be implemented for the entire building.

**Calculation of Combination of Percentage of Affected Floor Area (PFA) and Wall Area (PWA)**: When the combination of the percentage of affected floor as described above plus the percentage of wall area as described above (PFA + PWA > 50%) exceeds 50% then the entire building is required to comply with all of the WUI requirements.

**Example 4:**

Using the building plans above, if a 10" X 16" garage to the building was added to the scope of work in example 3 then the combination of PFA and PWA are as follows:

| **Percent Floor Area Affected (PFA) Calculation Table** | |
|---|---|
| Sq. Ft. of Proposed work (SFP) | 160 sq. ft. |
| Sq. Ft. of Existing Building (SFE) | 384 sq. ft. |
| **Percent affected (SFP/SFE) X 100** | **42%** |

| **PFA + PWA Calculation Table** | |
|---|---|
| PFA | 42% |
| PWA | 33% |
| **PFA + PWA** | **75%** |

The proposed scope of work in this example will trigger the WUI requirements be implemented for the entire building.