Building Height Handout

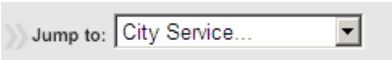
This handout is designed to help you determine height calculations and show them on your building permit application submittal. A **survey** to determine the existing elevation of the property may be needed in order to apply for a building permit. Additionally, a height survey may be needed to verify building height while in construction.

How to Calculate Building Height (see steps on page 2)
The first step is to draw the smallest rectangle possible that fits around the footprint of the building. Measure the elevation of the midpoints of each line of the rectangle. The average elevation of those four points represents the 'average base elevation'. The maximum height is measured from the average base elevation to the highest point of the roofline. In Historic Districts (H) and the Central Business District (B-3), building height is measured from the highest point of the sidewalk. However, in the H overlays, if the property slopes up from the roadway, the height may be determined from the average base elevation of the footprint.

When are Height Calculations Needed? All permit applications for new buildings or additions that alter the height must have complete height calculations.

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. Refer to the Everett Municipal Code (EMC) 19.39.180.

For example, if the height calculations for your proposed garage measures 14'-6" (between 14 feet and 15 feet); surveys will be required. The attached two forms: Base Elevation Survey and Height Survey will need to be completed by a surveyor. Submit the Base Elevation Survey with your 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.

What is the Maximum Height Allowed in the City of Everett? The maximum height varies by zone and type of structure. You may check the Zoning Code online at www.everettwa.org, click on the drop down button 

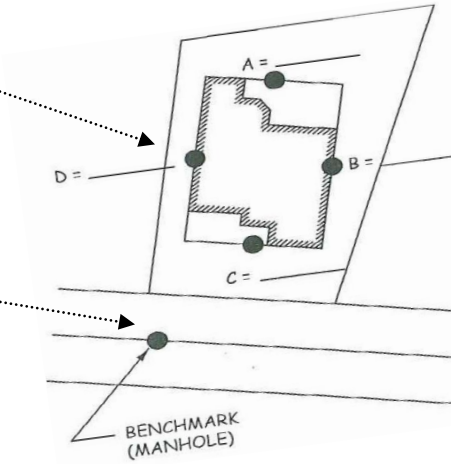
and select Zoning Code. Click on the MRSC link and go to Title 19, Chapter 6 to view Table 6.1 Development Standards for height information. NOTE: The numbers in parenthesis may have additional height requirements or refer you to another section of the code for height information.

City Staff Assistance:

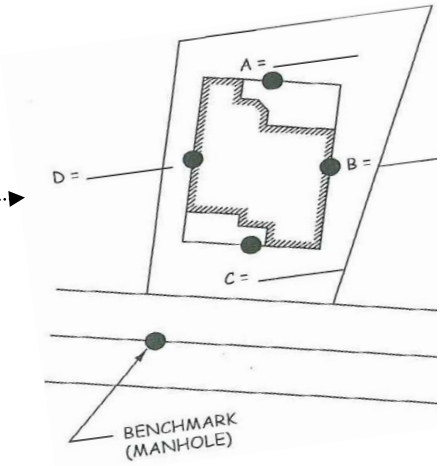
City of Everett Permit Services Counter
3200 Cedar Street, 2nd Floor, Everett, WA 98201
425.257.8810 or planning@everettwa.gov
M-F 7:30am – 4pm, closed 12-1

How to Calculate Building Height and Show on Your Plans

Step 1) Find the midpoints.
Stake out the smallest rectangle that encompasses the corners of the proposed building. Label the midpoints "A, B, C, and D" on the site plan.



Step 2) Select Bench Mark = 100'.
Select a fixed bench mark or datum point such as the top of a utility cover, monument in road, or other permanent point that cannot be easily moved. Use the nominal bench mark elevation of 100' or a surveyed datum elevation. Show your bench mark and the starting elevation on the site plan.



Step 3) Establish the difference in elevation. If the elevation of a point measured is above the bench mark then add to 100'. If the elevation is below the bench mark then subtract from 100'.

Step 4) Calculate the average base elevation and maximum elevation.
Add all midpoints together and divide by 4 to determine the average base elevation. Add the maximum height to the average base elevation to determine the maximum elevation allowed.

A = _____
B = _____
C = _____
D = _____
+ _____
Total Divided by 4 = _____Average Base Elevation
+ 28' max.
Maximum Elevation Allowed = _____

Step 5) Show the height calculations.
On your site plan, show your height calculations as shown in the table above. Also show one elevation view of your proposed structure with elevation and height calculations.

Base Elevation Survey

(For Surveyor Use Only IF a survey is required. Instructions: Complete this form to determine the average base elevation of the proposed footprint or to locate the highest point of the sidewalk, whichever applies. 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. Contact the Planning Department at 425.257.8731 if the structure does not meet the height limit.)

Date of Survey: _____ PERMIT #_____

Property Location Surveyed: _____
(address and/or parcel #)

Description of Bench Mark: _____

Bench Mark Elevation: _____

BOX 1	**BOX 2**
A = _____ B = _____ C = _____ D = _____ A+B+C+D = _____ / 4 = _____ Average Base Elevation + Maximum Height of_____ (feet) = _____ Maximum Elevation Allowed	Highest point of the sidewalk _____ EL *Submit a map showing the location of the highest point of the sidewalk abutting the property.

Check:

BOX 1 ☐ I, _____, certify that I **measured the grade at the midpoints** of the proposed structure at the ☐undisturbed ground elevations / ☐approved topography elevations for the property above.

BOX 2 ☐ I, _____, certify that I **measured the highest point of the sidewalk** for the property above.

_____ _____
Signature of Surveyor Date

Company _____

Address _____

_____

Phone/Email _____ seal/stamp

Height Survey

(For Surveyor Use Only IF a 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. Contact the Planning Department at 425.257.8731 if the structure does not meet the height limit.)

Date of Survey: _____ PERMIT #_____

Property Location Surveyed: _____
(address and/or parcel #)

Description of Bench Mark: _____

Bench Mark Elevation: _____

Fill in the information from the approved Base Elevation Survey for Box 1 or 2 and complete Box 3)

BOX 1

A = _____
B = _____
C = _____
D = _____
A+B+C+D = _____ / 4 = _____ Average Base Elev.

+ Maximum Height of_____ (feet)
= _____ Maximum Elevation Allowed

BOX 2

Highest point of the sidewalk
_____ EL

*Submit a map showing the location of the highest point of the sidewalk.

BOX 3

Actual Elevation*: _____ (elev.) Height of Structure*: _____ (feet)
*Measure from the average base elevation to the roof peak or from the sidewalk to top of roof.

Check:

I, _____, certify that I **measured the height of the structure** from the ☐ approved average base elevation / ☐ highest point of sidewalk to the top of the ridge/roof. The structure ☐ meets the height limit / ☐ doesn't meet the height limit.

_____ _____
Signature of Surveyor Date

Company _____

Address _____

_____

Phone/Email _____ seal/stamp