Jefferson-Como Fire Protection District

Main Office | 20200 Co Rd 15, Como, CO 80432 | 719-836-2082 | jcfpd@jcfpd.org

Wildfire Hazard Standards Requirement

(Required items as related to FPA 1144)

In order to obtain a certificate of occupancy from Park County, you must score within the Low Moderate range on Jefferson-Como FPO Wildland Fire Risk and Hazard severity Assessment Form; complete the Defensible Space and Wildfire Checklist for wildfire hazard mitigation. The requirements are sited below.

Wildland Fire Risk and Hazard Assessment Form

(Must fall within the Low-Moderate range.)

Creation of an Adequate Defensible Space

Minimum mitigation practices - 30 feet from structure- or as determined and in accordance to the Wildland Fire Risk and Hazard Severity Assessment.

Zone 1 - This zone measures 15 feet from the outside edge of the home· s eaves and any attached structures (i.e. decks) to the crown (branches) of the nearest tree. Remove all flammable vegetation from this area.
Zone 2 - The vegetation in at least the next 15 feet must be mitigate I. Vegetation must be pruned and thinned as per Colorado State Publication No. 6.302. This zone is determined from the Wil land Fire Risk and Hazard Assessment Survey.

Optimum mitigation practices - as stated in Colorado State Publication No. 6.302

Zone 1 - This zone measures 15 ft from the outside edge of the home's eaves and any attached structures (i.e. decks) to the crown (branches) of the nearest tree. Remove all flammable vegetation from this area.
Zone 2 - The vegetation in this area should be mitigated as related o the slope. In other words, all vegetation must be pruned and thinned as per Colorado State Publication No. 6.302

Wildfire Hazard Standards Check-list

Driveways: If a structure exceeds 150 ft. from the roadway, the following requirements must be met:

- Driveways to be a minimum of 12 ft. wide and provide vertical clearance of at least 14.5 ft. high.
- Turns must accommodate largest fire vehicle with a minimum 30 foot curve radius.
- No gates may swing outward.
- Fire department shall have access to locking mechanisms.
- Drives shall be constructed of a hard all-weather surface adequate enough to support large fire apparatus.
- Turnouts are required to be constructed so a driver can see from one turnout to another. (Minimum 35 feet in length. Distance between turnouts and required frequency to be determined on a case by case basis.
- Maximum grade of 12% within the right of way, Park County Road and Bridge standards apply.
- Dead-ends greater than 300 ft. require turnarounds of 50 ft. minimum curve radius. (Alternate hammerhead-T with a minimum 30 ft. backing space.

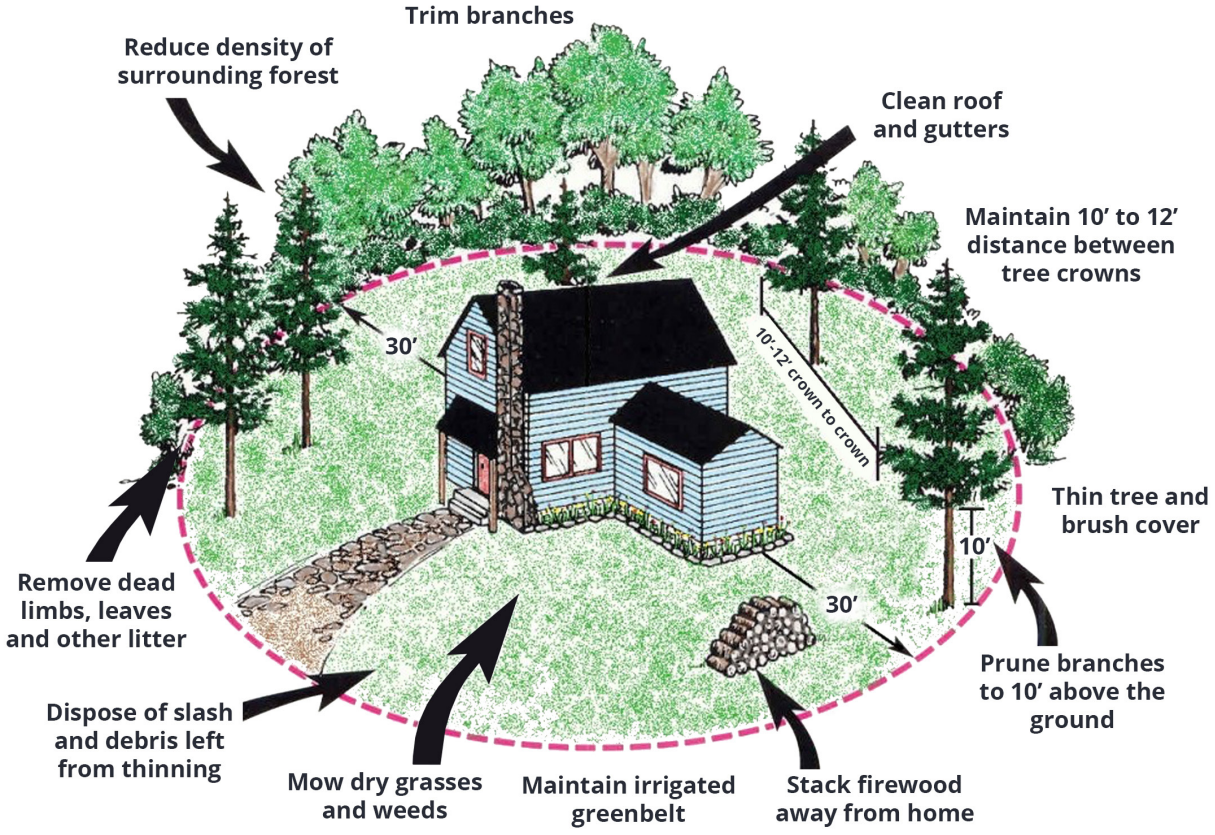
Structural Location, Design, and Construction:

- Building codes must be complied with.
- Structures closer than 30 ft. to a vegetated slope must be mitigated.
- Roofing must be class A
- Gable and eave vents to be screen with a minimum ¼ in. mesh.
- Eaves shall be boxed in with a minimum of 3/8 in. sheathing.
- Porches, decks, overhanging buildings, etc. shall be constructed of heavy timber as defined by local building codes, with a minimum of one (1) hour rated fire resistivity.
- Exterior vertical walls must be covered with a minimum of 2 inch wide nominal sheathing or equivalent.
- Fireplace and wood stove chimneys shall have a minimum of 2 inch wire mesh screened spark arrestor.
- No vegetation within IO ft. of a chimney outlet.

Jefferson-Como F.P.D. Responsibilities:

Public Fire Safety Information and Education programs targeting

- Wildfire hazards
- Prevention and safety programs
- Life and property risks
- Target audiences i.e. HOA 's etc.
- Fire cause and determination
- F.P.D. activities



Defensible Space Requirements

Defensible space is an area around a structure where fuels and vegetation are treated, cleared, or reduced in ordwer to slow the spread of wildfire towards a structure. The design of a defensible space is based upon local weather, topography and existing fuels. The inspecting specialist will assess these aspects and apply the following standards in the design of each defensible space.

Zone 1
This zone measures 15 ft. from the outside edges of a home's eaves and any attached outside structures such as decks, to the crowns (branches) of the nearest tree. Remove all flammable vegetation in these areas.

Zone2
Minimum mitigation - 30 ft. from the structure
Optimum mitigation - As stated in Colorado State Publication No. 6.302

The total distance for Zone 2 will vary with changes in topography. As slope increases, the minimum distances for Zone 2 will increase. Zone 2 can extend to, but not past, the property line.

Create 10 ft. separations between tree/shrub crowns by selective thinning. mall groups of two or three trees may be left, if there is greater than 10 feet of separation from the group to other trees. Crown separation is measured from the furthest branch of one tree to the nearest branch on the next tree.

Each forested lot is unique in its' vegetation type, size and arrangement. Some types of forests that require modification to the normal defensible space standard include:

- Aspen - It will not be required to thin aspen trees
- Lodge pole pine- in a dense stand of lodge pole or dog-hair, do not thin to 10 foot crown spacing in the first cutting. Initial thinning should provide several feet of crown separation and the land owner will need to continue to thin the forest gradually to reach the 10 feet standard.
- Gambel Oak (Oak brush)- All gambel oak will be removed within 50 ft. of the structure. Beyond the 50 ft. of clearing, small patches of oak brush, no larger than 10 ft. in diameter, can be created with at least 10 feet of vegetation cleared between the patches.
- Bottle Brush Pine and Limber Pine are very rich in pine tar which is quite volatile when subjected to fire; thinning these trees to 10 foot crown spacing is particularly important.

Remove all ladder fuels such as potentillas from under and within 10 ft. of the remaining trees in Zone 2. Ladder fuels connect surface vegetation to aerial vegetation. They include shrubs and young trees growing beneath mature trees, as well as branches hanging low to the ground. Prune all remaining trees so that the lowest hanging portions of a branch is 10 feet off of the ground. Isolated shrubs may remain, if they are at least 10 feet away from the crown of remaining trees. Stack firewood and woodpiles in an open area uphill or on the same elevation as the structure. Firewood or other wood piles and debris must be a minimum of 30 feet away from the structure.

Dispose of slash and un-necessary debris by using local slash and mulch sites, chipping materials on site, burying or burning (with permit only). Wood piles or detached structures within the defensible space zones are considered fuels and 10 feet of clearance to the nearest vegetation willnbe required. Should more clarification be needed, please refer to Colorado State Publication No. 6.302

Scheduling Your Inspection

In order to obtain your Certificate of Occupancy and meet Wildfire Hazard Standards Requirements, you must abide by the following procedures of the Jefferson-Como Fire Protection District, including receiving a successful completion of the Wild land Fire Risk and Hazard Severity Assessment Form. A Certificate of Occupancy will not be issued until an initial Fire Risk Mitigation survey has been performed on your property, and ALL the criteria cited on the Wildland Fire Risk and Hazard Severity Assessment Form have been met during a follow up inspection close to or near the completion of the residential/commercial dwelling. Avoidance of initial or final inspection by the property owner may additionally result in the delay/denial of a Certificate of Occupancy.

Prior to Initial Inspection

- Review Defensible Space Requirements and Wildfire Hazard Standards Requirements.
- Pay the required Fire Mitigation impact fee of $250.00 at the Park County Offices; at the time you pull a new building permit and you will receive a receipt for the fee. You can also pay the fee at Jefferson-Como Fire Protection District Station 5 (20200 County Rd. 15) and receive the same receipt. This fee includes the cost for the initial survey and the final inspection.
- Stake the corners of the new home. You may wait until the footer or the foundation is started before scheduling a date for survey. Be sure to place stakes or markers where decks or porches will extend beyond eaves and overhangs of the planned structure.
- Property boundaries must be marked clearly. Use flagging, strings, or stakes spaced approximately twenty (20) ft. apart to mark any property boundary within 250 feet of the proposed structure or foundation. If unsure of the boundaries please consult a surveyor prior to the initial survey.
- Post address sign along the road.
- Call to schedule an appointment with the Jefferson-Como F.P.D. Wildland Mitigation Specialist. The property owner or designated representative must be present during the survey. Please call **(719) 836-2082** for a survey request.

Initial Inspection

- Meet with a representative from Jefferson-Como Fire Protection District at the proposed construction/property site.
- Review basic wildfire behavior and design standards of the defensible space requirements (see Defensible Space Requirements and Wildfire Hazard Standards.)
- Trees to be removed will be marked with paint.

Final Inspection

Call the Jefferson-Como Fire Protection District for a final inspection when:

- Trees or other vegetation designated for removal from the defensible space area are cut down.
- All the remaining trees in Zone 2 are pruned to a height of eight-ten (8-10) feet.
- All of the slash is “treated” (chipped, burned, hauled away, etc.)
- Any remaining firewood is piled on contour or slope above the structure.
- All items on the Wildfire Hazard Standards Requirements form are completed.

Scheduling

- To schedule your appointment, please call **(719) 836-2082**. Please note, because inspections are conducted by on duty personnel, availability may be limited due to emergency call volume. If an emergency arises, we may be forced to postpone or reschedule your appointment.

Defensible Space and FireWise Annual Checklist

- ☐ Trees and shrubs are properly thinned and pruned within the defensible space. Slash from the thinning is disposed of.
- ☐ Roof and gutters are clear of debris.
- ☐ Branches overhanging the roof and chimney are removed.
- ☐ Chimney screens are in place and in good condition.
- ☐ Grass and weeds are mowed to a low height.
- ☐ An outdoor water supply is available, complete with a hose and nozzle that can reach all parts of the house.
- ☐ Fire extinguishers are checked and in working condition.
- ☐ The driveway is wide enough. The clearance of trees and branches is adequate for fire and emergency equipment.
  - ☐ Driveways to be a minimum of 12 ft. wide and provide vertical clearance of at least 14.5 ft. high.
  - ☐ Turns must accommodate largest fire vehicle with a minimum 30 foot curve radius.
  - ☐ No gates may swing outward.
  - ☐ Fire department shall have access to locking mechanisms.
  - ☐ Drives shall be constructed of a hard all-weather surface adequate enough to support large fire apparatus.
  - ☐ Turnouts are required to be constructed so a driver can see from one turnout to another. (Minimum 35 feet in length. Distance between turnouts and required frequency to be determined on a case by case basis.
  - ☐ Maximum grade of 12% within the right of way, Park County Road and Bridge standards apply.
  - ☐ Dead-ends greater than 300 ft. require turnarounds of 50 ft. minimum curve radius. (Alternate hammerhead-T with a minimum 30 ft. backing space.
- ☐ Road signs and your name and house number are posted and easily visible.
- ☐ There is an easily accessible tool storage area with rakes, hoes, axes and shovels for use in case of fire.
- ☐ You have practiced family fire drills and your fire evacuation plan.
- ☐ Your escape routes, meeting points and other details are known and understood by all family members.
- ☐ Attic, roof, eaves and foundation vents are screened and in good condition. Stilt foundations and decks are enclosed, screened or walled up.
- ☐ Trash and debris accumulations are removed from the defensible space.
- ☐ A checklist for fire safety needs inside the home also has been completed. This is available from your local fire department.

What creates wildland fire risk?

Terrain (topography)
A fire will burn faster uphill. This is because the flames can easily reach more unburnt fuel in front of the fire. Radiant heat preheats the fuel in front of the fire, making the fuel even more flammable. For every 10˚ slope, the fire will double its speed. For example, if a fire is travelling at 5 mph per hour along flat ground and it hits a 10˚ slope it will double in speed to 10 mph per hour up the hill. By increasing in speed the fire also increases in intensity, becoming even hotter. The opposite applies to a fire travelling downhill. The flames reach less fuel, and less radiant heat preheats the fuel in front of the fire. For every 10˚ of downhill slope, the fire will halve its speed.
Fires tend to move more slowly as the slope decreases.

Vegetation (fuel)
- Grass can burn early and quickly on hot, dry, windy days.
- Branches, twigs and leaves dropped from shrubs and trees become fine fuels, which burn easily. These can give off far more heat when they burn
- Fibrous and dry tree bark can carry fire to treetops. The fire can then break away and spread further
- Dry branches, twigs and leaves and other fine fuels found on the ground can also burn easily.

Weather conditions
Wildland fires are unpredictable and vary greatly according to weather conditions. They often start on hot, dry, windy days.

Temperature
A string of hot days dries out vegetation, making it easier to burn. This can be made even worse by underlying dry conditions caused by lack of rain. The drier the vegetation the easier it will burn. A fire spreads as a result of burning embers, radiant heat and direct flame contact.

Wind
Wind influences the:
- speed at which a fire spreads
- direction in which a fire travels and the size of the fire front
- intensity of a fire – wind provides more oxygen
- likelihood of spotting – burning pieces of leaves, twigs and bark (embers) that the wind carries ahead of the fire. These cause new ‘spot fires’ to ignite.

Wind change
A change in wind direction is one of the most dangerous influences on fire behavior. Many people who die in wildland fires get caught during or after a wind change.

Why are embers dangerous?
Embers are burning twigs, leaves and pieces of debris, carried by the wind and land on or around houses. Embers can land on top of debris in your gutters and set fire to your house, it is the most common way houses catch fire during wildland fires. It can happen before, during and after the fire front.

Wildfire Mitigation Resource List

- **Fire Mitigation** | firemitigation.org
- **Fire Ready** | fireready.com | Phone: 719-539-4944
- **Matt's Tree Service LLC**, Evergreen, Colorado | Office: 303-674-3758
- **Colorado Fire Wise** | email: info@coloradofirewise.com | Office: 719-209-5704
- **McGarva Tree and Landscape Service LLC** | Office: 303-674-1372 | mcgarvatree.com
- **Taylor Enterprise LLC** | Phone: 719-839-0452

Jefferson-Como Fire Protection District does not endorse any services or agencies. We merely offer this list as an aid to mitigation compliance.