

BUILDING BULLETIN: SPATIAL SEPARATION'S BETWEEN HOUSES

PURPOSE

The purpose of this bulletin is to inform designers, builders, and property owners of the BC Building Code requirements for spatial separation requirements between houses.

BACKGROUND

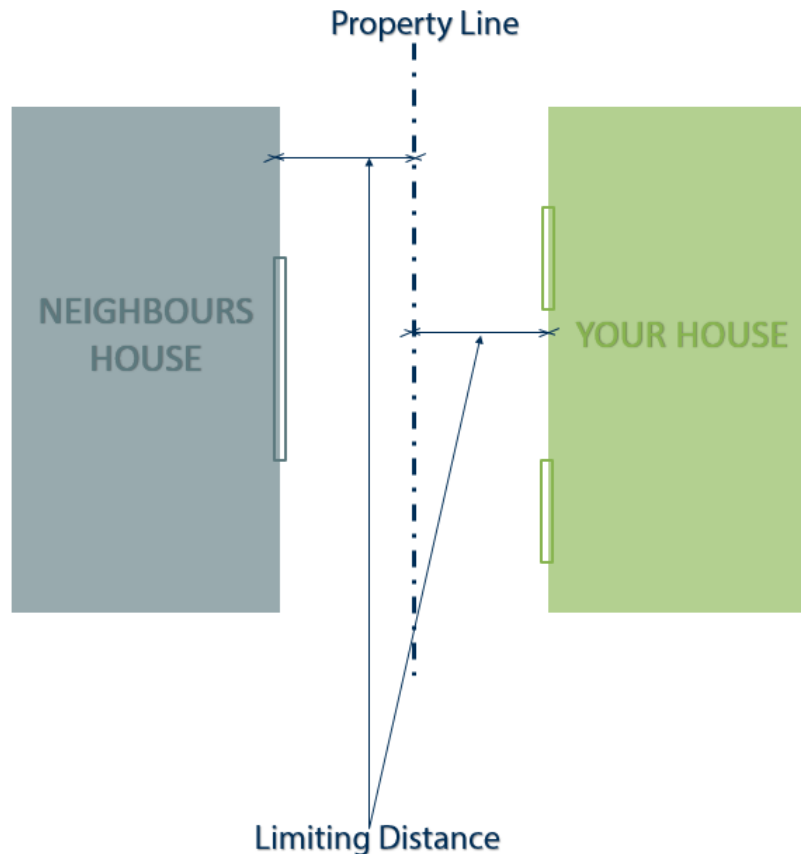
The BC Building Code provides the requirements for spatial separation between houses.

When the response time of the fire department is over 10 minutes in 10% or more of their calls, and you are building without a fire suppression system, a limiting distance equal to half the actual distance shall be used. (see example below)

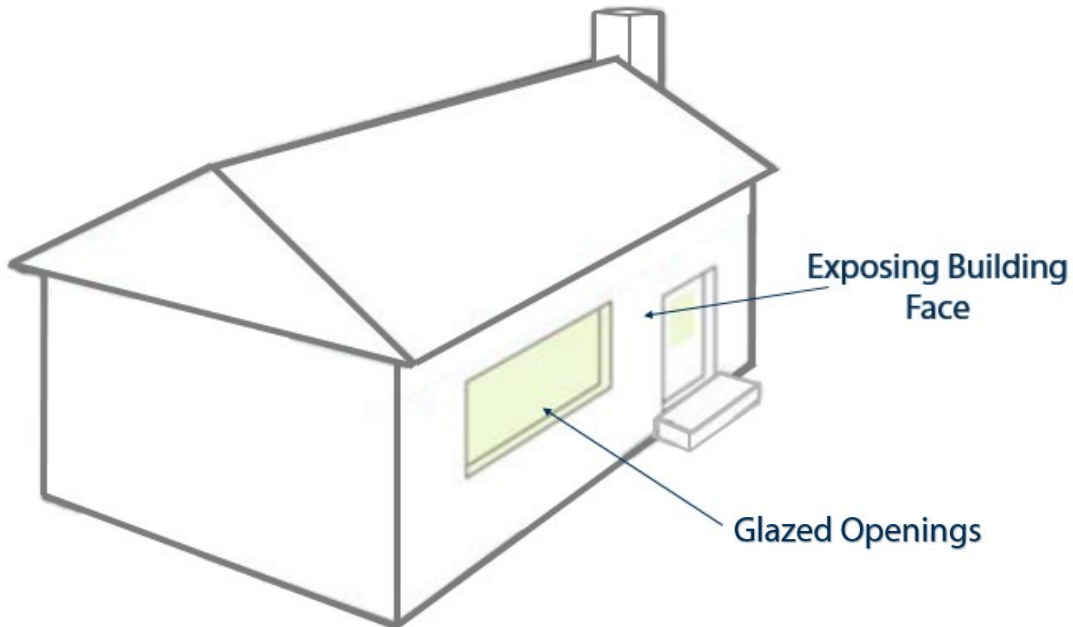
Currently, the only area serviced by the Fraser Valley Regional District that is within the 10 minute response time is The Village of Harrison Hot Springs.

KEY DEFINITIONS

1. **Limiting Distance** means the distance from an exposing building face to a property line, the centre line of a street, lane or public thoroughfare, or to an imaginary line between 2 buildings or fire compartments on the same property, measured at right angles to the exposing building face.



2. **Exposing Building Face** means that part of the exterior wall of a building that faces one direction and is located between ground level and the ceiling of its top storey or, where a building is divided into fire compartments, the exterior wall of a fire compartment that faces one direction.



3. **Glazed Opening** (as applying to exposing building face) means any opening in a house that has glass. This includes but is not limited to all windows, glass block, skylights, glass doors, etc.

UNPROTECTED SOFFITS

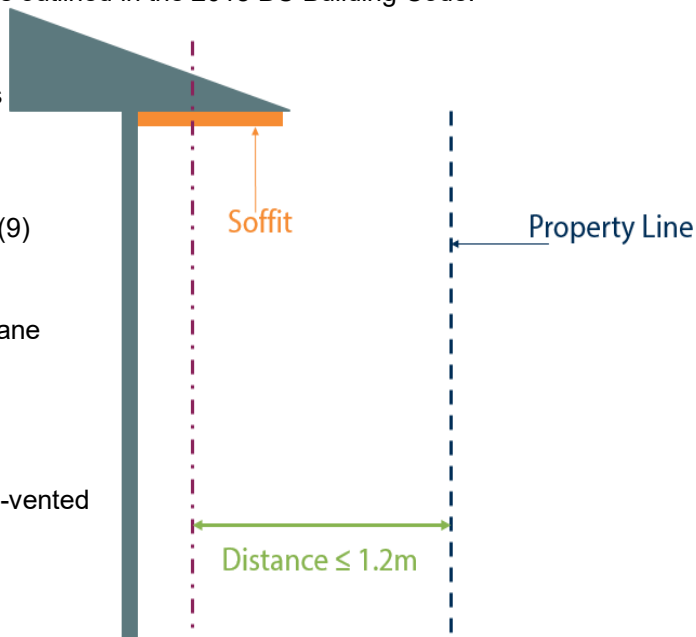
Where roof soffits project to less than 1.2m from the property line, the centre line of a lane, or public thoroughfare, or an imaginary line between two building or fire compartments on the same property they shall have no penetrations, and be protected as outlined in the 2018 BC Building Code.

Projecting roof soffits are not to be constructed where the limiting distance is $\leq 0.45\text{m}$ 9.10.15.5.(8)

Roof soffits must not project to less than 0.45m from the property line 9.10.15.5.(9)

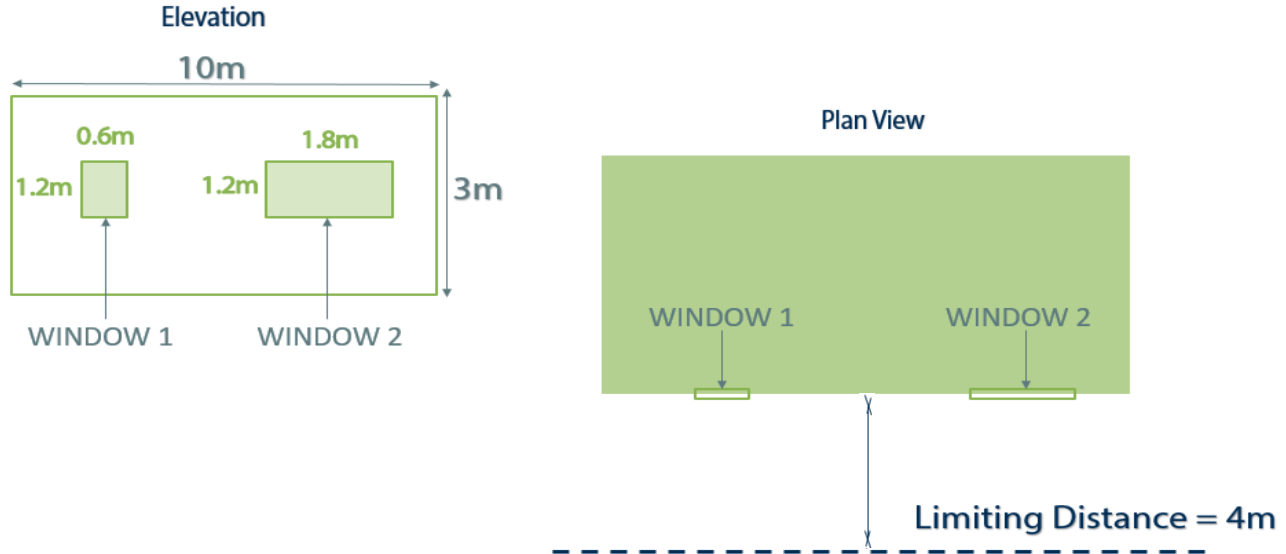
Roof soffits are permitted to project up to the property line where it faces a street, lane or public thoroughfare regardless of the limiting distance. 9.10.15.5.(10)

The diagram in this section depicts a non-vented protected/blocked soffit.



EXAMPLE

How to calculate your allowed maximum area of glazed openings in a house, where the fire department response time is over 10 minutes.



1. Limiting Distance is 4m, due to the fire department response time being greater than 10 minutes this number is required to be halved.
 - a. Limiting Distance = 2m
2. Our exposing building face is 10m x 3m = 30m²
3. Calculate the proposed unprotected glazed openings
 - i. Window 1 is 1.2m x 0.6m = 0.72m²
 - ii. Window 2 is 1.8m x 1.2m = 2.16m² } Add together
 - a. Our proposed unprotected glazed openings are 2.88m²
4. To determine your allowed % of maximum area of glazed openings divide your unprotected glazed openings by your exposed building face
 - a. (2.88m² ÷ 30m²) x 100 = 9.6%

As our example is a Single Family Dwelling, we will be referencing table 9.10.15.4. from the 2018 BC Building Code. Depending on the structure you are building, a different table may need to be referenced.

Table 9.10.15.4.
Maximum Area of Glazed Openings in Exterior Walls of Houses
Forming Part of Sentences 9.10.15.4.(1) and (2)

Maximum Total Area of Exposing Building Face, m ²	Maximum Aggregate Area of Glazed Openings, % of Exposing Building Face Area											
	Limiting Distance, m											
	Less than 1.2	1.2	1.5	2.0	4.0	6.0	8.0	10.0	12.0	16.0	20.0	25.0
30	0	7	9	12	39	88	100	-	-	-	-	-
40	0	7	8	11	32	69	100	-	-	-	-	-
50	0	7	8	10	28	57	100	-	-	-	-	-
100	0	7	8	9	18	34	56	84	100	-	-	-
Over 100	0	7	7	8	12	19	28	40	55	92	100	-

Our proposed amount of unprotected openings was 9.6%, using the table above we have identified the maximum area of glazed openings is 12%. Our proposal meets the requirements in the code.

ALL CODE REFERENCES ARE TO THE 2018 BC BUILDING CODE