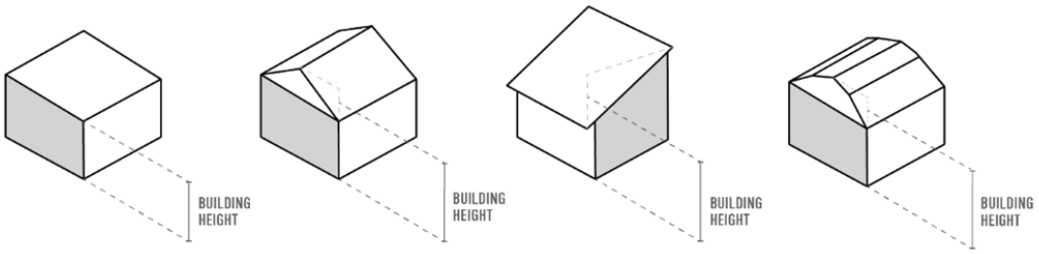
District of SECHELT

604 885 1986
PO Box 129,
5797 Cowrie St, 2nd Floor
Sechelt, BC V0N 3A0
sechelt.ca

Building Height Calculation Guide

This document is a general guide for determining building height under Zoning Bylaw 580. All Building Permit and Development Permit applications must include building height calculations with grades and height clearly noted on elevations. Refer to zoning bylaw for exact regulations.

BUILDING HEIGHT
means the vertical distance measured from the Average Grade to the mid-point of the roof of a building or structure.



GRADE, AVERAGE

means the measurement around the perimeter of the building or structure at or directly above or below the outermost projection of the exterior walls. (See Section 2.10, Zoning Bylaw 580)

GRADE, FINISHED

means the elevation at any point along the surface of a parcel after construction but excluding localized depressions immediately adjacent to building features such as basement window wells, entrance ways and limited patio space.

GRADE, NATURAL

means the surface elevation of a parcel in its existing state, prior to any disturbance, alteration of land, excavation or filling as determined by a British Columbia Land Surveyor.
(See Section 2.10.3, Zoning Bylaw 580)

Average Grade will be the lower of Average Natural Grade or Average Finished Grade.

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

- calculate the average grade elevation for each wall section having a constant grade along the finished grade and natural grade wall section by dividing the grade elevation at each end by 2, then multiply this average grade elevation by the length of that wall section.
- add the resulting numbers for each section of wall.
- divide this total number by the total perimeter wall length of the building. This will be the average grade.

District of SECHELT

604 885 1986
PO Box 129,
5797 Cowrie St, 2nd Floor
Sechelt, BC V0N 3A0
sechelt.ca

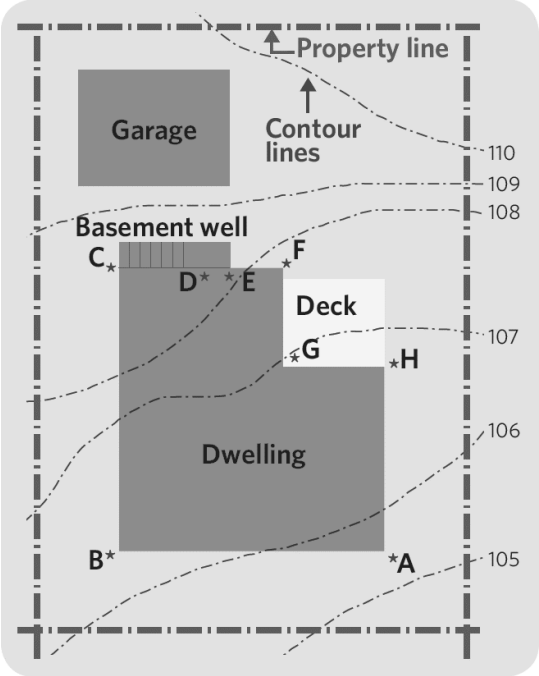
Example Grade Calculations

Interpolated grades *will not* be accepted for grade calculations. A topographic plan prepared by a British Columbia Land Surveyor (BCLS) must be submitted with all building permit applications unless specifically exempted by Chief Building Official.

Example: to calculate finished grade elevation:

	Elevation	X	Length	TOTAL
A-B	(105.6+106.3) ÷ 2	X	20.5’	= 2171.98
B-C	(105.6+106.3) ÷ 2	X	16.3’	= 1730.25
C-D	(105.6+106.3) ÷ 2	X	7.7’	= 787.33
D-E	(105.6+106.3) ÷ 2	X	5.0’	= 492.50
E-F	(105.6+106.3) ÷ 2	X	6.0’	= 640.20
F-G	(105.6+106.3) ÷ 2	X	8.4’	= 893.76
G-H	(105.6+106.3) ÷ 2	X	6.3’	= 668.75
H-A	(105.6+106.3) ÷ 2	X	9.2’	= 972.90
TOTAL			**79.4’**	**= 8357.67**

Average finished grade = 8357.67 ÷ 79.4 = 105.26’



Example: to calculate natural grade elevation:

	Elevation	X	Length	TOTAL
A-B	(105.7+106.7) ÷ 2	X	20.5’	= 2177.10
B-C	(106.7+108.5) ÷ 2	X	16.3’	= 1753.88
C-D	(108.5+108.3) ÷ 2	X	7.7’	= 834.68
D-E	(108.3+108.2) ÷ 2	X	5.0’	= 541.25
E-F	(108.2+107.8) ÷ 2	X	6.0’	= 648.00
F-G	(107.8+106.7) ÷ 2	X	8.4’	= 900.90
G-H	(106.7+106.7) ÷ 2	X	6.3’	= 672.21
H-A	(106.7+105.7) ÷ 2	X	9.2’	= 977.04
TOTAL			**79.4’**	**= 8505.06**

Average natural grade = 8505.06 ÷ 79.4’ = 107.12’