

## 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](http://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.*