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SCRD Building Height Calculation Guide

This document is a general guide for determining building height under SCRD 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 (www.scrd.ca/zoning-bylaws).

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 grade for the building:

1. Establish the natural and finished grade elevations at the corners of each exterior wall segment and choose the lower elevation as the reference grade.
2. For each wall segment add the corner elevations and divide the sum by two and then multiply by the length of the wall segment.
3. Add the resulting product of all wall segments and divide by the total length of all wall segments (perimeter of building). This will provide the **Average Grade**.

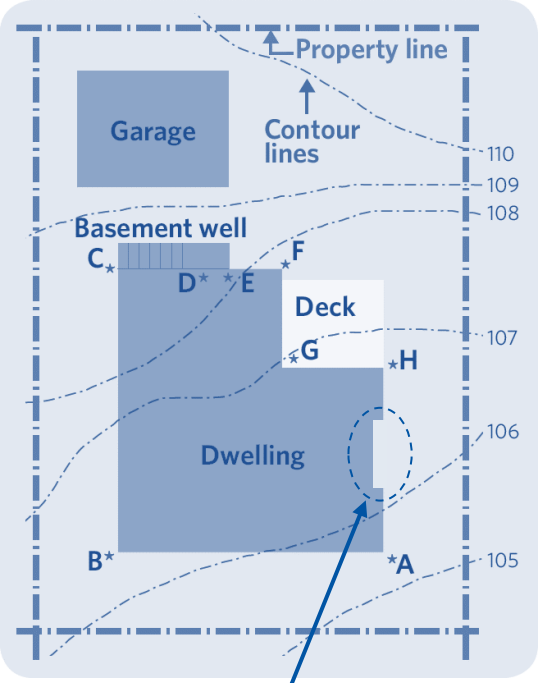
Example Height Calculation

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.

Step 1.

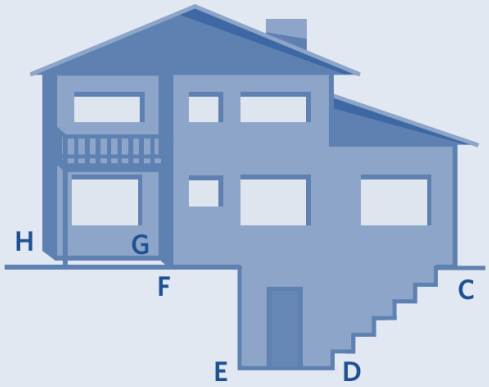
	Natural Grade	Finished Grade	Lower Grade
A	**105.5**	106.3	Natural
B	**106.3**	106.8	Natural
C	108.5	**106.0**	Finished
D	108.3	**98.5**	Finished
E	108.2	**107.0**	Finished
F	107.8	**106.4**	Finished
G	106.7	**106.4**	Finished
H	106.7	**105.9**	Finished



Minor variations/jogs in wall segments are not used for determining building height.

Step 2.

Segment	Elevation	X	Length	Total
A - B	(105.5+106.3) ÷ 2	X	6.25 m	661.71
B - C	(106.3+106.0) ÷ 2	X	4.97 m	527.38
C - D	(106.0+98.5) ÷ 2	X	2.35 m	239.98
D - E	(98.5+107.0) ÷ 2	X	1.52 m	156.59
E - F	(107.0+106.4) ÷ 2	X	1.83 m	195.13
F - G	(106.4+106.4) ÷ 2	X	2.56 m	272.42
G - H	(106.4+105.9) ÷ 2	X	1.92 m	203.83
H - A	(105.9+105.5) ÷ 2	X	2.80 m	296.40
Total			**24.2 m**	**2553.44**



Step 3.

Average Grade = 2553.44 ÷ 24.2 m = <u>105.51 m</u>