# RESIDENTIAL CONSTRUCTION IN THE WILDLAND URBAN INTERFACE

**Falcon Fire Protection District**
7030 Old Meridian Road
Falcon, CO 80831
719-495-4050
www.falconfirepd.org

This Information Packet has been created to assist you in the construction of a residential structure located within the designated Wildland Urban Interface of the Falcon Fire District.

***OUR MISSION STATEMENT:***

*The Falcon Fire Protection District is a public service provider that stands ready to protect and serve our community with pride and respect.*

# PLOT PLAN & BUILDING PERMIT

**PLOT PLAN –** The first step in constructing a residence in the wildland urban interface is to obtain an approved plot plan from El Paso County. This plan is submitted through the El Paso County Development Services Office (2880 International Circle – Colorado Springs, CO) and reviewed by the Falcon Fire Protection District. For more information about this process contact the Development Services Office at (719) 520-6300 or visit them on the web at: http://adm.elpasoco.com/Development_Services

**BUILDING PERMIT** – In addition to an approved plot plan, a construction permit must also be obtained through the Pikes Peak Regional Building Department (PPRBD) to build a residential home within the wildland urban interface of the Falcon Fire Protection District.

The PPRBD permit set of drawings shall be submitted to the Falcon Fire Headquarters (7030 Old Meridian Road) for a plan review. A permit fee of $340.00 will be assessed by the Falcon Fire Department. The Fire Department may request a third-party wildland risk assessment be submitted with the construction plans.

Once the permit has been issued by the PPRBD and the construction is complete, a final fire inspection will be required. To schedule the fire inspection please contact the Falcon Fire Department at: (719) 495-4050.

For more information about the building permit process, contact the Pike Peak Regional Building Department at (719) 327-2880 or visit them on the web at: www.ppprbd.org

# CONSTRUCTION MATERIALS

*"When considering improvements to reduce wildfire vulnerability, the key is to consider the home in relation to its immediate surroundings. The home's vulnerability is determined by the exposure of its external materials and design to flames and firebrands during extreme wildfires. The higher the fire intensities near the home, the greater the need for nonflammable construction materials and a resistant building design."*

*– Jack Cohen, USDA-Forest Service*

**Use Rated Roofing Material**

All roofing material within the wildland urban interface area require a Class A rated roof covering (2003 International Fire Code, Section H107 as amended)

Examples Include:

- Composition shingle
- Metal
- Clay
- Cement tile

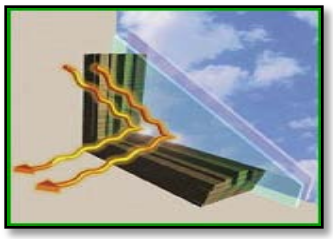
## Use Fire-Resistant Building Materials on Exterior Walls

Examples include:

- Cement
- Stone/Brick
- Plaster
- Masonry
- Stucco
- Fiber Cement

*While vinyl is difficult to ignite, it can fall away or melt when exposed to extreme heat and burns hotter and faster than wood.*

## Use Double-Paned or Tempered Glass



Double-pane glass can help reduce the risk of fracture or collapse during an extreme wildfire. Tempered glass is the most effective. For skylights, glass is more fire resistant than plastic or fiberglass.

## Enclose Eaves, Fascias, Soffits and Vents


'Box' eaves, fascias, soffits and vents, or enclose them with metal screens. Vent openings should be covered with 1/8" metal screen.

## Protect Overhangs and Other Attachments

Remove all vegetation and other fuels from around overhangs and other attachments (room additions, bay windows, decks, porches, carports and fences). Box in the undersides of overhangs, decks and balconies with noncombustible or fire resistant materials. Fences constructed of flammable materials like wood should not be attached directly to the house.

Anything attached to the house (decks, porches, fences and outbuildings) should be considered part of the house. These act as fuel bridges, particularly if constructed from flammable materials.

- If a wood fence is attached to the house, separate the fence from the house with a masonry or metal barrier.

- Decks and elevated porches should be kept free of combustible materials and debris.

- Elevated wooden decks should not be located at the top of a hill and consider terracing your property to limit fire spread.

*Composite decking material looks natural and is fire retardant*

**Residential Fire Sprinklers**

History has proven that residential fire sprinklers save lives and reduce property damage. The 2003 International Fire Code has been locally amended to require fire sprinklers in residential fire structures greater than 3,600-square feet that are constructed the wildland urban interface after January 1, 2006.

As an alternative, the fire code amendments allow the gross square footage to be increased to 6,000-square feet without fire sprinklers if the vegetation management distance is increased at a rate of one and a half time the normal required distance.

It should be understood that any residential property constructed in the wildland urban interface over 6,000-square feet (including all levels, garages, and covered decks) will require a residential fire sprinkler system.

More information may be obtained by reviewing the 2003 International Fire Code Amendments (Sections 9 and Appendix H) available at www.falconfirepd.org.

# FIRE DEPARTMENT ACCESS

When a wildfire threatens, the first few minutes are the most critical for saving your home. Firefighting personnel must be able to immediately locate and safely travel to your home in order to effectively protect it. Street signs and house addresses must be clearly posted, and roads must be able to accommodate busy traffic. At the same time that fire engines and other emergency equipment are trying to drive into your area, you must be able to escape in your car with your family and valuable personal possessions.

## Street Signs and Addresses


Proper identification of your home is essential. During a major wildfire, firefighters from throughout the State (or even the Nation) will arrive to assist local firefighters. They will rely on clear street signs and addresses to find your home.


- Street names shall be easy to read on a contrasting color background.
- Signs should be made of fire resistant materials (e.g. timber or metal).
- Each street and road in your area should be labeled and each should have a different name or number.
- Your home should have its own house number which should be in numerical order along your street or road.
- If your house is set back from the street or road, your address should be posted at the entrance of your driveway to the following specifications.
    - 4”X4” pressure treated post set in a concrete footing at the driveway entrance. 4” high numbers with a 1/2 “stroke on a contrasting background.
    - Numbers shall be mounted 30-inches above grade and shall be visible from both intended and opposite direction of travel.
- In situations where more than one home is accessed off a single driveway, all addresses should be posted at the street and at each appropriate intersection along that driveway.

## Access to Your House

Even if your street and house are clearly identified for firefighters, precious time can be lost if firefighters have difficulty getting to your house. Narrow roads, dead-end streets, steep driveways and weak bridges can delay firefighters, or prevent them from arriving at all; firefighting equipment is much larger and heavier than your family car or truck.

- Fire access roads shall be provided so that all portions of a residence can be reached within 150-feet of the access road.
- Fire access roads shall provide a minimum unobstructed width of 12-feet 6-inches and an unobstructed height of 13-feet.

- Fire access roads in excess of 150-feet shall be provided with an approved turn-a-round.

- Fire access roads in excess of 200-feet and less than 20-feet in width shall be provided with “turn-outs” in addition to a turn-a-round.

- All fire access roads shall be all-weather surfacing, capable of supporting HS-20 loading.

- Fire access roads and driveways shall not exceed 10 percent grade.

- Road and street systems must be designed to provide safe emergency evacuation and fire department access. A minimum of two primary access roads should be designed into every subdivision and development.

- Curves and intersections should be wide enough to allow large fire equipment to easily pass and turn.

# WATER SUPPLY

The 2003 International Fire Code requires that all newly constructed residences be provided with a fire protection water supply. For more information about water supply options please refer to the Falcon Fire Department’s ***Water Supply for New Construction & Development*** Information Packet.

Additionally, be advised that the required water supply may be reduced by 50 percent if a fire sprinkler is installed.

# DEFENSIBLE SPACE

Structures located in the wildland urban interface shall be clear of all vegetation by a distance of not less that 10-feet. This distance may be increased by the Fire Code Official, upon reviewing site specific conditions.

In addition to the 10-feet of clear space, a safety zone of not less than 30-feet in all directions from the structure shall be maintained. The safety zone consists of small brush patches, not exceeding one hundred square feet and fifteen lineal feet in any direction.

All vegetation shall be kept in a fire safe manner, to include pruning limbs located less than 6-feet above the ground surface. Adequate thinning shall occur so that trees do not have overlapping limbs.

Tree branches shall not extend over or under roof eves or decks and shall not be within 15-feet of a wood burning appliance or chimney.

For more information concerning vegetation management requires please refer to the Falcon Fire Department's ***Homeowners Guide to Vegetation Management*** Information Packet.

# ADDITIONAL RESOURCES

## Risk Assessments

The Falcon Fire Protection District will assist you in establishing a vegetation management plan for your property. For a free wildland fire risk assessment you can contact us at **719-495-4050**.

## More Information

- FireWise Communities - http://www.firewise.org
- Colorado State Forest Service - http://csfs.colostate.edu/pages/wildfire.html
- Pikes Peak Wildfire Prevention Partners - http://www.ppwpp.org

## 2003 International Fire Code

To view the locally adopted amendments of the 2003 International Fire Code please visit our website: www.falconfirepd.org