



## **SPATIAL SEPARATION & LIMITING DISTANCE**

The following document is intended to review general guidelines regarding spatial separation and limiting distance requirements for Part 9 Residential projects. This document does not include requirements for Part 3 or commercial projects, accessory buildings or accessory buildings with secondary suites or living accommodations. Consult with your Safety Codes Officer to review your project and specific Code application such as percentage of openings, building face size or when dealing with any unique projects, lot sizes or occupancy's.

### **What is a 10 minute response time?**

The response time utilized in the National Building Code-Alberta Edition is calculated as the time from receipt of notification of a fire to the time the first fire department vehicle arrives capable of beginning suppression activities. If this response time exceeds 10 minutes for 10% or more of recorded calls, it is determined that the jurisdiction would not have a 10 minute response time. If the response time is 10 minutes or less for 90% of recorded calls, it is determined that the jurisdiction does have a 10 minute response time. (NBC-AE 2019 9.10.15.3)

### **What is the limiting distance?**

*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.

### **What is the purpose of determining response time or limiting distance?**

When the Building Code is applied to ensure appropriate spatial separation is met, it significantly decreases the spread of fire to protect property and human life.

### **How does limiting distance affect your windows?**

The distance from your house to the property line will determine how many windows are allowable on the wall facing the property line. This is measured as a percentage of the wall. It starts at 0 percent allow for anything within 1.2m of the property line and increases proportionally as distance from the property line increases. For example, if your wall is between 1.2m and 1.5m from the property line you are permitted 7 percent of that wall to have windows. Contact your Safety Codes Officer to determine exactly how many windows you may be permitted on an exposed building face.

### **How does limiting distance affect wall construction?**

Wall construction changes when a building face is within 1.2m of a property line. If a wall is within 1.2m of a property line it must have a fire resistance rating. See following documents for more details on this restriction.

#### **COLD LAKE**

110, 4910 - 50 Avenue  
Phone: 780 594 4301  
Fax 780 594 3720

#### **EDMONTON**

300W, 14310 - 111 Avenue  
Phone: 780 454 5048  
Fax: 780 454 5222

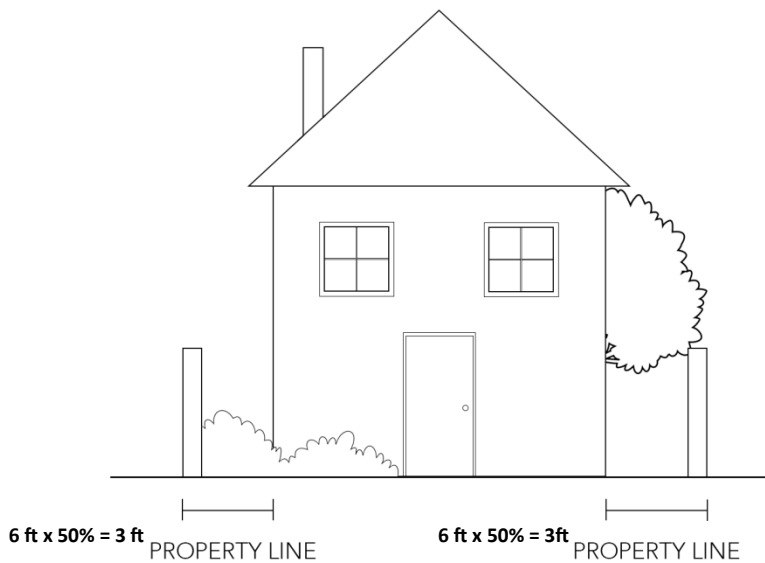
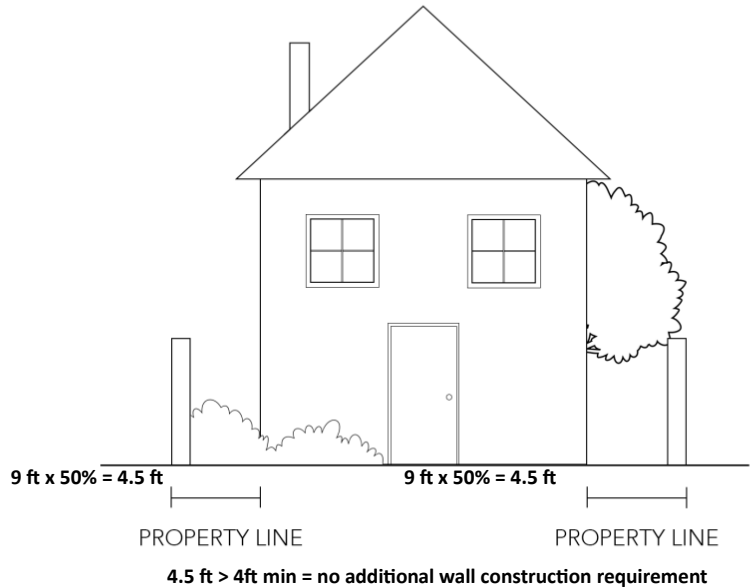
#### **LETHBRIDGE**

2825 - 18 Avenue N.  
Phone: 587 787 4143  
Fax: 587 787 4142

**Without a 10 minute response time**

- Minimum distance from building to property line is 8ft or 2.4 m before restrictions apply for wall construction
- Limiting distance is calculated as 'half of actual' when located in area without 10 minutes response time
  - I.e: If the physical building is proposed to be 6ft from the property line, *for calculation purposes only*, the limiting distance is viewed as 'half of the actual', determining the limiting distance to be 3ft.

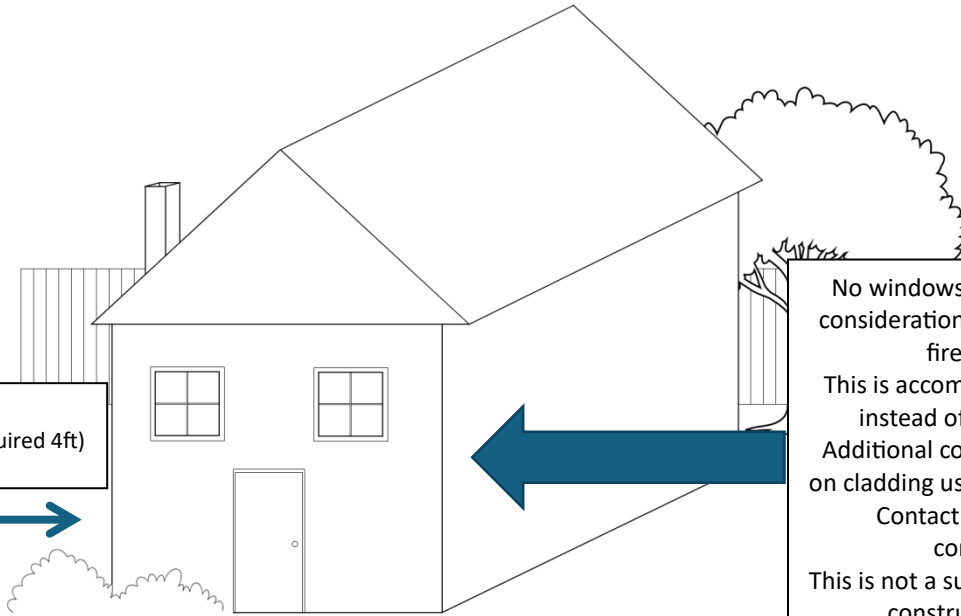
This example depicts a home in a jurisdiction **without a 10 minute response time.**  
 The home is proposed to be 9ft from each property line.  
 After calculation the limiting distance would be 4.5 ft which exceed the minimum threshold of 4ft.  
**Note:** The setback distance will determine what percentage of windows is allowed. Consult with you Safety Codes Officer for specific application to your project.



**3 ft < 4ft min = additional considerations required**

This example depicts a home in a jurisdiction **without a 10 minute response time.**  
 The home is proposed to be 6ft from each property line.  
 After calculation the limiting distance would be 3 ft which **does not** exceed the minimum threshold of 4ft.  
 Therefore additional considerations or requirements would apply, as shown below.

**Additional Consideration #1 – No Windows on side walls & Fire Rating**



No windows on side walls mean the only consideration in this example would be the fire rating of side walls. This is accomplished by using 5/8" drywall instead of 1/2" drywall or using Roxul. Additional considerations may be required on cladding used and how it can be installed. Contact SCO if planning on using combustible cladding. This is not a substantial cost difference in the construction of a new building.

**Additional Consideration #2 – Windows on side walls & Fire Rating**



As our limiting distance is less than 4ft, the exterior walls need to be fire rated as show in the image above. With windows on the side wall, these *openings need to be protected*, remembering the purpose to limit the spread of fire. Protecting openings can be accomplished by:

- Sprinklering
- Fire Shutters

These options can be less esthetically pleasing and more of a substantial cost. **Note:** This can be avoided by adjusting a floor plan to remove windows on the side wall or adjustments made to maintain a minimum of 4ft to the property lines.