

# Home Ignition Zone Assessment

## Extended Zone

10m to 30m

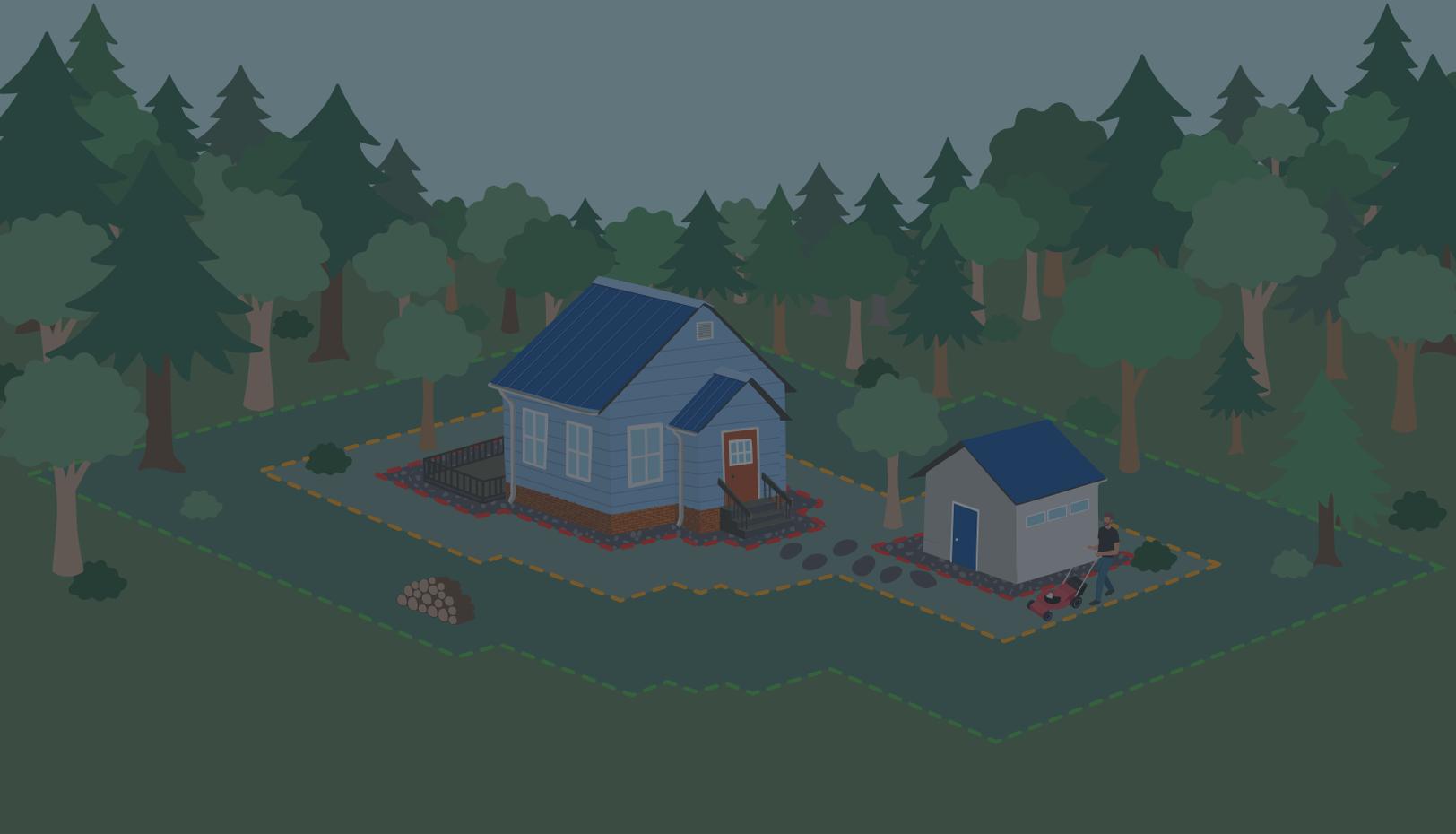
## Intermediate Zone

1.5m to 10m

## Immediate Zone

0m to 1.5m





## Introduction

The state of your residence and the immediate 30-metre vicinity play the most crucial role in deciding whether your home will ignite and suffer damage during a wildland fire. This area is commonly referred to as the “Home Ignition Zone” (HIZ). A properly maintained HIZ is designed to significantly lower the intensity of the fire and its ability to spread. When residents collaborate as a community to establish interconnected HIZs, they can drastically reduce the risk of large scale structure to structure ignition.

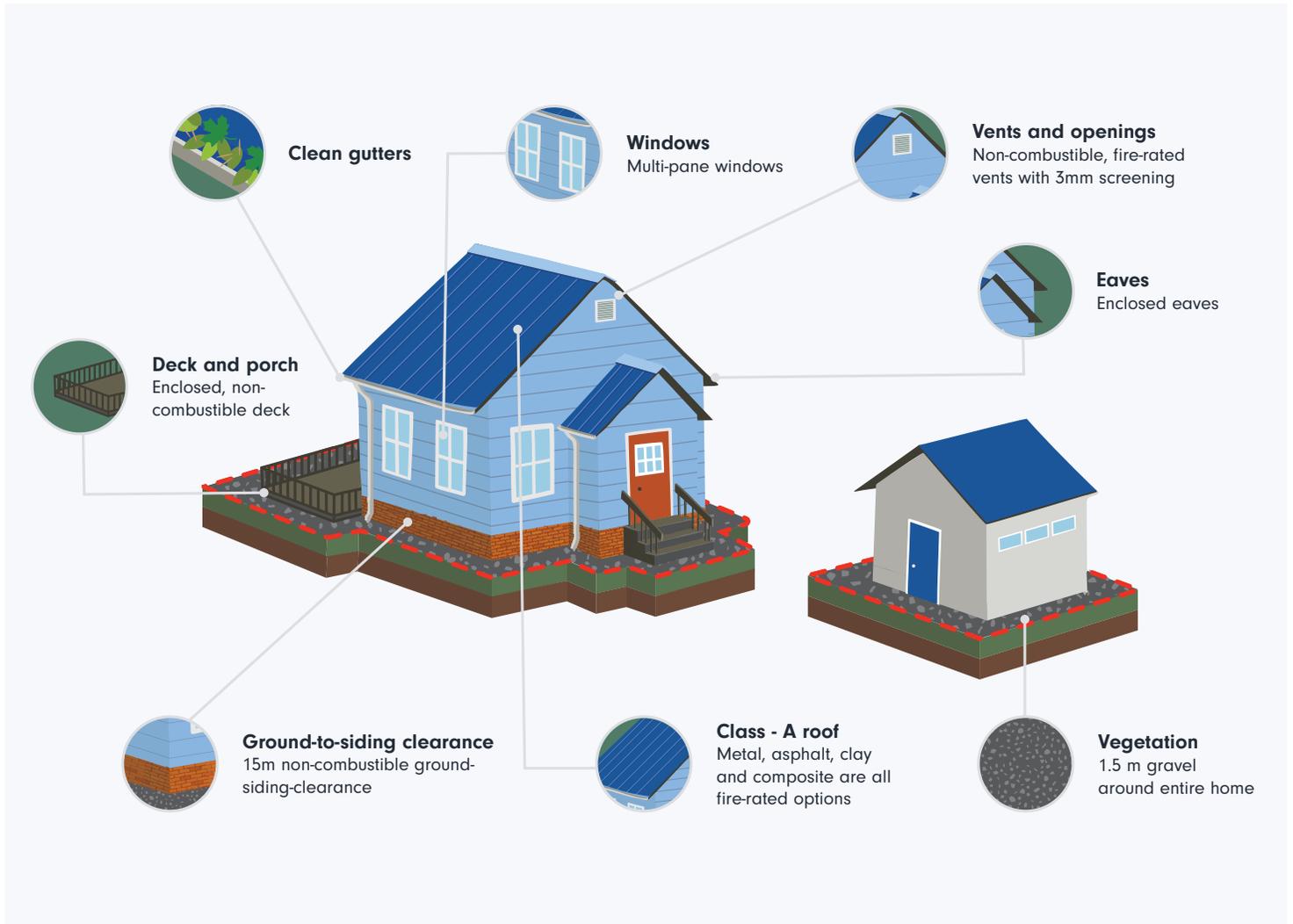
**For each Hazard Factor - Select:**

- Low (green)
- Medium (yellow)
- High (red)

A comment box is located after each Zone to provide a space for assessor comments.

## ● Immediate Zone (0 - 1.5 metres):

The Immediate Zone should be a non-combustible area that starts at the house and extends 1.5 metres around the entire home and any attachments.



## The Home:

The home, including any structural attachments, is subject to various ignition vulnerabilities depending on the design, construction and materials used.

Treat outbuildings to the same standards as the home, or relocate to the Extended Zone.

## 1. Roof Material

A Class-A fire-rated roof assembly offers the best protection. Metal, asphalt, clay, and composite rubber tiles are all options. Untreated wooden shakes pose a hazardous mix of flammable material combined with spaces where embers or sparks can gather and penetrate. Refer to manufacturers' guidelines to maintain the fire resistance of the roof.

	● Fire Rated - good condition (metal, clay, asphalt shingles)
	● Fire-rated - poor condition or unrated (wood shakes)

## 2. Gutter type and roof cleanliness

Every inside-corner of the roof is a place where debris and embers can collect. Regularly check and clean combustible debris, like needles and leaves, from the roof and gutters. Consider installing commercial screens or covers over gutters to reduce debris accumulation.

	● Non-combustible Gutter - no debris
	● Combustible gutter - no debris
	● Non-combustible gutter with debris
	● Combustible gutter with debris

## 3. Vents and openings

Unscreened vents can allow embers to enter a building. With the exception of dryer vents, install non-combustible vents with 3 mm metal screening in order to limit embers from accessing the home. Ensure dryer vents are clean and operational.

	● Non-combustible, fire-rated vents or vents with 3mm screening
	● Combustible vents, not fire-rated or without 3mm screening (with exception of dryer vent)

#### 4. Eaves

Open eaves create vulnerabilities to embers and radiant heat. Consider enclosing eaves with properly fitted soffits and fascia to reduce the risk of embers and heat from reaching the wooden rafters of the home.

	● Closed or Boxed-in eaves
	● Open eaves

#### 5. Building exterior or siding

Some types of construction material, like vinyl siding, can melt when exposed to high temperatures allowing the fire to reach the underlying wall components and penetrate the interior of the building. Stucco, metal, brick, concrete, and fibre cement siding offer superior fire resistance.

	● Non-combustible or ignition resistant (fibre cement, stucco, log, metal, brick/stone)
	● Combustible or non-ignition resistant (vinyl, wood)

#### 6. Building exterior condition

Examine the siding for locations where embers could accumulate or lodge. Ensure any holes and gaps in exterior siding are sealed and flush in order to prevent embers from igniting the structure.

	● No gaps, cracks or holes
	● Gaps, cracks or holes

#### 7. Ground-to-siding clearance

Creating a non-combustible vertical ground-to-siding clearance can be achieved by exposing additional foundation walls. It can also be achieved by replacing a minimum of 15 cm of combustible siding with non-combustible siding material or flashing at the base of the wall. This will limit the risk of siding igniting as a result of ember accumulation at the base of the structure.

	● 15 cm non-combustible vertical ground-to-siding clearance
	● No 15 cm non-combustible vertical ground-to-siding clearance

## 8. Window glass

Single pane glass windows are highly vulnerable to breakage from radiant heat exposures, direct flame and impacts that can occur during wildland fires. Multi-pane windows are less vulnerable while tempered glass windows are superior.

Tempered	
	● Any Size
Multi-pane / Thermal	
	● Small - Medium less than 1 m x 1 m
	● Large More than 1 m x 1m
Single pane	
	● Small - Medium less than 1 m x 1 m
	● Large More than 1 m x 1m

## 9. Deck and porch

- a. Consider enclosing the underside of a deck or porch with non-combustible sheathing, and ensure a non-combustible surface extends underneath these features, as this will act as a barrier against ember ignitions. Moving combustible materials stored underneath a deck or porch to the Extended Zone, or storing inside a FireSmart™-mitigated building, will limit the potential for those materials to affect the primary structure if ignited.
- b. Non-combustible, Class A or B fire-rated deck or porch materials are ideal when it comes to reducing the susceptibility of the feature igniting during a wildfire event. A non-combustible surface should cover the entire area under the deck and extend for 1.5 metres out from its perimeter.

	● N/A, no gaps or cracks, heavy timber, noncombustible or fire-rated construction with non-combustible surface and no combustible debris under deck
	● Gaps or cracks, no heavy timber or fire-rated construction with combustible surface and combustible debris under deck

## 10. Position on slope

When fire moves upslope, it preheats fuels much quicker, allowing them to burn faster than on flat terrain. The effects of slope on fire spread become greater as the slope increases. Double the Immediate Zone and Intermediate Zone size to accommodate for slope below or adjacent to a structure.

<input type="radio"/>	● Building is located on the bottom or lower portion of hill
<input type="radio"/>	● Building is located on the mid to upper portion or crest of hill

## Comments

## 11. Woodpiles and other combustible materials

Regularly remove accumulations of combustible debris like needles, leaves, and branches. Ensure that all combustible materials, like woodpiles, building materials, patio furniture, tires, recreation equipment, vehicles, etc., are moved into the Extended Zone, or a FireSmart™-mitigated building.

	<ul style="list-style-type: none"> <li>● No combustible materials are located against the home or within 1.5 metres of the structure</li> </ul>
	<ul style="list-style-type: none"> <li>● Combustible materials including woodpiles, building materials, patio furniture, etc. are located against the home or within 1.5 metres of the home</li> </ul>

## 12. Forest vegetation (trees)

Ensure there are no trees or tree branches extending into the Immediate Zone

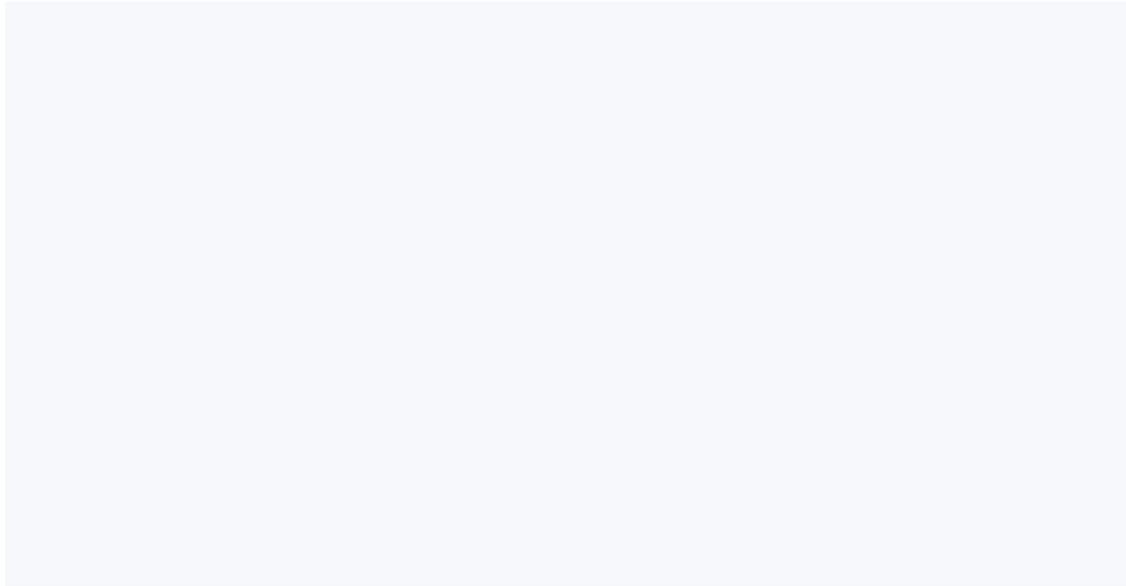
	<ul style="list-style-type: none"> <li>● Immediate zone is free of trees and their branches</li> </ul>
	<ul style="list-style-type: none"> <li>● Trees and branches are located against the home or within 1.5 m of the home</li> </ul>

## 13. Surface vegetation (shrubs, grass, and debris)

Reduce the chance of wind-blown embers igniting materials near the home. A non-combustible surface should extend around the structure and any attachments such as decks. Creating a non-combustible surface can be easy. Flammable materials and vegetation such as grass or plants should not be present in this zone.

	<ul style="list-style-type: none"> <li>● A 1.5 m non-combustible surface surrounds the home and all attachments</li> </ul>
	<ul style="list-style-type: none"> <li>● Shrubs, grass, and surface debris are located against home or within 1.5 metres of the home</li> </ul>

**Assessor comments for the Immediate Zone (list mitigation priorities)**



## ● Intermediate Zone (1.5 - 10 metres)

Elements in the Intermediate Zone are managed so they don't transmit fire to the home.



## 1. Woodpiles and other combustible materials (eg. stored vehicles)

Ensure that all combustible materials, like woodpiles, building materials, patio furniture, tires, recreation equipment, vehicles, etc., are moved into the Extended Zone, or a FireSmart™-mitigated building.

	● Woodpiles and other combustible materials are located more than 10 metres from home
	● Woodpiles and other combustible materials are located less than 10 metres from home

## 2. Outbuildings, sheds, and garages

Mitigate outbuildings, sheds, and garages to the same standard as the home or move them beyond 10m of other important structures so the chances of fire spreading to adjacent structures is significantly reduced.

	● Outbuildings, sheds and garage meet FireSmart™ guidelines
	● Outbuildings, sheds, and garage that do not meet FireSmart™ guidelines but are located more than 10 metres from home
	● Outbuildings, sheds, and garage that do not meet FireSmart™ guidelines and are located within 10 metres of home

## 3. Forest Vegetation

- a. A surface fire can climb trees quickly. Removing all coniferous branches within 2 metres from the ground will help stop surface fires from moving into the treetops.
- b. Spacing coniferous trees at least 3 metres apart from crown-to-crown will reduce the risk of tree-to-tree fire transmission.

	● No coniferous trees
	● Scattered coniferous trees
	● Abundant coniferous trees

#### 4. Surface vegetation and combustible materials

- a. Mowing and maintaining the lawn to a height of 10 cm or less will limit fire intensity and/or spread.
- b. Regularly remove accumulations of combustible debris like needles, leaves, and branches.

	Minimal surface vegetation
	Scattered surface vegetation
	Abundant Surface vegetation

#### Assessor comments for the Intermediate Zone (list mitigation priorities)

## ● Extended Zone (10 - 30 metres)

The focus in the Extended Zone is not to eliminate the possibility of fire, but to reduce its intensity.



### Surface vegetation

Regularly remove accumulations of branches, dry grass, and pine needles.



### Forest vegetation

- Ensure conifer crown spacing is at least 3 metres apart
- Prune conifer branches to 2m from the ground

## 1. Forest vegetation

- a. Spacing coniferous trees at least 3 metres apart from crown-to-crown will reduce the risk of tree-to-tree fire transmission.
- b. Removing all coniferous branches within 2 metres from the ground will help prevent surface fires from moving into the treetops.

	● Well spaced and limbed coniferous trees
	● Tighter coniferous spacing and some limbs below 2 metres
	● Abundant coniferous trees and limbs below 2 metres

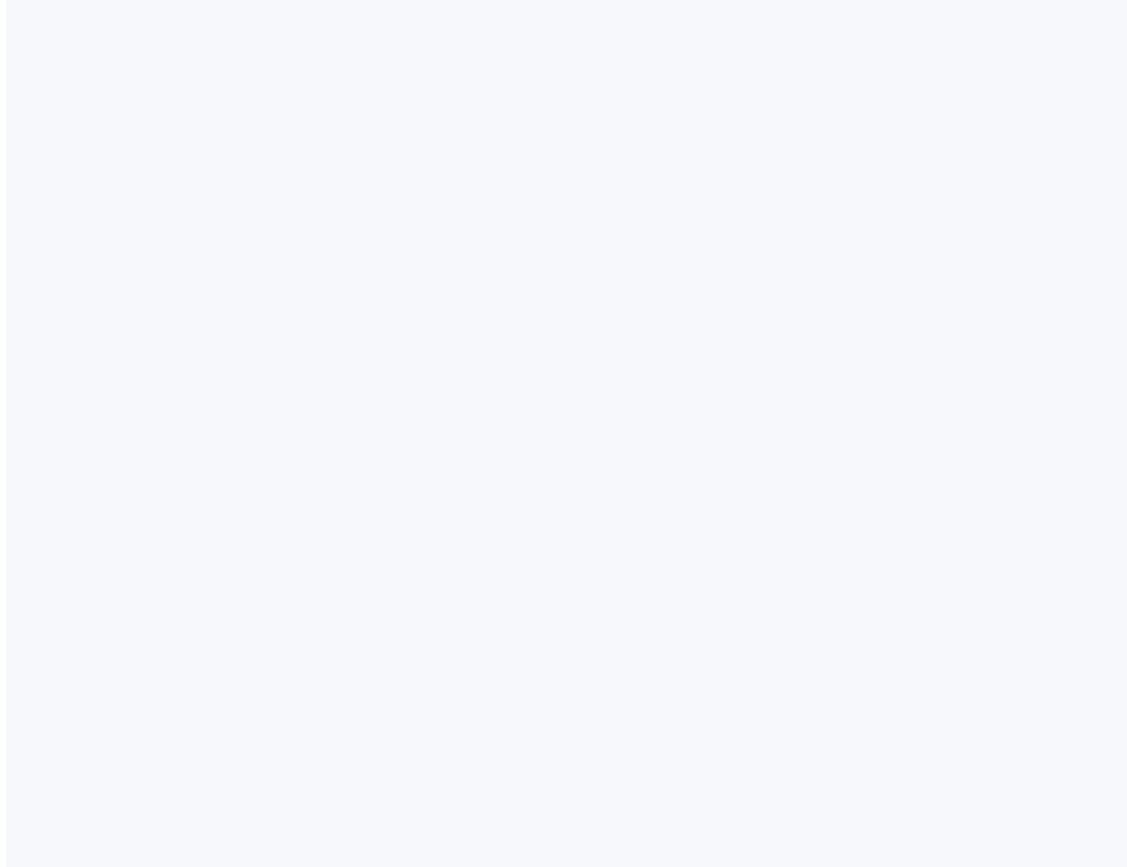
## 2. Surface vegetation

Cleaning up accumulations of fallen branches, dry grass, and needles will reduce potential surface fuels.

	● None
	● Scattered
	● Abundant

### Assessor comments for the Extended Zone (list mitigation priorities)

## General Notes



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