

DEFENSIBLE SPACE

HOME IGNITION ZONES.

A defensible space is an area around a building in which vegetation, debris, and other types of combustible fuels have been treated, cleared, or reduced to slow the spread of fire to and from the building. Information about local vegetation, weather, and topography is used to determine the Home Ignition Zone of an area, which can help determine the most effective design of a defensible space.

A defensible space is one of the most cost-effective ways to protect a building from a wildfire and can often be created by the property owner.



GUIDANCE

- Assess both the horizontal and vertical aspects of vegetation when designing the defensible space.
- To prevent the horizontal spread of wildfire, thin shrubs and trees so the crowns do not intersect and there is space between individual shrubs and trees.
- To prevent the vertical spread of wildfire, keep the lowest tree branches pruned and trimmed to maintain vertical separation from the top of shrubs and grasses to the lowest tree branches.
- The vertical distance needed will vary significantly, depending on the species of tree and composition of the understory.
- Create three concentric zones around the building. The zone closest to the building, normally has the greatest need for fuel modification with progressively less modification in the other two zones. The higher the Fire Severity Zone, the larger the concentric zones should be. Consult the local or state fire agency for assistance.

The three zones are discussed further below.

IMMEDIATE ZONE This is the area immediately around any structures on your property. It is the areas of maximum modification and treatment. It consists of an area from zero to five (0-5) feet around the structure in which flammable materials and vegetation is removed or replaced with decorative stone and well-placed fire-resistant plants and groundcover. Wooden decking can be replaced with non-flammable decking. The 5 feet is measured from the outside edge of the home's eaves and any attached structures, such as decks or stairways. **This should also include the structures themselves in the way of Structure Hardening.**

- Clean roofs and gutters of dead leaves, debris and pine needles that could catch embers.
- Replace or remove missing shingles or roof tiles to prevent ember penetration.
- Reduce embers that could pass through vents in the eaves by installing 1/8 inch metal mesh screening.
- Clean debris from exterior attic vents and install 1/8 inch metal mesh screening to reduce embers.
- Repair or replace damaged or loose window screens and any broken window screens or boxed in areas below patios and decks with wire mesh to prevent debris and combustible materials from accumulating.
- Move flammable materials away from wall exteriors—mulch, flammable plants, leaves and needles, firewood piles—anything that can burn. Remove anything stored underneath decks or porches.
- Do not stack firewood or store other combustibles in this zone.

INTERMEDIATE ZONE This is the area from five to thirty (5-30) feet around any structure on your property. This is the zone where by creating fuel breaks it is possible to help influence and decrease fire behavior.

- Clear vegetation from under large stationary propane tanks.
- Create fuel break with driveways, walkways/paths, patios and decks.
- Remove ladder fuels (vegetation under trees) so a surface fire cannot reach the crowns. Prune tree six to ten feet from the ground; for shorter trees do not exceed 1/3 of the overall tree height.
- Remove any branches that touch or interfere with the roof, or are within 15 feet of the chimney.
- Tree replacement should be planned to ensure the mature canopy is no closer than ten feet to the edge of the structure.
- Trees and shrubs in this zone should be limited to small clusters of a few each to break up the continuity of the vegetation across the landscape. Tree groupings should be approximately eighteen (18) feet apart.
- Do not stack firewood or store other combustibles in this zone.

EXTENDED ZONE This is the area from thirty to one hundred (30-100) feet around any structure on your property. On large parcels of property it can be extended to two hundred (200) feet. The goal here is not to eliminate fire but to interrupt the fire's path and keep flames smaller and on the ground.

- Dispose of heavy accumulations of ground litter/debris.
- Remove dead plant and tree material.
- Stack firewood/woodpiles at least 30 feet away and uphill from structure. Keep flammable vegetation at least 10 feet from woodpiles.
- Remove small conifers growing between mature trees.
- Trees thirty to sixty (30-60) feet from the home should have at least twelve (12) feet between the canopy tops.
- Trees sixty to one hundred (60-100) feet from the home should have at least six (6) feet between canopy tops.