



## SCRD Building Height Calculation Guide

This document is a general guide for determining building height under Zoning Bylaw 722 and Zoning Bylaw 337.

All Building Permit and Development Permit applications must include building height calculations with grades and heights shown on building elevation plans. Refer to zoning bylaws for exact regulations.

### **Height**

means the vertical distance measured from the average grade to the highest point of a building or structure.

*\* See Section 5.11.6 in Zoning Bylaw 722 and Section 512(3) in Zoning Bylaw 337 for exempt structures.*

### **Average Grade**

means the average ground elevation, calculated by referencing the lower of finished grade or natural grade at the corners of every exterior wall or column around the perimeter of a building, excluding steps, eaves, sunlight controls, balconies, open porches, patios and uncovered swimming pools.

### **Finished Grade**

means the ground elevation, after placement of fill, removal of soil, regrading or construction.

### **Natural Grade**

means the ground elevation referencing undisturbed ground prior to human alteration or, where undisturbed ground level cannot be ascertained, the existing grade.

**Average Grade will reference the lower of Natural Grade or Finished Grade**

**To calculate the average finished grade and average natural grade for the building:**

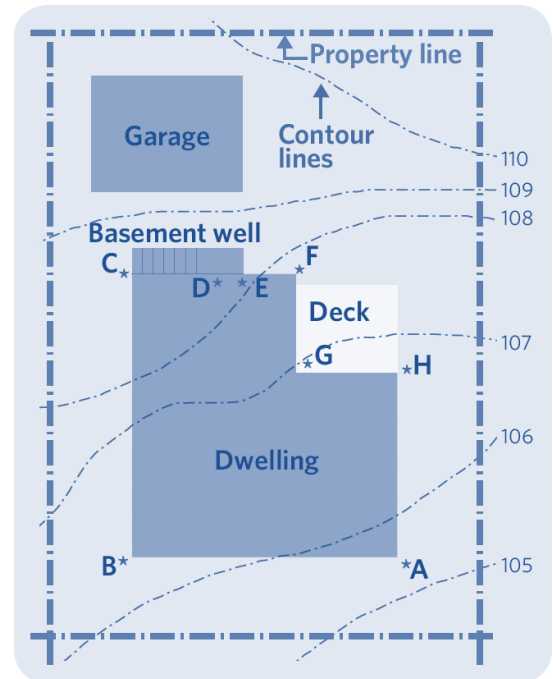
- establish the natural and finished grade elevations at the corners of each exterior wall segment and choose the lower elevations as reference grades.
- Add the corner elevations of each exterior wall segment and divide the sum by two to determine the average elevation of the wall segment.
- add the resulting elevations of all wall segments and divide the total by the number of wall segments. This will be the average grade.

# Example Height Calculation

Interpolated grades *will not* be accepted for grade calculations.

A topographic plan prepared by a British Columbia Land Surveyor (BCLS) must be submitted with a building permit application as required by a Building Official.

	Natural Grade	Finished Grade	Lower Grade
A	<b>105.5</b>	106.4	Natural
B	<b>106.3</b>	106.4	Natural
C	108.5	<b>106.0</b>	Finished
D	108.3	<b>98.5</b>	Finished
E	108.2	<b>107.0</b>	Finished
F	107.8	<b>106.4</b>	Finished
G	106.7	<b>106.4</b>	Finished
H	106.7	<b>105.9</b>	Finished



Segment	Average Grade
A - B	$(105.5+106.3) \div 2 = 105.90$
B - C	$(106.3+106.0) \div 2 = 106.15$
C - D	$(105.6+106.3) \div 2 = 103.50$
D - E	$(105.6+106.3) \div 2 = 102.75$
E - F	$(105.6+106.3) \div 2 = 106.70$
F - G	$(105.6+106.3) \div 2 = 106.40$
G - H	$(105.6+106.3) \div 2 = 106.15$
H - A	$(105.6+106.3) \div 2 = 105.70$
<b>Average Grade</b>	<b><math>843.25 \div 8 = 105.41</math></b>

