



LANDSCAPE (DESIGN)

A resilient landscape is fire-wise, water wise and promotes biodiversity by using California native plants. These gardens use sustainable practices, plant selection, and maintenance to reduce the risk of fire in the defensible space zone. Resilient gardens save water, protect us from fire and promote biodiversity.

START HERE!

DESIGN

SEASONAL MAINTENANCE

Zone 0	Zone 1	Zone 2
--------	--------	--------

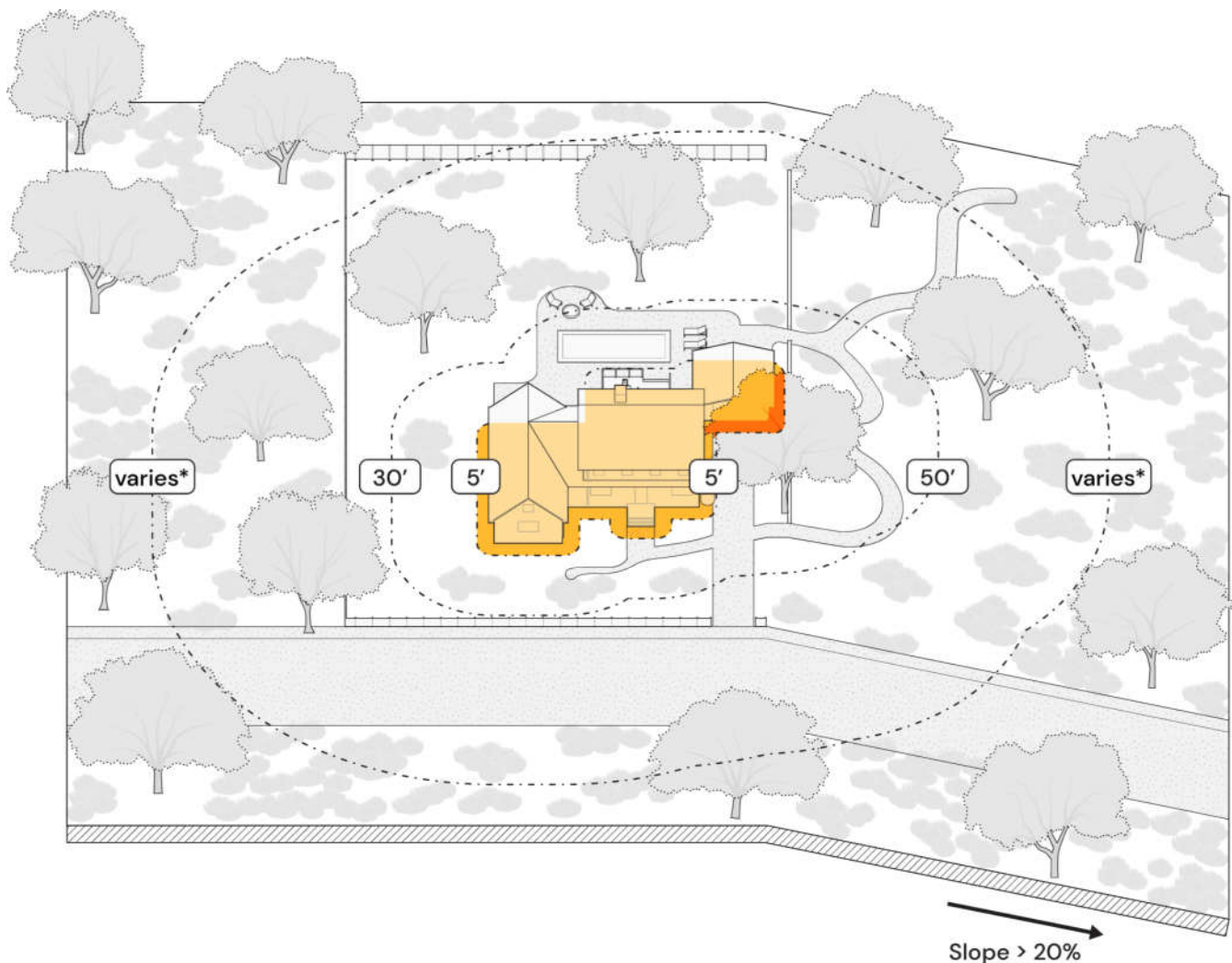
Zone 0: 0-5' from structures

The Ember-Resistant Zone (ERZ)

The Ember-Resistant Zone is the first 5 feet around your home, including the structure itself. The objective in this zone is to avoid ignitions from windblown embers landing on or near the direct surroundings of the house and starting a fire. Ember ignitions are responsible for the majority of homes lost or damaged in wildfires. In the Ember-Resistant Zone, all home building materials, vegetation, equipment, outdoor furniture, toys or anything else that could be ignited by embers must be removed or replaced. Research from the Insurance Institute for Business and Home Safety (IBHS) shows that appropriately managing the first 0 to 5 feet around the house has the greatest impact on reducing the risk of losing a home to wildfire.

No vegetation is recommended within 5 feet of any structure. No organic landscape mulch or wood chips should be utilized. Incorporate pathways of gravel, pavers, or concrete. Existing trees may overhang the roof, but maintain a distance of 5 feet (10 feet from chimneys), and clean roof and gutters regularly.

Zone 0: 0-5' from structures



Defensible space is an area around a home or other structure that is designed, modified, and/or maintained in a way that increases the probability of the home surviving a wildfire event. All vegetation, whether native or non-native, are potential fire fuel. Through proper planning, you can have both a beautiful native landscape and a fire-wise home. Fire-wise landscapes should also include hardscape elements, such as granite paths, patios, and stone walls. These can act as fuel breaks in-between islands of native vegetation to help slow down or change the path of an approaching fire.

The size of the zones shown above are supported by research into home losses in wildfires, and are consistent with most local regulations at the time of publication. Based on this evidence and current CalFire standards, we

show a maximum distance for vegetation modification of 100' from the house. However, the type of vegetation, terrain, and local regulations may require additional thinning beyond 100'. Contact your local Fire Department for specific requirements.

Native vegetation is often protected by regulations, so do not remove previously unmodified habitat without first contacting your local County planning department for specific limitations and processes.

Recommendations for Zone 0: 0-5' from structures

1. No vegetation is recommended within 5 feet of any structure.
2. Keep the area surrounding your structures clear of combustible materials such as furniture and accessories, natural fiber doormats, garbage and recycling containers, lumber, firewood, and clutter.



Design by April Owens, photo by Saxon Holt/PhotoBotanic

3. Install hard surfaces, such as concrete walkways, or use noncombustible mulch products such as rocks and gravels.

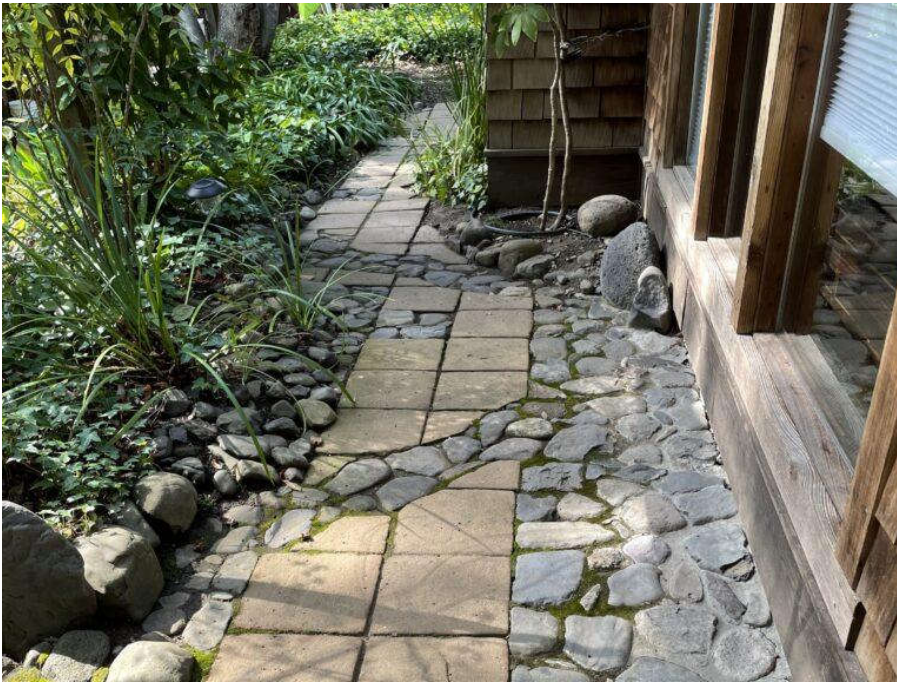


Photo by Ellie Insley.

4.

Clean up all fallen leaves and needles, and keep any remaining plants free of dead material.

5.

Wood fences and hedges should not extend into Zone 0 or connect to the house.

6.

Include footprint of any attached structure, such as a deck, within the Ember-Resistant Zone, and do not store firewood, lumber or combustibles here. Consider installing screening that is 1/8" mesh or smaller to keep debris and embers from entering areas under decks.



Design and photo by Ellie Insley

Plant Selection

Optimally, no vegetation is recommended within 5' of any structure. Particularly important is to avoid plants in front of or below windows, in corners and under eaves. The highest standard is to have no combustible materials in zone 0, however irrigated non-woody herbaceous plants may be considered if less than 16" in height and set back from structures and decks. Plants should have high water content. Any vegetation that remains in this zone should be pruned to reduce the amount of fire fuel. Thinning the plant from the inside is recommended. Hedging the tops and sides of plants causes fine twiggy growth and a build up of plant debris, increasing ignitability.

Trees

- Do not plant trees in the Ember-Resistant Zone.
- Remove tree limbs that extend into this zone. Tree branches can overhang the roof if 5' clearance is maintained (10' from chimneys), but removal of leaves and debris from the roof and gutters is critical!

Potted Plants

The ember-resistant zone is a no planting zone. Although not directly planted, any potted plants should be well-maintained and follow these guidelines. As a general rule, we recommend keeping potted plants outside that zone at all times since heavy pots can be hard to move. If you keep potted plants in this zone, they should be non-combustible pots (such as ceramic, metal or cement) with a maximum vegetation height of two feet.

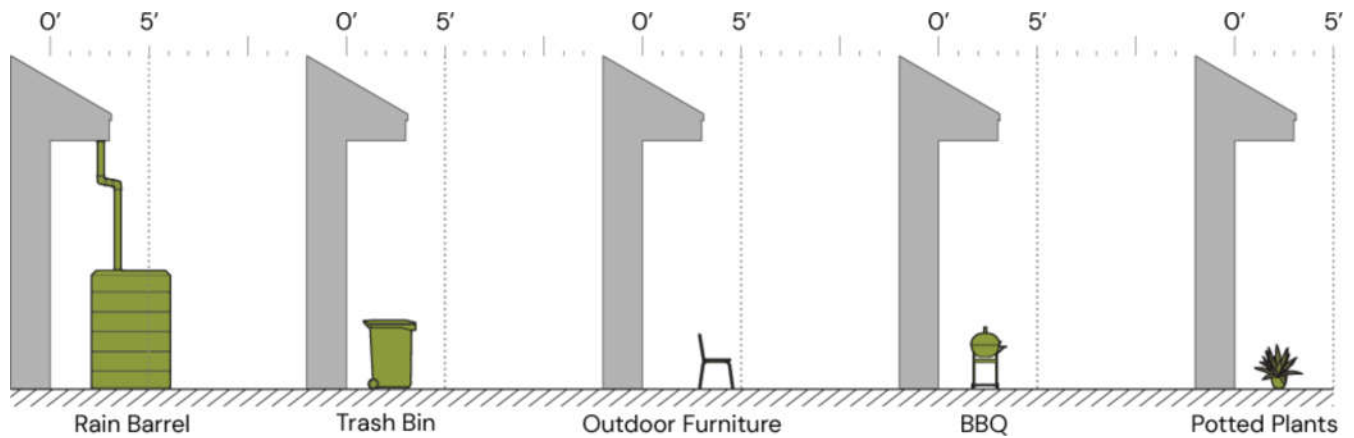


- Do not plant invasive species. They can generate seeds and contaminate the natural environment. [Click here for INVASIVE section.](#)
- Make sure your potted plants are well maintained and watered.
- Remove any debris and dead material from your potted plant. Any leaf litter within the pot can be ignited by embers.



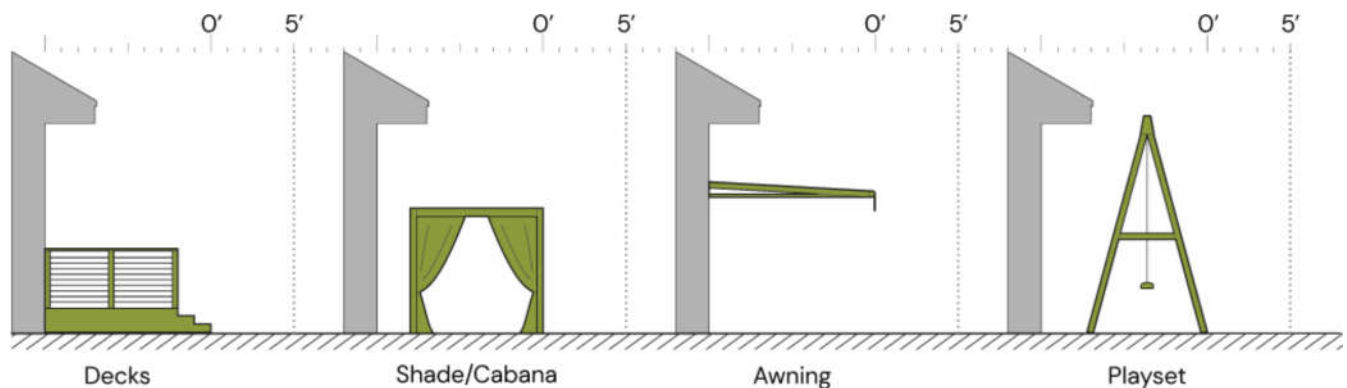
Design and photo by April Owens. Potted plants can enhance Zone 0, but ideally are moved during high fire risk.

Typical Amenities in Zone 0



- Make sure the amenities are movable, not in contact with your structure (ideally outside the 5-foot zone) and with a minimum of 12 inches vertical space from any window.
- For non-movable amenities (e.g. rain barrels) make sure they are made of non combustible material (e.g. metal).
- Any movable amenities should be placed outside the Ember-Resistant Zone during Red Flag Warnings. [Click here](#) for CAL FIRE Red Flag warnings page.

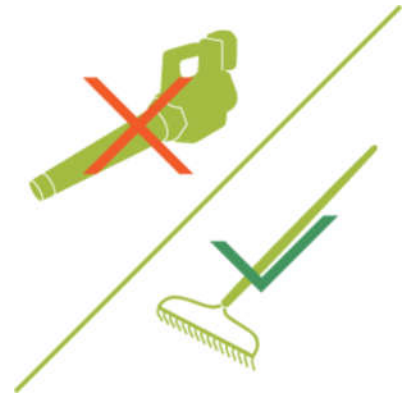
Typical Accessories in Zone 0



If you have combustible accessories such as awnings, shades / cabanas, play-sets, or decks, make sure to extend your Ember Resistant Zone and include 5 feet of non-combustible area around these structures.

About Leaf Blowers

In early summer, give your leaf blower a vacation; use a rake instead. Leaf blowers blow away mulch and topsoil, and they contribute to air and noise pollution. They are also a fire hazard due to engine heat and the sparks they can generate. Check local regulations, as some cities no longer allow the use of gas leaf blowers.



Work with Your Neighbors

- In most cases, the most effective solution is a cooperative approach between neighbors. Many homes do not have 100' of space between structures and parcel lines. Property owners are required to maintain defensible space to their property line. Help your neighbors create defensible space for their homes, and ask neighbors for help if their property threatens yours.
- Remember that the most important zone is closest to your structures – from zero to five feet. If you've taken all the steps outlined here and worked to "harden" your home, neighboring properties typically present only a minimal risk.

Sources

[California Natives](#) (UC Master Gardener Program of Sonoma County)

[California Native Plants: Beauty & Many Environmental Benefits](#) (UC Marin Master Gardeners)

[Reducing the Vulnerability of Buildings to Wildfire: Vegetation & Landscaping](#) (UC ANR Publication 8695)

[California Native Plants for The Garden](#) (2006) by C. Bornstein, D. Fross, and B. O'Brien. Cachuma Press.

[California Watershed Approach to Landscaping](#) (G3, 2018)

[Compost in a Hurry](#) (UC ANR, 2007)

[Defensible Space, Fire Retardant Landscaping, and Fire Hazard Reduction](#) (UC ANR, 2020)

[Fire Preparation Through the Year](#) (UC ANR, 2020)

[Fire Recovery Guide](#) (California Native Plant Society, 2019)

[Getting Started with Native Plants](#) (Theodore Payne Foundation, 2015)

[Native Planting Guides](#) (California Native Plant Society)

[Pruning Tips and Techniques](#) (California Native Plant Society)

[Starting a Native Plant Garden](#) (California Native Plant Society, 2017)



Sonoma Ecology Center works to address challenges related to water supply and quality, open space, rural character, biodiversity, energy, climate change, and a better quality of life for all residents.

<https://sonomaecologycenter.org/>



The UC Master Gardener Program of Sonoma County has been extending educational outreach and providing technical assistance to home gardeners since 1981.

<https://sonomamg.ucanr.edu/>



The mission of the Habitat Corridor Project is to create and promote California native plant restoration gardens in the urban environment.

<http://habitatcorridorproject.org/>



The primary objective and purpose of FireSafe Sonoma is to provide education, exchange information and foster fire prevention and fire safety within the County of Sonoma.

<https://www.firesafesonoma.org/>



Sonoma Ecology Center works to address challenges related to water supply and quality, open space, rural character, biodiversity, energy, climate change, and a better quality of life for all residents.

<https://sonomaecologycenter.org/>



The UC Master Gardener Program of Sonoma County has been extending educational outreach and providing technical assistance to home gardeners since 1981.

<https://sonomamg.ucanr.edu/>



The mission of the Habitat Corridor Project is to create and promote California native plant restoration gardens in the urban environment.

<http://habitatcorridorproject.org/>



The primary objective and purpose of FireSafe Sonoma is to provide education, exchange information and foster fire prevention and fire safety within the County of Sonoma.

<https://www.firesafesonoma.org/>



Funding for the Resilient Landscapes Coalition is provided by a Vegetation Management Project Grant from the County of Sonoma