

KEY ISSUES:

Many homes have attached decks, which can spread fire directly to the home when ignited during a wildfire. The materials used to build the deck, combustible materials stored on and under the deck, and the vegetation around it all contribute to how vulnerable a deck will be to ignition during a wildfire. Decks are an important consideration because of their proximity to homes and buildings.



What factors contribute to the vulnerability of decks and porches?

- Slotted deck surfaces allow combustible debris to accumulate below the deck. The accumulation of combustible debris under the deck makes ignition from embers easier.
- Most deck boards are combustible, including dimensional wood and plastic.

Consider these guidelines when planning an upgrade to your deck and as a part of your ongoing home maintenance:

- Replace combustible deck/porch material with non-combustible or fire-rated materials.
- Cap deck joists with flashing or foil tape.
- Your local area may have specific minimum requirements that must be followed for new decking materials.
- Sheath or screen the exposed underside of decks/porches/foundation with fire-resistant materials, such as fibre cement board or metal screening.
- Create and maintain a non-combustible surface under and for 1.5 metres around the deck /porch.
- Move combustible materials stored underneath and on top of the deck to greater than 10 metres from home or store inside a FireSmart-mitigated building.
- Check the condition of combustible wood deck boards and replace or repair boards that show signs of rot or have large cracks.



Refer to the FireSmart Canada Home Development Guide for more information.

KEY ISSUES:

Combustible wood fences and boardwalks create a direct line to your home and can contribute to the spread of wildfire.



What factors contribute to the vulnerability of your fence?

- Wood fences offer zero fire resistance and can act as a wick directly to your home.
- Fence panels with gaps, such as wood slat fences, can allow embers to become lodged in the gaps and ignite the fence.
- Combustible materials (firewood, construction materials, etc.) and vegetation (combustible mulch, plants, shrubs, etc.) along the base of a combustible fence increase the likelihood of flame spread to a building.

Consider these guidelines when planning an upgrade to your fence and with your ongoing home maintenance:

- If a wood fence is installed, ensure there is at least a 1.5-metre non-combustible break between the wood portion of the fence and your home. Install a metal gate, for example, to break up the combustible fence and protect your home.
- Your local area may have specific minimum requirements that must be followed for new fence materials.
- Monitor the condition of a combustible wood fence closely. Repair or replace any fence panels or posts that show signs of rot or damage.
- Combustible debris near the fence should be cleared regularly and the lawn well maintained.

Refer to the FireSmart Canada Home Development Guide for more information.



KEY ISSUES:

The gutters on your home provide a place for combustible debris to accumulate, and open eaves create an entry point for sparks and embers. Combustible debris can accumulate at the vents and openings on your home and be ignited by embers during a wildfire.

**What factors contribute to the vulnerability of gutters, eaves and vents?**

- Unscreened vents can allow heat and embers to enter a building and ignite.
- Open eaves create an entry point for sparks and embers.
- Combustible debris such as leaves and pine needles can accumulate in gutters and embers can ignite the accumulated debris.

Consider these guidelines when planning an upgrade to your gutters, eaves, and vents and as part of your ongoing home maintenance:

- Screen over or behind vents with 3 millimetre non-combustible mesh OR install ember-resistant ASTM rated vents.
- Ensure there is a non-combustible drip edge and soffit, or flashing installed between the upper extent of your gutters and the roof covering so there is no exposed combustible material.
- Your local area may have specific minimum requirements that must be followed for gutters, eaves and vents.
- Inspect your vents and openings regularly to ensure the vents are in good repair and remove any accumulated combustible debris.
- Select a boxed-in or soffit-ed eave design for your home. Exposed or open eaves create an entry point for sparks and embers.
- Regularly remove debris from your gutters as sparks and embers can easily ignite these dry materials. Consider screening your gutters with metal mesh to reduce the amount of debris that can accumulate.



Refer to the FireSmart Canada Home Development Guide for more information.

KEY ISSUES:

The roof is the most vulnerable component of your home. Sparks and burning embers from a wildfire can travel long distances and quickly ignite flammable roofing material and/or combustible debris on the roof.



What factors contribute to the vulnerability of your roof?

- Un-rated roofing materials (untreated wood shakes or shingles) create a dangerous combination of combustible material and/or crevices for burning embers to lodge, and provide no protection from wildfire.
- As asphalt-composition shingles age and curl, more openings are exposed and may increase places for embers to accumulate.
- Your roof is a large surface where combustible debris can accumulate. When a wildfire threatens your home, wind-blown embers can land on your roof and ignite this debris, potentially putting your home at risk.

Consider these guidelines when planning an upgrade to your roof and as part of your ongoing home maintenance:

- Fire-rated roofing materials (ULC/ASTM) provide the best protection from wildfire.
 - > **Class A** fire-rated roofing materials provide a high level of protection.
 - > **Class B** fire-rated roofing materials provide a moderate level of protection.
 - > **Class C** fire-rated roofing materials provide a lower level of protection.
- Replace un-rated or old roofing materials with fire-rated roofing materials that meet or exceed the local authority requirements. Class A roofing material is recommended and includes asphalt-composition shingles, metal, or slate/clay/concrete tile.
- Your area may have a specific minimum fire rating that must be followed for new roofing materials. Avoid wood shakes or shingles.
- Clean leaves, pine needles and other combustible debris from your roof regularly.
- Inspect your roof often and replace or repair any shingles that are curling or in poor condition.
- Roof features, such as skylights and solar panels, could be an entry or accumulation point for wind-blown embers. Keep these features properly maintained and clear of combustible debris.

Refer to the FireSmart Canada Home Development Guide for more information.



KEY ISSUES:

Some types of siding materials, such as vinyl, can melt when exposed to high temperatures, allowing the fire to reach the underlying wall components and penetrate the interior of the building.



What factors contribute to the vulnerability of exterior walls?

- Siding is vulnerable when it ignites and when flames or embers get into the cavity behind the siding.
- With inadequate ground-to-siding clearance, accumulated embers can ignite combustible siding directly.
- Combustible debris stored near the exterior walls of a home increases a building's vulnerability to ignition during a wildfire through direct flame contact or radiant heat exposure.

Consider these guidelines when planning an upgrade to your siding and as a part of your ongoing home maintenance:

- Replace combustible siding with non-combustible or ignition-resistant siding material. Stucco, brick, fibre cement boards/ panels and poured concrete all offer superior fire resistance.
- Your local area may have specific minimum requirements that must be followed for new siding materials.
- Examine your siding for locations where embers could accumulate or lodge. Maintaining and removing combustible debris, such as lumber, stored vehicles, branches, grass, leaves and firewood near the exterior walls will reduce a building's vulnerability to ignition during a wildfire.
- Ensure your siding is free of gaps, holes, or other areas where embers could accumulate, lodge or penetrate. Prioritize repairing any vulnerabilities identified on the exterior walls of your home.
- With inadequate ground to-siding clearance, accumulated embers can ignite combustible siding directly. Create a minimum of 15 centimetre vertical non-combustible material clearance between grade and combustible siding material.

Refer to the FireSmart Canada Home Development Guide for more information.

KEY ISSUES:

Flames and radiant heat can break the glass in a window and allow fire to enter the interior of a home. Gaps at the top, bottom and edges of exterior doors (front door, garage door, etc.) can allow embers to enter and ignite combustible materials within the home and garage.

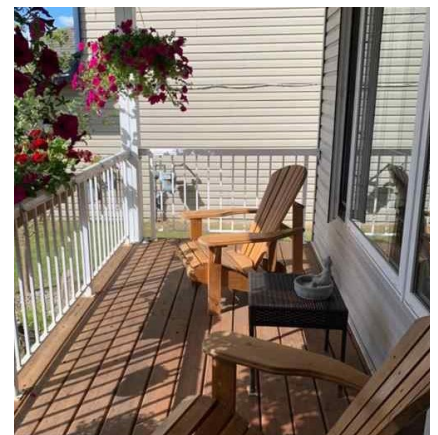


What factors contribute to the vulnerability of windows and doors?

- Single-pane windows do not withstand as much heat as multi-pane or tempered glass windows.
- Combustible materials stored next to the windows on the exterior of a home can be ignited by embers and generate enough radiant heat to break the glass and allow fire to enter the home.
- Worn or damaged weather stripping around exterior doors can allow embers to enter the interior of a home or garage and ignite combustible materials.

Consider these guidelines when planning an upgrade to your windows and doors and as a part of your ongoing home maintenance:

- Use multi-pane, tempered glass windows, and close them when a wildfire threatens.
- Your local area may have specific minimum requirements that must be followed for new siding materials.
- Move combustible materials and vegetation at least 10 metres from the home.
- Ensure garage and exterior doors are properly fitted and that weather stripping is maintained to prevent gaps for ember entry.
- Your local area may have specific minimum requirements that must be followed for new window and door materials.



Refer to the FireSmart Canada Home Development Guide for more information.

KEY ISSUES:

Living where wildfires can occur puts our homes at risk, but it is possible to live safely and resiliently with wildfire. The choices we make about our homes and properties – out to 100 metres from the foundation – can greatly reduce vulnerability to wildfire.



What factors contribute to the vulnerability of your yard?

- Storing items such as firewood piles, construction materials, patio furniture, tools and decorative pieces against or near a house is a major fire hazard.
- If combustible landscaping mulch ignites, it can produce embers that may ignite combustible materials and increase the chance of direct flame spreading to the home.
- Evergreen trees (with cones and needles) are highly flammable and should not be within 10 metres of your home.

Consider these guidelines when planning updates to your yard and as part of your ongoing property maintenance:

- A 1.5 metre non-combustible surface should extend around the entire home and any attachments, such as decks, to reduce the chance of wind-blown embers igniting materials near your home.
- Use non-combustible materials such as gravel, brick, or concrete in this critical 1.5 metre area adjacent to your home. Woody shrubs, trees or tree branches should be avoided in this area; any that are present should be properly mitigated.
- Plant only a few fire-resistant plants and shrubs within 10 metres of your home.
- Do not use bark or pine needle mulches within 10 metres of your home as they are highly combustible. Gravel mulch and decorative crushed rock mulch significantly reduce the risk of wildfire.
- A mowed lawn is a fire resistant lawn. Grasses shorter than 10 centimetres in height are less likely to burn intensely.
- Move firewood piles, stored trailers/recreational vehicles, storage sheds, and other combustible materials a minimum of 10 metres from your home.
- Regularly clean up accumulations of fallen branches, dry grass and needles from the ground to eliminate potential surface fuels.
- Remove all branches to a height of 2 metres from the ground on evergreen trees that are within 30 metres.

Refer to the FireSmart Canada Home Development Guide for more information.