



PRIVATE CLIENT SERVICES



## PRIVATE CLIENT

# Creating Defensible Space and Hardening Your Home and Property in Wildfire Zones



## Wildfire Risk Mitigation: Defensible Space & Hardening Your Property

Wildfires in the U.S. have grown larger, more frequent, and more destructive in recent years. According to research from [Pew Charitable Trusts](#), from 2017 to 2021, the average annual acreage burned by wildfire in the U.S. was 68% greater than the yearly average from 1983 to 2016. A [congressional report](#) estimates that wildfires cost the U.S. economy between \$394 billion to \$893 billion each year.

The threat of wildfire is clear and present. In 2023 alone, catastrophic wildfires spread in California and across the Western United States and to traditionally humid regions — including Florida and Hawaii. The increased risk of wildfire is spreading across the country, all the way to the East Coast. In short, nowhere is safe, and everyone must take proactive steps to protect their homes.

Creating defensible space and hardening your home through strategic, proven tactics are crucial to safeguarding homes from destruction. These strategies are especially important for high-net-worth individuals living in wildfire-prone regions. Let's dig into best practices for creating defensible space, top considerations for hardening your home, and the insurance implications of not doing so.



### What is defensible space?

A defensible space serves as a fuel break (barrier) between your home and the wildfire, reducing the likelihood of ignition from radiant heat, embers, or direct flame contact. Defensible space is specifically designed to reduce the risk of wildfire reaching your home.

Creating defensible space also provides a safer environment for firefighters to defend your home, allowing them to access your property more easily and reducing the risk to their safety. Given the larger homes and lot sizes of high-value properties, especially in wildfire-prone areas, defensible space is essential for protecting these investments.

### Benefits of creating defensible space around high-value homes in wildfire prone regions

Creating defensible space can be time-intensive and can be a significant investment to protect against a scenario that may or may not happen. But if a wildfire does come creeping towards your door, the benefits will become immediately clear:

#### Protecting property value:

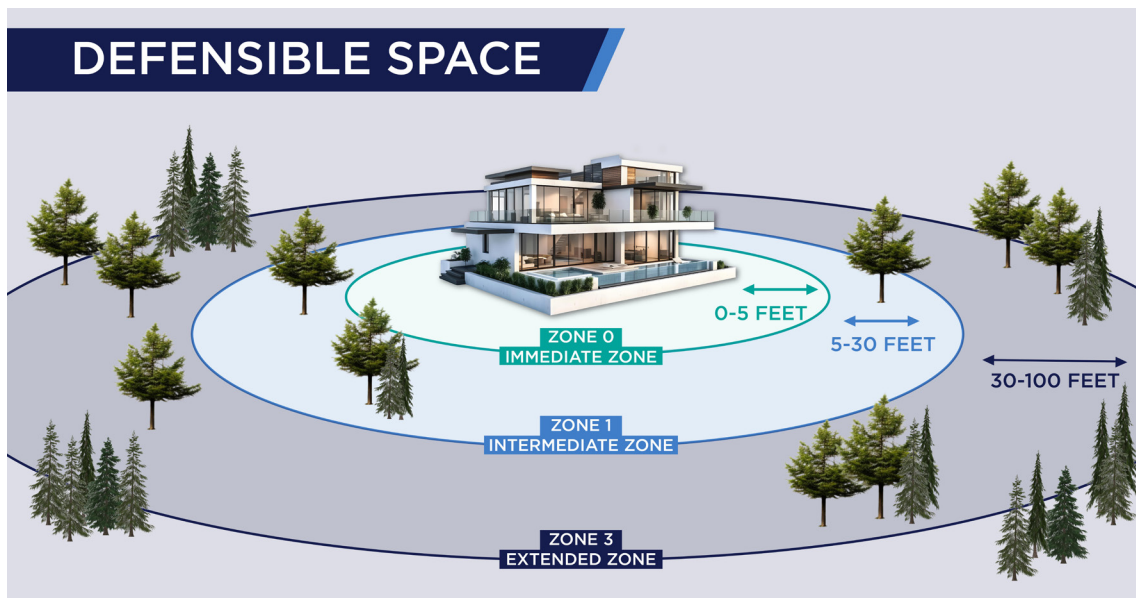
Creating defensible space can help protect the value of your high-end home by reducing the risk of damage or destruction in the event of a wildfire. Insurers often view homes with defensible space more favorably, potentially leading to lower premiums and access to better coverage.

#### Ensuring safety and peace of mind:

Defensible space helps protect your property and helps ensure the safety of your family and other occupants. Knowing your home is well-prepared against wildfires can provide peace of mind, especially in high-risk areas.

## Creating defensible space: A step-by-step guide

The following guidelines and steps will help you create defensible space and better protect your property. The National Fire Protection Association (NFPA) subdivides defensible space into three zones (Zone 0, Zone 1, and Zone 2), based on proximity to a home or structure. It is important to also know your Local and State Ordinances, as there may be additional or more strict rules and requirements specific to your location.



### Where is Zone 0 of defensible space located?

Zone 0 of defensible space, also called the Immediate Zone, is the first 5 feet around the home. The goal of this zone is to make this a non-combustible area, to protect the home and prevent embers from entering.

#### How to create a non-combustible Zone 0 of defensible space:

##### 1. Clear vegetation and debris

- Remove all dead vegetation, leaves, and pine needles from the roof, gutters, and within 5 feet of the home.
- Remove any vegetation or combustible materials under decks or porches.
- Trim tree branches to be at least 10 feet away from chimneys and stovepipes.

##### 2. Use non-flammable materials

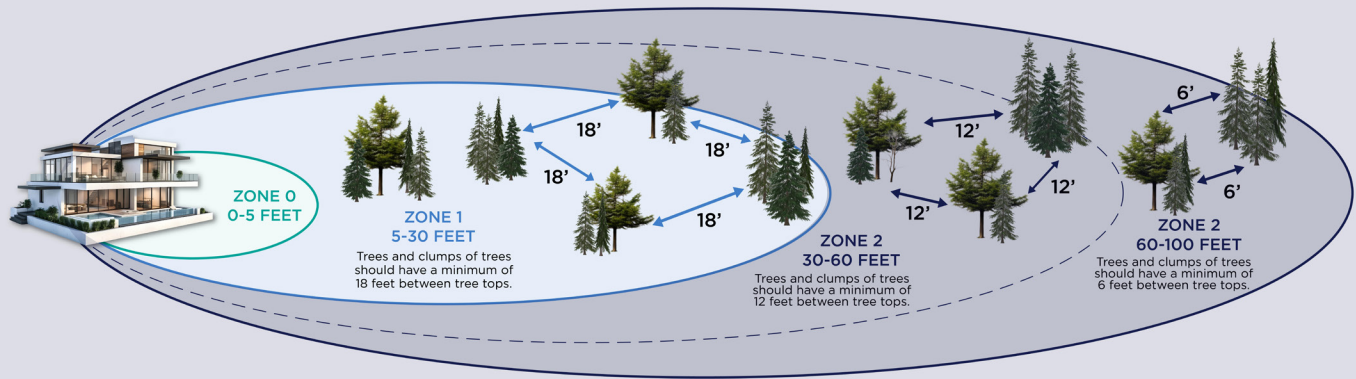
- Use non-flammable materials such as rock, gravel, bricks, or pavers to surround the house.
- Do not use wood mulch or plant flammable vegetation.

##### 3. Maintain your defensible space

- Regularly maintain this area by keeping it clear of debris and flammable materials.
- Remove anything stored underneath decks or porches.
- Monitor for any new growth or accumulation of debris and remove as soon as possible.
- Do not store wood piles or fuel sources (e.g., propane tanks for cooking appliances or fire pits) in this area.
- Only use plants that are considered safe for wildfire-prone areas.
- Ensure all attic vents have 1/8" metal mesh screens to prevent ember penetration.
- Use non-combustible or Class A fire-rated exterior building materials and tempered or dual pane glass windows.



## TREE SPACING: Horizontal Spacing Recommendations



### Where is Zone 1 of defensible space located?

Zone 1 of defensible space, also called the Intermediate Zone, is located 5 to 30 feet from the home. The goal of this zone is to reduce flammable materials near the home and reduce connectivity between trees, shrubs, and other landscape features.

#### How to create defensible space in Zone 1:

##### 1. Create fuel breaks

- Create fuel breaks with hard surfaces like driveways, walkways, paths, and patios.

##### 2. Maintain a well-irrigated lawn

- Keep grass well-watered and maintained to reduce flammability.
- Consider using fire-resistant landscaping materials in this zone.

### 3. Space trees and shrubs with adequate horizontal and vertical clearance

- Limit trees to small clusters with adequate spacing.
- Thin trees and large shrubs.
- Horizontal Spacing:
  - Maintain recommended spacing of 18 feet between tree crowns\*.
- Vertical Clearance:
  - Remove any “ladder fuels” within 6 feet of the ground. Ladder fuel (or fuel ladder) is a term for live or dead vegetation that allows a fire to climb from the landscape or forest floor into the tree canopy. Common ladder fuels include tall grasses, shrubs, and tree branches, both living and dead.
  - For trees near smaller plants or shrubs, make sure the lowest branches of the tree have a minimum clearance of 3-times the height of the adjacent smaller plant.

## Where is Zone 2 of defensible space located?

Zone 2 of defensible space, often referred to as the Extended Zone, is located 30 to 100 feet, or more, from the home. The goal of this zone is to create fuel breaks, reduce heat transfer, and prevent wildfires from moving closer to the home.

### How to create defensible space in Zone 2:

#### 1. Space trees and shrubs with adequate horizontal and vertical clearance

- Regularly thin trees and brushes to maintain adequate spacing and to minimize the fuel load and the likelihood that the fire will spread.
- Regularly remove dead vegetation and debris.

- **Horizontal Spacing:** Trees 30 to 60 feet from the home should have at least 12 feet between canopy tops. Trees 60 to 100 feet from the home should have at least 6 feet between the canopy tops.\*
- **Vertical Clearance:** Follow the vertical clearance recommendations outlined for Zone 1.

#### 2. Plant fire-resistant vegetation

- Plant fire-resistant vegetation in this zone, such as deciduous trees and low-growing shrubs.
- Avoid planting highly flammable plants, such as juniper or pine trees.

## TREE SPACING:

### Vertical Clearance Recommendations



## Actions for creating and maintaining defensible space year-round

- **Regular Inspections:**  
Regularly inspect your defensible space and make any necessary adjustments to ensure it remains effective.
- **Fire-Resistant Landscaping:**  
Use fire-resistant landscaping materials and plants throughout your property.
- **Create Fuel breaks:**  
Consider creating fuel breaks, such as driveways, gravel pathways, or irrigated areas, to help prevent the spread of fire.
- **Stay Informed:**  
Stay informed about wildfire risks in your area and follow any guidelines or recommendations from local authorities.
- **Review your Local Ordinances:**  
Check your local ordinances for defensible space requirements, which may be different and more strict than state requirements. Your local fire department or fire protection district should be able to provide location specific rules and requirements.



## Harden your home to reduce wildfire threats

Creating defensible space is one piece of the property-protection puzzle; hardening your home is another. Wild fires threaten homes and properties with direct flames, radiant heat, and flying embers. Making strategic changes to your home, including materials, installation practices, sealing, and maintenance, can increase its chances of survival if a wildfire strikes.

By following these tips, you can create a more fire-resistant home. Even minor improvements can make a big difference. Proactive defensive measures you can take include:

### Roofs and chimneys

- Use fire-resistant roofing materials like metal, clay, or tile.
- Close off gaps under roof tiles and shingles to prevent embers from entering.
- Regularly remove leaves and debris from the roof.
- Cover chimney and stove pipe outlets with a non-flammable screen of 1/8" or smaller.

### Vents and windows

- Install non-flammable mesh (1/8" or smaller) over vents to block embers. Consider installing ember-resistant vents.
- Install dual-pane windows with tempered glass.
- Limit the size and number of windows facing large vegetation areas.
- Add non-flammable screens (1/8" or smaller) to operable windows.

### Walls and decks

- Use fire-resistant siding materials like stucco, fiber cement, stone, or fire-rated wood systems.
- Ensure siding materials extend from the foundation to the roofline.
- Construct decks from fire-resistant materials that have a Class-A fire rating or are non-combustible.
- Remove flammable materials from underneath decks.
- For decks extending over steep slopes, create defensible space and take action to prevent flames from reaching the underside of the deck.

### Patio covers and eaves

- Use the same fire-resistant materials on patio covers as on your roof.
- Box in eaves using fire-resistant materials to prevent ember entry.

### Garages and fences

- Store fire extinguishers and firefighting tools in the garage.
- Install battery backups for garage doors. Apply weather stripping around the garage door to block embers.
- Use non-combustible materials for fences.

### Driveways and access roads

- Maintain at least 10 feet of vegetation clearance on either side of driveways and access roads.
- Ensure gates open inward and are wide enough for emergency vehicles.
- Make sure house numbers are visible at the driveway end so firefighters can easily find and identify the property.
- Trim overhead branches on driveways and access roads.

### Rain gutters and water supply

- Regularly clean gutters to prevent ember ignition.
- Install a non-combustible metal drip edge to protect the roof's edge from embers.
- Use non-combustible gutter covers to keep out debris.
- Install long garden hoses that can reach all areas of your property.
- Consider installing pumps for pools or wells to increase water availability during fires.

Many insurance carriers review Risk Scoring and Protection Classes to underwrite homes and property.



### Fire protection classes and risk scoring

Although there are many risks management measures you can proactively take as a homeowner, there are also some items that are out of your control based on the location of your property.

Many insurance carriers review Risk Scoring and Protection Classes to underwrite homes and property. Risk Scoring and Protection Classes are based on where your residence is located and how prone it is to future wildfire events. Some of the components that go into Risk Scoring include the following:

- Distance to the nearest fire department and what their average response time is.
- The staffing of your fire department - fully staffed vs. volunteer.
- Reviewing the history of wildfires in or near your community.
- The distance your home and property to a fire hydrant.
- What water resources are nearby – lakes, ponds, rivers, harbors.
- The coordinated response plan of your local county and state.
- The access your community has to firefighting helicopters and the ability to mobilize firefighters quickly.
- The annual measure for moisture content in the soil and surrounding vegetation.
- The area ingress and egress and more...



## Proactive wildfire defense measures both help protect your property and improve your risk profile with insurance carriers

Homeowners' insurance is crucial for protecting homes in all regions, and especially so in wildfire-prone regions and locations susceptible to any type of natural disasters and severe weather. Creating defensible space and hardening your home can help make your property more attractive to underwriters.

Below are some of the actions that insurance companies may take when properties are not adequately fire-safe or have insufficient defensible space. Risk Scoring and Protection Classes also are factored into decisions related to insurability, deductibles, limits, and rates.

- **Higher premiums:**

Insurance companies may charge higher premiums for homes in high-risk areas or with insufficient defensible space. Additional risk factors can further increase premiums.

- **Limited coverage:**

In extreme cases, insurers may limit coverage or refuse to insure homes with inadequate defensible space. This can leave homeowners vulnerable to significant financial losses in the event of a wildfire.

- **Loss of comprehensive coverage:**

Without defensible space, insurers may offer policies with limited coverage for wildfire-related damages. This can include higher deductibles, exclusions for certain types of damages, or coverage caps that may not fully cover the cost of rebuilding or repairing a high-value home.

- **Wildfire deductibles:**

If you receive coverage through the non-admitted market, you will likely see a Wildfire Deductible in your policy. This is becoming common among non-admitted carriers, allowing them to write business while protecting themselves from devastating losses. Typically, wildfire deductibles are higher than standard deductibles due to the increased risk and potential for extensive damage associated with wildfires.

- **Difficulty finding coverage:**

In some cases, high-net-worth individuals may struggle to find insurance coverage for homes without adequate defensible space. This can lead to financial hardship and difficulty securing mortgages or loans for the property (if needed by the owner).

### Protecting what matters most

Creating defensible space and hardening your high-value home against wildfires is an investment in peace of mind and the legacy you build. Don't wait for disaster to strike. It is important to control what you can. Take proactive steps today to safeguard your valuables, your loved ones, and your property.

Partner with expert advisors and experienced insurance brokers to secure adequate homeowners' insurance. These professionals understand the unique needs of high-net-worth individuals and can tailor insurance policies to address specific risks, such as wildfire exposure. Their expertise, alongside defensive measures, can ensure your home is protected for generations to come.





### Additional resources

The [Risk Strategies Private Client Risk Resource](#) offers helpful checklists and resource guides to keep you informed and help you manage and mitigate your risk exposure. Our wildfire guides can help you in case of emergency:

- [Wildfire Safety & Evacuation Action Guidelines](#)
- [Wildfire Safety for Your Livestock and Pets](#)
- [Private Client Claims Reporting Guidelines](#)

### Connect with a Risk Strategies Wildfire Insurance Expert

- Email us at [privateclient@risk-strategies.com](mailto:privateclient@risk-strategies.com)
- Visit us online at [risk-strategies.com/privateclient](https://risk-strategies.com/privateclient)
- Access all the [Private Client Blogs & Risk Resources](#)

### Footnotes & sources

- \*The distances listed for crown spacing are suggested based on NFPA 1144. However, the crown spacing needed to reduce/prevent crown fire potential could be significantly greater due to slope, the species of trees involved and other site specific conditions. Check with your local forestry professional to get advice on what is appropriate for your property.
- <https://readyforwildfire.org/>
- <https://www.nfpa.org/education-and-research/wildfire>

### Want to learn more?

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