

The Fire Safe Home

What's most important?

Embers from a wildfire can travel a mile!!

A wildfire's strong winds can carry burning embers far from the active blaze.

- Avoid features that can trap embers like uncovered vents and exposed undersides of decks.
- Build home away from slopes. Slopes and canyons create "chimneys" that strengthen the blaze.
- Use fire-resistant building materials for roof, walls, and windows.
- Avoid highly flammable structures such as wooden fences, furniture, and decks.
- Create a 30-foot non-combustible area around the home using ground covers, pebbles, or hard surfaces, not mulch. Store firewood outside this area or in a fire proof container. Keep this area clean of debris such as leaves and pine needles.
- Check with local fire and building agencies for regulations on building in high fire hazard zones.

Roof

- Use fire-resistant materials: composition, metal, or tile.
- Block any space where embers could get caught.
- Keep roof and gutters free of debris.
- Keep 10 feet of space between roof and trees.

Eaves

- "Box in" (enclose) eaves to reduce fire heat buildup.

Decks

- Use fire-resistant materials.
- Enclose underside with fire-resistant materials or 1/8-inch wire mesh.

Windows

- Use dual-pane windows with one pane of tempered glass, which reduces the chance of breaking in a fire.
- Do not use vinyl windows; they can melt and allow embers inside.

Chimney

- Screen with 1/8-inch wire mesh or approved spark arrestor.

Outside Walls

- Use stucco, cement board, brick, or other approved materials.

Vents

- Cover with 1/8-inch or smaller wire mesh to keep embers out.

Flammable Items

- Keep the deck, porches, and any areas within 30 feet of the home free of any easily combustible materials such as baskets, wooden patio furniture and fences, firewood, pine needles, and other debris.

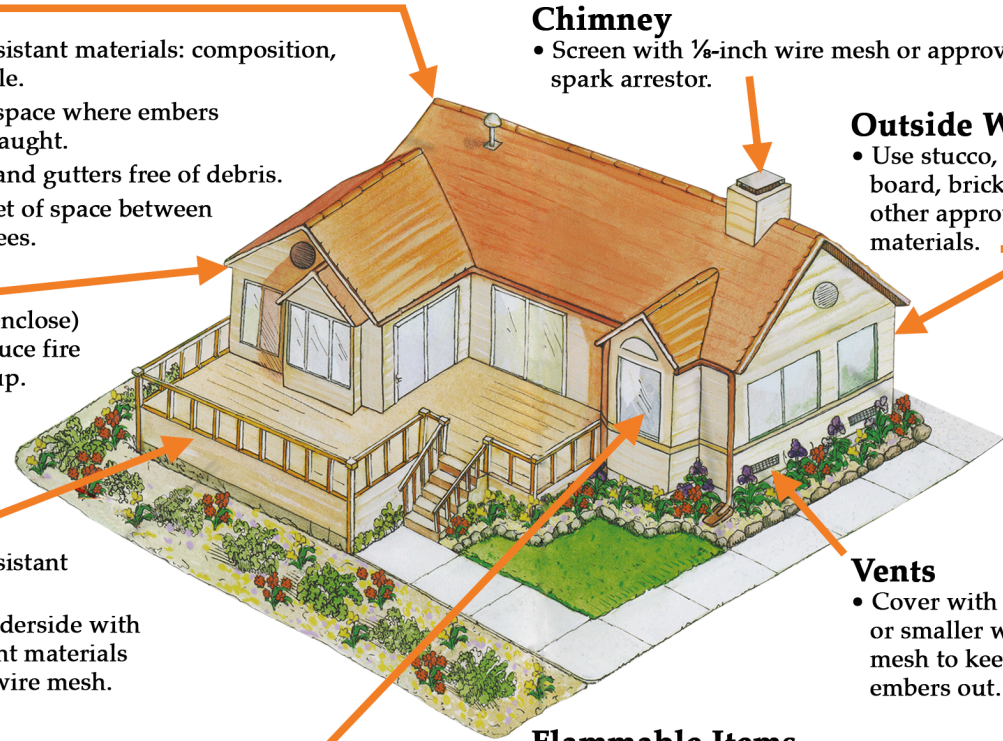


Image courtesy Cal Fire and the San Luis Obispo County Community Fire Safe Council

The Defensible Space

What's most important?

California state law requires a minimum 100-foot *Defensible Space* around homes near fire-hazard areas. This model divides that space into two zones:

- **Zone 1** is within 30 feet of the home and is the most important in saving the home. All fuel (flammable material) is removed from this zone.
- **Zone 2** is from 30 to 100 feet from the home (more on slopes and above canyons) and is a fire fuel reduction area between Zone 1 and the Natural Area.

The Two Zones

Don't forget: Increase distances on slopes!

Zone 1, Lean, Clean, and Green

0 to 30 feet from home.

- **Lean:** Remove all fuel (flammable material). This includes mulches, as they catch flying embers and can smolder for days before starting a house fire. Small islands of mulch may be used around individual plants.
- **Clean:** Remove dead plants and branches, dry leaves, and pine needles.
- **Green:** Plants in Zone 1 are healthy, green, irrigated regularly, pruned to reduce fuel volume, and highly fire-resistant.
- Properly spaced live plants such as green grass, succulents, and well-maintained trees and shrubs are usually not considered "fuel."
- Instead of large areas of mulch, use non-combustible pebbles, decomposed granite, gravel, sand, pavers, or brick that allow water penetration.
- Space any trees with 10 feet of clearance between their canopies, 10 feet between their canopies and the home, and pruned to 6 feet above the ground.

With paths between plants and no fuel, firefighters can move safely through this zone with a good chance of saving the home.



Zone 2, Fire Fuel Reduction

30 to 100 feet from home (more on slopes and above canyons).

- Keep dried annual grasses mowed to 4 in.
- Remove dead twigs, weeds, leaves, litter.
- Plants should be fire resistant, low to medium height, watered only periodically to maintain moisture content, and thinned to reduce fuel volume.
- Shrubs should be spaced away from trees to avoid "ladders" for the fire to climb up into the tree canopy.
- Shrubs should be separated by twice their height on level ground, more on slopes.

A Starter List of Fire-Resistant Plants.

Most of these plants are here and were grown locally. If you find any of them difficult to find at nurseries, choose another plant from the same genus (first part of the botanical name; e.g. *Aeonium*).

Aeonium arboreum

Common names: (No common names known.)

Size: 2 to 3 ft. high

Aeonium cyclops

Common names: giant red aeonium

Size: 4-5 ft. high, 3-4 ft. wide

Aloe brevifolia

Common names: kleinalwyn

Size: Spreading clumps to 3 in. high and 3 to 12 in. wide

Aloe ferox

Common names: Cape aloe, bitter aloe

Size: 6-10' high when mature.

Aloe nobilis

Common names: golden toothed aloe

Size: 1 to 2 ft. high and wide

Aloe striata

Common names: coral aloe

Size: To 3 ft. high, 2 ft. wide

Anigozanthos 'Bush Tango'

Common names: orange kangaroo paw

Size: 2 to 3 ft. high and wide

Arctostaphylos densiflora 'Howard McMinn'

Common names: sonoma manzanita

Size: 6 ft. high, 7-14 ft. wide.

Aristida purpurea var. purpurea

Common names: purple three awn grass

Size: 12 to 18 in. high, 4 in. wide

Carex praegracilis

Common names: California field sedge

Size: Less than 1 ft. high, spreading

Ceanothus gloriosus 'Gualala'

Common names: California lilac

Size: 8 to 12 in. high; 6 to 8 ft. wide

Ceanothus impressus 'Vandenberg'

Common names: Santa Barbara ceanothus

Size: 3-5 ft. high; 4-6 ft. wide

Chondropetalum tectorum

Common names: thatching reed, small Cape rush

Size: 5 ft. high and 6 ft. wide.

Cistanthe grandiflora (Calandrinia spectabilis)

Common names: rock purslane

Size: 2 ft. high and wide; flower stalks to 3 ft.

Cistus salvifolius 'Prostratus'

Common names: sageleaf rockrose

Size: 1 to 2 ft. high, 4 to 6 ft. wide

Crassula capitella 'Campfire'

Common names: campfire crassula

Size: To 6 in. high; to 3 ft wide

Crassula muscosa (lycopholoides)

Common names: watch chain

Size: 6 to 12 in. high, 1 to 2 ft. wide

Crassula ovata

Common names: jade plant

Size: To 10 ft. high, 5 ft. wide

Crassula perfoliata var. falcata

Common names: airplane plant

Size: 4 ft. high; 4-5 ft. wide.

Dietes grandiflora

Common names: fortnight lily

Size: 3 to 4 ft. high, 2 to 3 ft. wide

Dudleya pulverulenta

Common names: chalk lettuce

Size: Leaves 1 ft. high and wide, blooms 2-3 ft.

Erigeron glaucus 'Sea Breeze'

Common names: beach aster, seaside daisy

Size: To 1 ft. high, 2 ft. wide

Euphorbia flanaganii

Common names: (No common names known.)

Size: About 7 in. high; spreading to 14 in.

Helianthemum 'Cheviot'

Common names: peach sunrose

Size: 6 to 8 in. high, 2 to 3 ft. wide

Lampranthus aurantiacus

Common names: ice plant

Size: 10 to 15 in. high; 15 to 18 in. wide.

Lavandula x intermedia 'Provence'

Common names: provence French lavender

Size: 2 ft. high and wide

Leymus condensatus 'Canyon Prince'

Common names: canyon prince wild rye

Size: 2 to 3 ft. high (to 5 ft. with regular water), spreading

Osteospermum 'Purple Shades'

Common names: (No common names found.)

Size: 8 to 14 in. high and wide

Phlomis fruticosa 'Grande Verde'

Common names: Jerusalem sage

Size: 4 to 5 ft. high, 3 to 4 ft. wide

Quercus agrifolia

Common names: California live oak

Size: 30-60' high and wide; prune to control.

Salvia clevelandii 'Allen Chickering'

Common names: Cleveland sage, California blue sage

Size: To 4-5 ft. tall, 4-8 ft. wide

Senecio mandraliscae

Common names: kleinia

Size: To 2 ft. high, 3 ft. wide

Senecio serpens

Common names: blue chalksticks

Size: 6 in. high, 1 ft. wide.

Sisyrinchium bellum

Common names: California blue-eyed grass

Size: 12-18 in. high, 2 ft. wide.

Fire-Resistant Plants

What's most important?

Well-spaced and maintained plants around the home can help protect it from wildfires and their effects.

- Plants catch fire embers and let them die out.
- Plants' roots help control erosion after a fire sweeps through.
- **Do not clear the area of plants!** This invites annual grasses, which carry fire easily when dry.

What are some traits of fire-resistant plants?

Although all plants can burn, fire-resistant plants:

- Store water in their stems and leaves (like succulents).
- Hold moisture with little extra watering.
- Grow deep roots to obtain water and limit erosion.
- Produce little dead material or litter.
- Grow low, slow, and need little care.
- Grow open and loose with little total vegetation.
- Contain very little volatile resins or oils.

Remember: Spacing, pruning, and watering are at least as important as plant choice.

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Resources:

Owen Dell, ASLA, and Stacey Isaac, ASLA: Original landscape design. 2010.
David Foote, ASLA, Firma Consultants: Revised landscape design. 2014.
San Luis Obispo County Community Fire Safe Council: Information and brochure, *Living with Fire*. 2008.
University of California Cooperative Extension: *S.A.F.E. Landscapes*, 2009.
Cal Fire: Information and brochure, *Wildfire is Coming: Are You Ready?*
Kent Douglas: *Firescaping* (Wilderness Press). 2005.
Sandra Adams, Ken Levine, Janet Melbourne, Marti Rutherford San Luis Obispo Botanical Garden (www.slobg.org).
Ron Kindig: Brochure April, 2016

