

Floor Area Calculation - Worksheet

Town of Woodside

2955 Woodside Road

Woodside, CA 94062

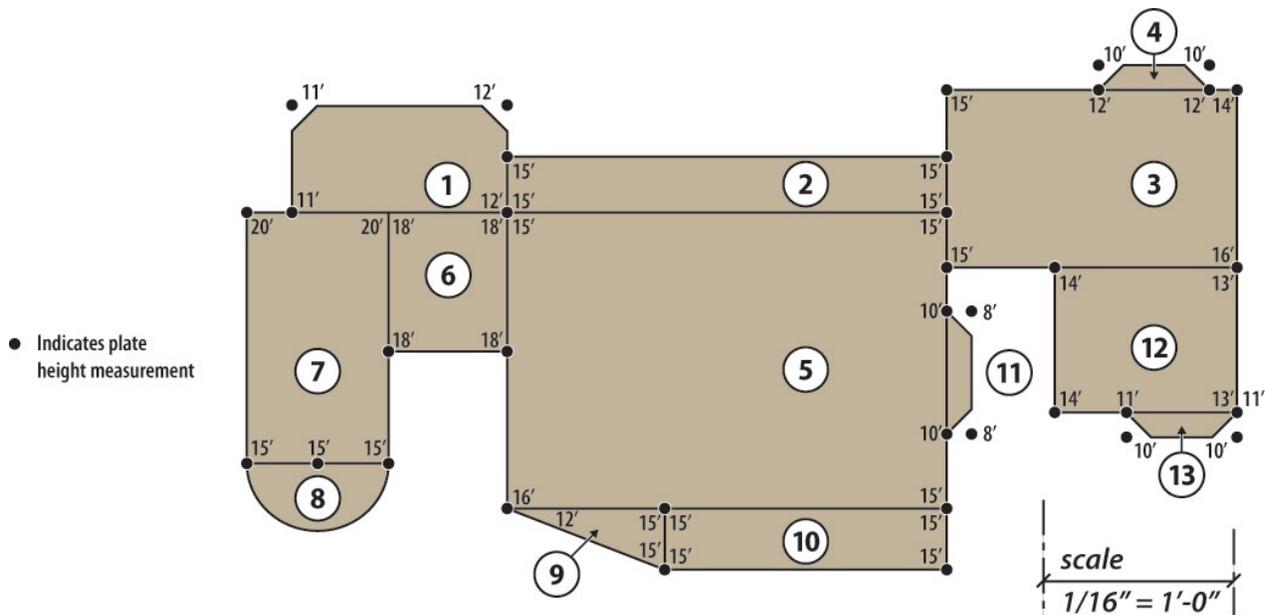
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How to Calculate the Floor Area for Buildings

(See Woodside Municipal Code 153.206 for more information.)

1. Divide the footprint of the building into non-overlapping simple sections (rectangles, triangles, and circles), creating a new section at points where the roof or eave line changes, at building level changes, and at points where the grade changes are more than 5%. See example below.



2. Calculate the footprint area of each section of the example building (see chart on the next page)
3. Determine the plate height at each of the four corners of rectangles, at each of the three corners of triangles, and at the center point of circles (see diagram above and attached chart). Plate heights are measured from existing or finished grade, whichever is lower, to the intersection of the exterior wall with the roof. For example, a section that is associated with a two-story element of a residence would typically have plate heights of 20 feet or so (see chart on the next page).
4. Determine the average plate height (APH) of each section by dividing the sum of the plate heights by 4 for rectangles, by 3 for triangles, or by simply taking the plate height at the center for circles (see chart on the next page).
5. Assign a multiplier to each section, based on the section's APH, as follows: 1 + 0.1 for every APH foot over 11 feet. Example: 15.5 APH = 1.45 multiplier (see chart on the next page).
6. Multiply each section's footprint area by its multiplier to get the calculated floor area of each section. (Note: Bay windows less than 25 square feet in area can be excluded. Those portions of each bay window exceeding 25 square feet in area count.) (see chart on the next page)

7. Total the calculated floor area of each section to get the calculated total floor area of the building (see chart on the next page).
8. For one-story portions of main residences only, up to 600 square feet of footprint area that would otherwise have a floor area multiplier of either (i) more than 1.0 but less than 1.5 shall have its multiplier reduced to 1.0 or (ii) greater than 1.5 shall have its multiplier reduced by 0.5.

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Example Chart:

Section Number (shape)	Plate Height #1	Plate Height #2	Plate Height #3	Plate Height #4	Sum of Plate Heights	Average Plate Height (APH)	Multiplier	Floor Area of Section Footprint	Calculated Floor Area of Each Section
1 rectangle	12	11	12	11	46	11.5	1.05	$([9 \times 18] - 4) = 158$	165.90
2 rectangle	15	15	15	15	60	15	1.4	$(39 \times 5) = 195$	273.00
3 rectangle	15	16	15	14	60	15	1.4	$(25 \times 16) = 400$	595.00
4 rectangle*	10	10	12	12	44	11	1.0	$([9 \times 2] - 4) = 14$	0.00*
5 rectangle	15	15	15	16	61	15.25	1.425	$(39 \times 26) = 1,014$	1,444.95
6 rectangle	18	18	18	18	72	18	1.7	$(10 \times 12) = 120$	204.00
7 rectangle	20	20	15	15	70	17.5	1.65	$(22 \times 12) = 264$	435.60
8 half-circle	15	--	--	--	15	15	1.4	$([\pi \times 6^2] \div 2) = 57$	79.80
9 triangle	15	15	12	--	42	14	1.3	$([14 \times 6] \div 2) = 42$	54.60
10 rectangle	15	15	15	15	60	15	1.4	$(25 \times 6) = 150$	210.00
11 rectangle*	10	10	8	8	36	9	1.0	$([11 \times 2] - 4) = 18$	0.00*
12 rectangle	14	14	13	13	54	13.5	1.25	$(16 \times 13) = 208$	260.00
13 rectangle*	10	10	11	11	42	10.5	1.0	$([9 \times 2] - 4) = 14$	0.00*
Step 7	Total calculated floor area (square feet):								3,722.85
Step 8	600 square feet credit deduction:**								-283.80
Final Total Calculated Floor Area (square feet):									3,439.05

*Bay windows: up to 25 square feet of each bay window may be excluded if the bay window is raised above the finished floor

**Deduction calculation:

Section 6:	120 x 0.5	=	60.0
Section 7:	264 x 0.5	=	132.0
Section 5: (portion)	216 x 0.425	=	91.8
Total:	600	=	283.8

Note: To maximize the 600 square foot deduction (i.e., to get a deduction of 300 square feet), utilize any section that is larger than 600 square feet and that has a multiplier > 1.5

Attached Garage Impacts on Main Residence Allowable Floor Area

For purposes of main residence size limitations, note that attached garage areas can be deducted from main residence size as follows: in the R-1 and SR zones, up to 440 square feet; in the RR and SCP zones, up to 660 square feet. In no case can the deduction exceed the actual size of the garage. Any portions of attached garages that exceed these limits would count toward the main residence size limits. This exclusion may not be used for portions of garages that do not count as floor area, such as garages within basements.

NOTE: This exclusion only applies to the calculation of main residence size. Attached garages (and/or carports) that are excluded from the calculation of main residence size still count towards Total Floor Area (the combined floor area of a building or buildings on a lot).