

Landscape Design



Landscape design is an important step toward reducing risk from wildfire. Creating a defensible space around a building is one of the most important and effective steps you can take. All vegetation, naturally occurring and otherwise, is potential fuel for fire - plant choice, spacing and maintenance are critical.

- ❖ Refrain from planting trees or bushes within a 10 metre radius around a structure.
- ❖ Create fire safe zones with stone walls, patios, swimming pools, ponds, waterfalls, trails and driveways.
- ❖ Use rock mulch or lava stones around any shrubbery that is within 2 metres of the building.
- ❖ Use gardens and flower beds as effective fire breaks.
- ❖ Plan landscape designs to prevent vegetation from creating a fire ladder.
- ❖ Follow local bylaws which do not permit any open burning.
- ❖ Select the use of fire-resistive vegetation for use in landscape designs. An example of this would be using deciduous trees and shrubs, succulent plants that retain a large amount of water, and slow growing plants that have thick woody stems that potentially require prolonged heating to ignite.



By taking a proactive approach all levels of the community accept responsibility to reduce the impact of Wildland/Urban Interface fires.

For further information please visit www.coquitlam.ca or contact the Coquitlam Fire/Rescue Department at 604-927-6400



City of Coquitlam

Notice To Builders, Developers & Professionals

Building and Landscaping Recommendations for Wildland/ Urban Interface Areas



This guide is intended for architects, contractors, developers, engineers, home builders, planners or anyone considering building or renovating any structure in a wildland/urban interface area.

Designing and maintaining a fire wise building or subdivision can mean the difference in a successful outcome when dealing with interface fires. The following recommendations are provided to assist in the choice of development design, choice of construction materials and landscaping in interface areas.

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Development Design



In urban/interface areas it is possible to minimize the risks to both residents and natural resources by incorporating some of the following suggestions into project subdivision designs.

- ❖ Incorporate at least two entrances/exits into the development by utilizing looped road networks capable of accommodating two-way traffic.
- ❖ Roadways shall meet the BC Building Code minimum requirements for widths, overhead clearances, turnarounds, road slope and load capacities.
- ❖ Firebreaks should be considered in the development design. Some suggestions may include utilizing road access routes as perimeter firebreaks and providing adequate spacing between buildings.
- ❖ Hydro servicing should be run underground whenever possible.
- ❖ Buildings should be constructed on the most level portion of the land.
- ❖ Building-design scheme covenants (if proposed) should consider the use of fire resistant materials and landscaping features as described in this brochure.

Construction Materials

With the expansion of residential construction into previously undeveloped forests and wildlands, more buildings are now at risk from wildfires. Proper use and assembly of fire-rated building materials can reduce a fire's spread and extend the amount of time it takes for a home to ignite and burn. As no building can be completely fireproof; implementing the recommendations as described below should not only greatly reduce the potential for damage to a building but also increase its chance of survival.

Roof

The roof is extremely vulnerable as it is the largest exposed surface area of a structure. Simple roof forms with less intersections and surface area are more likely to be protected from trapped, wind-blown embers (firebrands) in the rough surfaces of most roofing materials. The use of "fire-resistant" rated materials may provide additional protection without sacrificing design features.

- ❖ Examples of Class A materials include the following: concrete tile, slate, metal, and terra-cotta tile.
- ❖ Class B materials may include certain applications of built up roofing.
- ❖ Class C materials may include listed fire rated wood shakes or shingles.
- ❖ Eaves should be closed in with vents and soffits screened. Both vents and screens should consist of materials that will not burn when exposed to heat.

Siding

- ❖ Use non-combustible siding such as cement based stucco, masonry products such as brick or brick veneer, or cement board siding

Windows

- ❖ Utilizing tempered glass for window glazing provides optimum protection.
- ❖ Minimize the number and size of windows on any side of the house that is likely to be exposed to a forest fire. Small or multiple-pane windows are less vulnerable to breakage during a fire than one large window.
- ❖ Utilize non-flammable materials for all window shutters.

Doors

- ❖ Utilize metal or non-combustible exterior doors whenever possible.

Decks and Balconies

- ❖ Construct balconies and deck surfaces with non-combustible or fire resistant materials.
- ❖ Cover decks with solid surfaces as opposed to slotted surfaces which allow needles to accumulate below the deck.
- ❖ Screen or enclose space underneath decks and porches whenever possible.
- ❖ Consider terraces instead of elevated decks.
- ❖ Use of heavy timbers in construction of decks will increase the fire resistance of buildings as heavy timber takes longer to burn and the surface-to-volume ratio is lowered.

Other Adjacent Structures

- ❖ Refrain from attaching wooden fences to homes as they can act as fuel bridges.
- ❖ Accessory structures, which may include: outbuildings, patio covers and gazebos should have at least 9 metres separation from a main structure.

Construction Safety Practices

- ❖ Ensure adequate fire protection is provided during construction of a building. This includes hot-works safety practices during common welding, roofing and plumbing installations. Construction fire safety plans are required.

Please remember to consult local bylaws and registered covenants on the use of materials and design approaches prior to the construction of any building.