

FIRESCAPE - FIREWISE LANDSCAPE DESIGN

"When a wildfire comes through your neighborhood, could your house survive on its own?" A dramatic question, but one we need to consider when living in an environment where wildfire is a common occurrence. "Firescaping" is landscape design that reduces house and property vulnerability to wildfire. The goal is to develop a landscape with a design and choice of plants that offers the best fire protection and enhances the property. The ideal is to surround the house with things that are less likely to burn. It is imperative when building homes in wildfire-prone areas that fire safety be a major factor in landscape design. Appropriate manipulation of the landscape can make a significant contribution toward wildfire survival.

Firescape integrates traditional landscape functions and a design that reduces the threat from wildfire. It does not need to look much different than a traditional design. In addition to meeting a homeowner's aesthetic desires and functional needs, such as entertaining, playing, storage and erosion control, firescape also includes vegetation modification techniques, planting for fire safety, defensible space principles and use of fire safety zones.

Through proper plant selection, placement and maintenance, we can diminish the possibility of ignition, lower fire intensity, and reduce how quickly a fire spreads, thereby increasing a home's survivability. In firescaping, plant selection is primarily determined by a plant's ability to reduce the wildfire threat. Other considerations may be important, such as appearance, ability to hold the soil in place, and wildlife habitat value. The traditional foundation planting of junipers is not a viable solution in a firescape design. Minimize use of evergreen shrubs and trees within 30 feet of a structure, because junipers, other conifers and broadleaf evergreens contain oils, resins, and waxes that makes these plants burn with great intensity. Use ornamental grasses and berries sparingly because they also can be highly flammable. Choose "firewise" plants. These are plants with a high moisture content. They are low growing. Their stems and leaves are not resinous, oily or waxy. Deciduous trees are generally more fire resistant than evergreens because they have a higher moisture content when in leaf, but a lower fuel volume when dormant.

Placement and maintenance of trees and shrubs is as important as actual plant selection. When planning tree placement in the landscape, remember their size at maturity. Keep tree limbs at least 15 feet from chimneys, power lines and structures. Specimen trees can be used near a structure if pruned properly and well irrigated.

Firescape design uses driveways, lawns, walkways, patios, parking areas, areas with inorganic mulches, and fences constructed of nonflammable materials such as rock, brick, or cement to reduce fuel loads and create fuel breaks. Fuel breaks are a vital component in every firescape design. Water features, pools, ponds or streams can be used also as fuel breaks. Areas where wildland vegetation has been thinned or replaced with less flammable plants are the traditional fuel break. Remember, while bare ground is an effective fuel break, it is not generally recommended as a firescape element due to aesthetic, soil erosion, and other concerns.

A home located on a brushy site above a south or west facing slope will require more extensive

Firewise Plant Material for the Great Plains

Although there are no plants that will not burn at all, the following is a list of some fire resistive plants that can be used in landscaping. Landscape maintenance is far more important to fire prevention than the selection of plant materials. When planning your landscape, use the characteristics of fire resistive plants along with site characteristics such as slope, aspect, hardiness zone and amount of precipitation to choose plant material suitable for your site.

TREES	common name	PERENNIALS	common name
Conifers:			
Calocedrus decurrens	Incense cedar	Achillea spp.	Yarrow
Thuja plicata	Western red cedar	Allium schoenoprasum	Chives
		Bergenia spp.	Bergenia
		Brodiaea spp.	Lilies
Deciduous:		Coreopsis spp.	Coreopsis
Acer spp.	Maple	Erysimum linifolium	Wall flower
Alnus spp.	Alder	Eschscholzia spp.	California poppy
Catalpa speciosa	Northern catapla	Fragaria sp.	Wild Strawberries
Cornus florida	Flowering dogwood	Geranium spp.	Geranium
Fagus spp.	Beech	Hemerocallis hybrids	Daylillies
Fraxinus spp.	Ash	Heuchera spp.	Coral bells
Gleditsia tricanthos	Honeylocust	Iris spp.	Iris
Malus spp.	Apple	Kniphofia uvaria	Red hot poker
Populus spp.	Aspen, cottonwood, poplar	Lupinus spp.	Lupine
Prunus spp.	Cherry	Oenothera spp.	Evening primrose
Quercus spp.	Oak (white, burr or red)	Penstemon spp.	Beard tongue
Robinia pseudoacacia	Black locust	Solidago spp.	Goldenrod
Salix spp.	Willow	Strachys bysantina	Lamb's ear
SHRUBS	common name	GROUNDCOVERS	common name
Amelanchier spp.	Serviceberry	Succulents:	
Atriplex canescens	Four wing saltbrush	Delospema nubigenum	Hardest ice plant
Buddelia davidi	Butterfly bush	Echeveria spp.	Hens & Chicks
Caryopteris x clandonensis	Blue-mist spirea	Sedum spp.	Stone crops
Cornus sericea	Red osier dogwood		
Cotoneaster spp.	Cotoneaster	Non-succulents:	
Liqustrum spp.	Privet	Achillea tomentosa	Wolly yarrow
Mahonia spp.	Creeping grape holly	Ajuga reptans	Carpet bugle
Pachistima canbyi	Dwarf mountain lover	Arctostaphylos uva-ursi	Kinnikinnick
Philadelphus spp.	Mock orange; syringa	Armeria meritima	Sea pink; thrift
Rhamnus fragula	Buckthorn	Cerastium tomentosa	Snow in summer
Rhododendron spp.	Azaleas, rhododendrons	Cotoneaster dammeri	Bearberry cotoneaster
Ribes spp.	Currant	Euonymus fortunei	Winter creeper
Sheperdia argentea	Silver buffaloberry	Potentilla tabernaemontanii	Spring cinquefoil
Symphoricarpos albus	Snowberry	Senecio cineraria	Dusty miller
Viburnum trilobum	Cranberry bush	Thymus praecox articus	Mother of thyme
Yucca spp.	Yucca	Verbenia bipinnatifida	Verbenia

wildfire safety landscape planning than a house situation on a flat lot with little vegetation around it. Boulders and rocks become fire retardant elements in a design. Whether or not a site can be irrigated will greatly influence location of hardscape (concrete, asphalt, wood decks, etc.), plant selection and placement. Prevailing winds, seasonal weather, local fire history, and characteristics of native vegetation surrounding the site are additional important considerations.

The 30 feet closest to a structure will be the highest water use area in the firewise landscape. This is an area where highly flammable fuels are kept to a minimum and plants are kept green throughout the fire season. Use well-irrigated perennials here. Another choice is low growing or non-woody deciduous plants. Lawn is soothing visually, and is also practical as a wildfire safety feature. But extensive areas of turfgrass may not be right for everyone. Some good alternatives include clover, groundcovers, and conservation grasses that are kept green during the fire season through irrigation. Rock mulches are good choices. Patios, masonry and rock planters are excellent fuel breaks



Lawn can be an effective landscape feature in a firescape

and increase wildfire safety. Be creative with boulders, riprap, dry streambeds and sculptural inorganic elements. When designing a landscape for fire safety remember, less is better. Simplify visual lines and groupings. A firewise landscape lets plants and garden elements reveal their innate beauty by leaving space between plants and groups of plants. In firescaping, the open spaces are more important than the plants.