



Firewise Construction Checklist



Construction



When constructing, renovating, or adding to a firewise home, consider the following:

- q Choose a firewise location.
- q Design and build a firewise structure.
- q Employ firewise landscaping and maintenance.

To select a firewise location, observe the following:

- q Slope of terrain; be sure to build on the most level portion of the land, since fire spreads more rapidly on even minor slopes.
- q Set your single-story structure at least 30 feet back from any ridge or cliff; increase the distance if your home will be higher than one story.

In designing and building your firewise structure, remember that the primary goals are fuel and exposure reduction. To this end:

- q Use construction materials that are fire-resistant or non-combustible whenever possible.
- q For roof construction, consider using materials such as Class-A asphalt shingles, slate or clay tile, metal, cement and concrete products, or terra-cotta tiles.
- q Constructing a fire-resistant sub-roof can add protection as well.
- q On exterior wall facing, fire resistive materials such as stucco or masonry are much better choices than vinyl which can soften and melt.
- q Window materials and size are important. Smaller panes hold up better in their frames than larger ones. Double pane glass and tempered glass are more reliable and effective heat barriers than single pane glass. Plastic skylights can melt.
- q Install non-flammable shutters on windows and skylights.
- q To prevent sparks from entering your home through vents, cover exterior attic and underfloor vents with wire screening no larger than 1/8 of an inch mesh. Make sure under eave and soffit vents are as close as possible to the roof line. Box in eaves, but be sure to provide adequate ventilation to prevent condensation.
- q Include a driveway that is wide enough to provide easy access for fire engines (12 feet wide with a vertical clearance of 15 feet and a slope that is less than 5 percent). The driveway and access roads should be well-maintained, clearly marked, and include ample turnaround space near the house. Also provide easy access to fire service water supplies, whenever possible.
- q Provide at least two ground level doors for easy and safe exit and at least two means of escape (i.e., doors or windows) in each room so that everyone has a way out.
- q Keep gutters, eaves, and roofs clear of leaves and other debris.
- q Make periodic inspections of your home, looking for deterioration such as breaks and spaces between roof tiles, warping wood, or cracks and crevices in the structure.
- q Periodically inspect your property, clearing dead wood and dense vegetation at distance of at least 30 feet from your house. Move firewood away from the house or attachments like fences or decks.

Any structures attached to the house, such as decks, porches, fences, and outbuildings should be considered part of the house. These structures can act as fuel bridges, particularly if constructed from flammable materials. Therefore, consider the following:

- q If you wish to attach an all-wood fence to your house, use masonry or metal as protective barriers between the fence and house.
- q Use metal when constructing a trellis and cover it with high-moisture, low flammability vegetation.
- q Prevent combustible materials and debris from accumulating beneath patio decks or elevated porches. Screen or box-in areas below patios and decks with wire screen no larger than 1/8 inch mesh.
- q Make sure an elevated wooden deck is not located at the top of a hill where it will be in direct line of a fire moving up slope. Consider a terrace instead.



Access additional information on the Firewise home page
www.Firewise.org or www.BurnSafeTN.org



Please see the other side of this sheet for the *Firewise Landscaping Checklist*.



Firewise Landscaping Checklist



Landscaping



When designing and installing a firewise landscape, consider the following:

- q Local area fire history.
- q Site location and overall terrain.
- q Prevailing winds and seasonal weather.
- q Property contours and boundaries.
- q Native vegetation.
- q Plant characteristics and placement (duffage, water and salt retention ability, aromatic oils, fuel load per area, and size).
- q Irrigation requirements.

To create a firewise landscape, remember that the primary goal is fuel reduction. To this end, initiate the zone concept. Zone 1 is closest to the structure; Zones 2-4 move progressively further away.

- q **Zone 1.** This well-irrigated area encircles the structure for at least 30' on all sides, providing space for fire suppression equipment in the event of an emergency. Plantings should be limited to carefully spaced low flammability species.
- q **Zone 2.** Low flammability plant materials should be used here. Plants should be low-growing, and the irrigation system should extend into this section.
- q **Zone 3.** Place low-growing plants and well-spaced trees in this area, remembering to keep the volume of vegetation (fuel) low.
- q **Zone 4.** This furthest zone from the structure is a natural area. Selectively prune and thin all plants and remove highly flammable vegetation.

Also remember to:

- q Be sure to leave a minimum of 30' around the house to accommodate fire equipment, if necessary.
- q Widely space and carefully situate the trees you plant.
- q Take out the "ladder fuels" — vegetation that serves as a link between grass and tree tops. This arrangement can carry fire to a structure or from a structure to vegetation.
- q Give yourself added protection with "fuel breaks" like driveways, gravel walkways, and lawns.
- q Have at least 3-5 feet of nonflammable material next to the house or building — no grass, wood chips, pine straw, etc.

When maintaining a landscape:

- q Keep trees and shrubs properly pruned. Prune all trees so the lowest limbs are 6' to 10' from the ground.
- q Remove leaf clutter and dead and overhanging branches.
- q Mow the lawn regularly.
- q Dispose of cuttings and debris promptly, according to local regulations.
- q Store firewood away from the house.
- q Use care when refueling garden equipment and maintain them regularly.
- q Store and use flammable liquids properly.
- q Dispose of smoking materials carefully.
- q Remove leaves, pine needles, and other debris from roofs, decks (above and below), gutters, and other open areas.



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