



Planning & Economic Development

200 NE Moe Street | Poulsbo, WA 98370-7347

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MEASURING HEIGHT

WHAT IS THE DEFINITION OF HEIGHT?

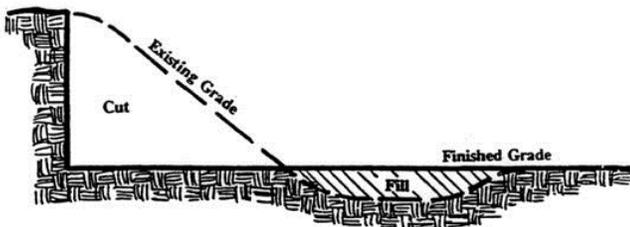
Building Height is the vertical distance measured from the elevation of the finished grade at an exterior building wall or *building segment* to the highest point of the building wall or building segment. The overall building height shall be calculated as the **average** of all building sides. *See page 2 for building height measurement in the C1-downtown zoning district.

WHAT IS FINISHED GRADE?

Finished Grade means grade following development. The term “finished grade” may also mean existing grade when no terrain alteration is proposed (Figure 1).

Fill which is not necessary to achieve positive drainage or slope stabilization, or which is otherwise proposed clearly to raise the finished floor elevation(s) for any other purpose, shall not be considered finished grade.

Figure 1. Existing and Finished Grade.



WHAT IS A BUILDING SEGMENT?

A “building segment” is when a break in the roof line, change in number of stories, or break in finished grade occurs of at least four feet. “Roof line” means the uppermost line of the roof of a building or, in the case of an extended or mansard facade, the uppermost height of said facade.

Only the primary building walls at its highest point is of relevance for the height calculation. The **primary building wall** means the wall on the side of the building which served as the essential or principal wall, in which all other walls or architectural features may be appended to or extended from.

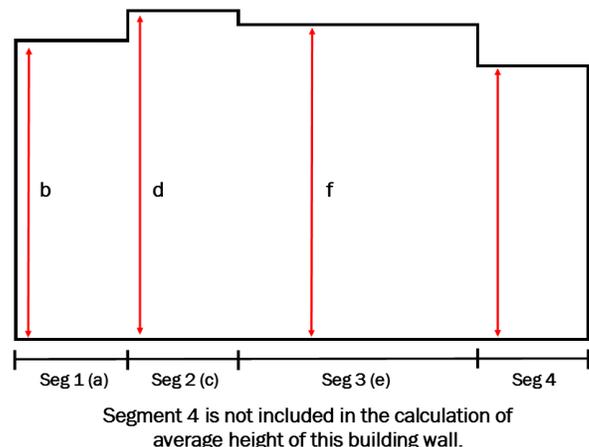
- An appendage to a primary building wall, such as a shed or dormer, with a different roofline are not considered a building segment.
- A canopy, building overhang, building articulation, or drive-through structures, are not considered as a building segment (Figure 2).

Figure 2. Appended to or Extended Features.



For calculation of average building wall height, no more than 3 segments per building wall shall be used, even if there are more than 3 breaks in stories, rooflines, or finished grade. **The three highest segment height per building wall shall be used.** See Figure 3.

Figure 3. Walls with Multiple Segments.



For buildings consisting of **multiple wings**, the average building height shall be calculated for each wing separately. An overall average building height of each wing is calculated based on the average of each wing. Each wing is considered stand alone and must meet the maximum building height requirement (Figure 4).

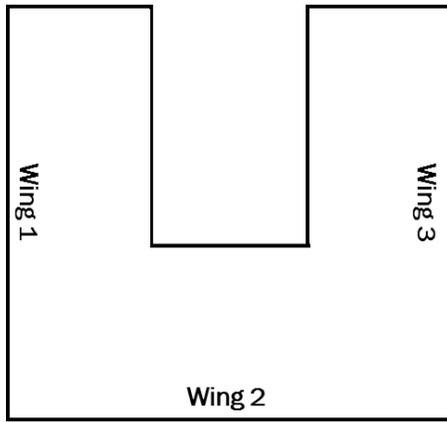


Figure 4. Building with Multiple Wings.

WHAT IS MY HEIGHT LIMIT?

In all [zones](#) the height limit is 35 feet, except as follows in the C-1/downtown:

1. The height limit on 3rd Ave NE between Moe St NE and NE Hostmark St shall be 25 feet as measured from the highest sidewalk grade of 3rd Ave NE adjacent to the property line.
2. In the [Shopfront Overlay](#) the height limit on west side of Front St NE shall be 25 feet and on east side of Front St NE shall be 35 feet as measured from the highest sidewalk grade of Front St NE adjacent to the property line.
3. Highest sidewalk grade means the highest elevation of the sidewalk parallel to the building frontage (Figure 5).
4. The height limits described above in 1 and 2 shall also apply to rooftop appurtenances, such as those identified in [PMC 18.310.010 B](#).

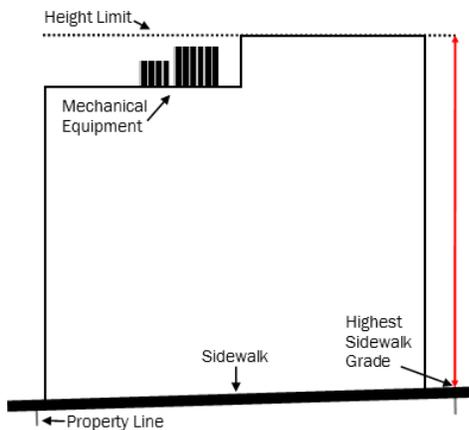


Figure 5. Highest Sidewalk Grade.

ARE ANY BUILDING FEATURES EXCLUDED FROM THE HEIGHT CALCULATIONS?

Per [PMC 18.310.010](#), height limitations do not apply to the following: chimneys, church spires, belfries, cupolas, smokestacks, flagpoles, cooling towers, monuments, firehouse towers, masts, aerials, and other similar projections, wireless communication facilities, and outdoor theater screens; provided, said screens contain no advertising matter other than the name of the theater.

In addition, HVAC or other roof-mounted mechanical equipment and necessary screening, stairwell enclosures that provide rooftop access, elevator shafts, may extend up to 10 feet above the maximum building height limit as follows:

1. The combined total coverage of all features shall not exceed 15 percent of the roof area; and
2. Stairwell enclosures and elevator shafts shall be setback at least 15 feet from the all roof edges on street facing facades.

WHEN ARE HEIGHT CALCULATIONS NEEDED?

All permit applications for new buildings or additions that alter the height must have complete height calculations. The height calculations should be embedded in the plan set.

WHEN ARE SURVEYS REQUIRED?

If the height of the building is within one (1) foot of the maximum building height, surveys are required from a professional land surveyor.

For example, if the height calculations for your proposed house measures 34'-6" (between 34 feet and 35 feet); a survey will be required. The attached two forms: Base Elevation Survey and Height Survey will need to be completed by a surveyor. Submit the Average Building Height form with your Building Permit application prior to land disturbance. The Height Survey form, used to verify the building's height, will need to be submitted to the City inspector at the time the framing inspection occurs.

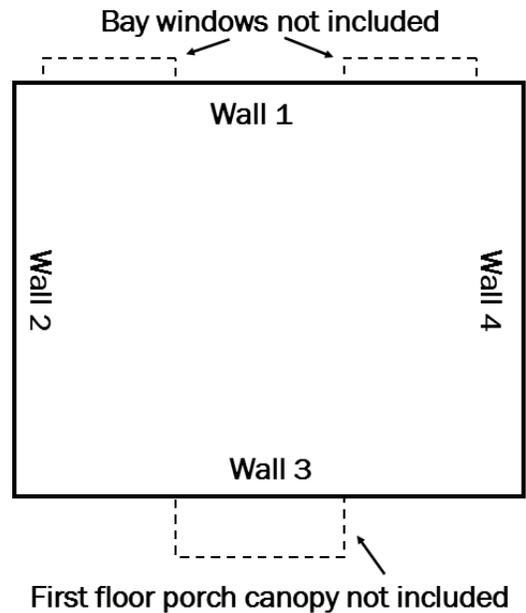
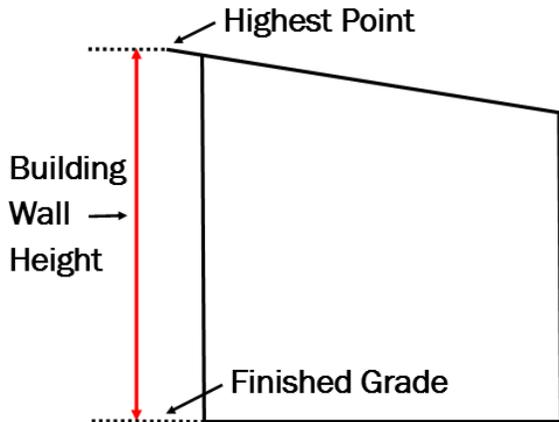


HOW DO I DETERMINE HEIGHT?

STEP 1: Determine the number of outside building walls (see right).

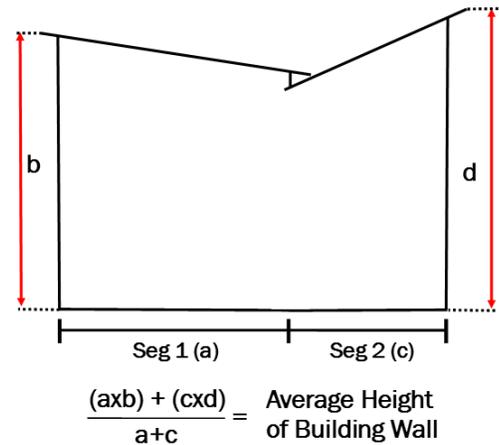
STEP 2: Calculate the height of each primary building wall.

Measure the finished grade directly beneath the outside face to the highest point of the primary wall (see below).



If a primary wall contains segments:

- A. Determine appropriate segments for the primary wall.
- B. Determine the highest point of each segment, by measuring finished grade directly beneath the outside face of the primary wall to the highest point of the segment.
- C. Calculate the buildings walls average height by determining the average of the segments height (see right).



STEP 3: Calculate average height of building.

Once each primary building wall's height has been calculated, the overall building height is determined as an average of all building walls.

For example:

Wall 1 = 44 feet

Wall 2 = 28 feet (average after calculating segments)

Wall 3 = 35 feet

Wall 4 = 32 feet

$44' + 28' + 35' + 32' = 139/4 = 34.75$ feet

$34.75 < 35'$ maximum allowed height - OK!

Disclaimer: this handout should not be used as a substitute for codes and regulations. The applicant/property owner is responsible for compliance with all code and rule requirements, whether or not described here. Please see the City of Poulsbo Municipal Code for complete text and requirements.





AVERAGE BUILDING HEIGHT

Planning and Economic Development Department

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For use **ONLY** if a height survey is required. Instructions: Complete this form to determine the average building height of the proposed structure. This form is to be submitted with the building permit application. Include these calculations on the site plan and building plans. During framing, the Height Survey form will be required for the framing inspection. Please see the [Measuring Height Handout](#) for additional information. **NOTE:** This form does not need to be completed by a professional surveyor. However, it is recommended.

PROJECT/PROPERTY INFORMATION:

Date of Survey:	Permit No:
Property Location:	
Description of Benchmark:	
Benchmark Elevation:	

AVERAGE BUILDING HEIGHT

Wall 1	finished grade (elevation)	wall height (ft.)	max wall height (ft. or elevation)
Wall 2	finished grade (elevation)	wall height (ft.)	max wall height (ft. or elevation)
Wall 3	finished grade (elevation)	wall height (ft.)	max wall height (ft. or elevation)
Wall 4	finished grade (elevation)	wall height (ft.)	max wall height (ft. or elevation)
$(wall\ 1\ height) + (wall\ 2\ height) + (wall\ 3\ height) + (wall\ 4\ height) = \quad /4$ $= \quad (average\ building\ height)$			

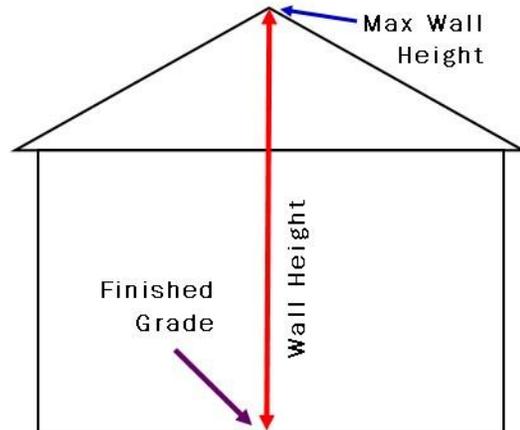
* Please attach a separate sheet if additional space is needed to calculate average building height.

I certify that the above calculations represent the proposed finished grades and wall heights for the development.

Form completed by:

Date:

Signature:





HEIGHT SURVEY

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For surveyor use **ONLY** if a height survey is required. Instructions: Complete this form prior to the framing inspection. This form will need to be provided to the City inspector at the framing inspection. Please see the [Measuring Height Handout](#) for additional information. **NOTE:** This form IS REQUIRED to be completed by a professional surveyor.

PROJECT/PROPERTY INFORMATION:			
Date of Survey:	Permit No:		
Property Location:			
Description of Benchmark:			
Benchmark Elevation:			
AVERAGE BUILDING HEIGHT			
Wall 1	finished grade (elevation)	wall height (ft.)	max wall height (ft. or elevation)
Wall 2	finished grade (elevation)	wall height (ft.)	max wall height (ft. or elevation)
Wall 3	finished grade (elevation)	wall height (ft.)	max wall height (ft. or elevation)
Wall 4	finished grade (elevation)	wall height (ft.)	max wall height (ft. or elevation)
$ \begin{aligned} &(\text{wall 1 height}) + \quad (\text{wall 2 height}) + \quad (\text{wall 3 height}) + \quad (\text{wall 4 height}) = \quad /4 \\ &= \quad \underline{\hspace{2cm}} \quad (\text{average building height}) \end{aligned} $			
* Please attach a separate sheet if additional space is needed to calculate average building height.			
SURVEYOR INFORMATION			
I certify that I measured the: <input type="checkbox"/> finished grade and <input type="checkbox"/> max wall height for each primary wall. The structure <input type="checkbox"/> does <input type="checkbox"/> does not meet the average building height limit of _____ feet.			
Company:			
Address:			
Email:		Phone:	
Signature:		Date:	

