

East Fork Fire Protection District Amendments to the 2024 *International Wildland-Urban Interface Code* Regulations

101.1 Title. These regulations shall be known as the *Wildland-Urban Interface Code* of the East Fork Fire Protection District, hereinafter referred to as “this code.”

101.2 Scope. The provisions of this code shall apply to the construction, alteration, movement, repair, maintenance and use of any building, structure or premises and to the management of fuels on undeveloped lots and on unmodified portions of large lots within the *wildland-urban interface areas* in this jurisdiction.

Buildings or conditions in existence at the time of the adoption of this code are allowed to have their use or occupancy continued, if such condition, use or occupancy was legal at the time of the adoption of this code, provided that such continued use does not constitute a distinct danger to life or property.

Buildings or structures moved into or within the jurisdiction shall comply with the provisions of this code for new buildings or structures.

102.1.1 Appendices. Provisions in the appendices shall not apply unless specifically adopted.

1. Appendix A of the 2024 Edition of the *International Wildland-Urban Interface Code* is adopted in its entirety with the following amendments:

A102.3.1 Support clearance. Persons owning, controlling, operating or maintaining electrical transmission or distribution lines shall have an approved program in place that identifies poles or towers with equipment and hardware types that have a history of becoming an ignition source, and provides a combustible free space consisting of a clearing of not less than ~~10~~ 20 feet (3048 mm) in each direction from the outer circumference of such pole or tower during such periods of time as designated by the code official.

Exception: Lines used exclusively as telephone, telegraph, messenger call, alarm transmission or other lines classed as communication circuits by a public utility.

A104.7 Outdoor fires. Outdoor fires in wildland-urban interface areas shall comply with Section 307 of the 2024 *International Fire Code* Regulations.

2. Appendix B of the 2024 Edition of the *International Wildland-Urban Interface Code* is adopted in its entirety with the following amendments:

B101.1 Scope. Where required, vegetation management plans must be submitted to the code official and the State Forester Fire Warden for review and approval as part of the plans required for a permit.

B101.2 Plan content. Vegetation management plans shall describe all actions that will be taken to prevent a fire from being carried toward or away from the building. A vegetation management plan shall include at least the following information:

1. A copy of the site plan showing the required *defensible space*.
2. Methods and timetables for controlling, changing or modifying areas on the property. Elements of the plan shall include removal of slash, snags, vegetation that may grow into overhead electrical lines, other ground fuels, ladder fuels and dead trees, and the thinning of live trees.
3. A plan for maintaining the proposed fuel-reduction measures.

B102 Defensible Space Plans.

B102.1 General. Where required, defensible space plans must be submitted to the fire code official for review and approval as part of the plans required for a permit.

B102.2 Plan content. A defensible space plan shall include at least the following

information:

1. Property boundaries.
 2. Current and proposed structures on the property.
 3. Location of trees and vegetation taller than 3 feet in height.
 4. Individual plant or brush fields 20 square feet or larger in area.
 5. Tree drip lines.
 6. Roads and driveways accessing the property.
3. Appendix C of the *2024 Edition of the International Wildland-Urban Interface Code* is adopted in its entirety with the following amendments:

C101.1 Fire hazard severity form. Where adopted, Table C101.1 is permitted to be used as an alternative to Table 502.1 for analyzing the fire hazard severity of building sites. Where a new subdivision is being developed, it must comply with the requirements in Chapter 4. When one is evaluating a property in an existing subdivision, this form can be used to review the adequacy of the subdivision itself. Per NRS 278.320 and Douglas County Code, “Subdivision” means any land, vacant or improved, which is divided or proposed to be divided into five or more lots, parcels, sites, units or plots, for the purpose of any transfer or development, or any proposed transfer or development, unless exempted within the NRS.

103.1 Creation of agency. The department of fire prevention is hereby created and the official in charge thereof shall be known as the code official. The function of the agency shall be the implementation, administration and enforcement of the provisions of this code.

A. Except as otherwise provided the IWUIC shall be enforced by the department of fire prevention of the fire district having jurisdiction in the county, which is established and operated under the supervision of the chief of each fire district.

B. In all portions or sections within the boundaries of Douglas County where local fire protection districts have been formed for the purpose of fire protection, enforcement of the chapter shall be affected by the fire chief of the local district.

104.2.2 Alternative materials, design, and methods. The provisions of this code are not intended to prevent the installation of any material or to prohibit any design or method not specifically prescribed by this code, provided that any such alternative has been approved.

Where the alternative material, design or method is not approved, the fire chief or their designee shall respond in writing, stating the reasons why the alternative was not approved.

Alternative means and methods for Sections 504.5:

As an alternative means and methods, we will allow the following to be used in lieu of “heavy timber” as prescribed:

1. Minimum 6” x 6” columns
2. 4” x 8” floor joists
3. 4” x 10” or 6” x 8” beams
4. 3” x n” ledgers
5. 2” x n” decking

This shall be allowed when the 5’ non-combustible criteria are met per Section 604.5. Areas under decks shall be kept free of combustibles as amended.

106.1 General. To determine the suitability of alternative materials and methods and to provide for reasonable interpretations of the provisions of this code see the *2024 International Fire Code* Section 104 as adopted by the District.

107.2 Permits required. Unless otherwise exempted, buildings or structures regulated by this code shall not be erected, constructed, altered, repaired, moved, removed, converted, demolished or changed in use or occupancy unless a separate permit for each building or structure has first been obtained from the code official.

For buildings or structures erected for temporary uses, see Appendix A, Section A108.3, of this code.

109.3.7 Violation penalties. Persons who shall violate a provision of this code or shall fail to comply with any of the requirements thereof or who shall erect, install, alter, repair or do work in violation of the approved construction documents or directive of the code official, or of a permit or certificate used under provisions of this code, shall be guilty of a misdemeanor, punishable by a fine of not more than \$1000.00 dollars or by imprisonment not exceeding six months, or both such fine and imprisonment. Each day that a violation continues after due notice has been served shall be deemed a separate offense.

112.1 General. In order to hear and decide appeals of orders, decisions or determinations made by the code official relative to the application and interpretation of this code, there shall be and is hereby created a board of appeals. The board of appeals shall be appointed by the applicable governing authority and shall hold office at its pleasure. The board shall adopt rules of procedure for conducting its business and shall render all decisions and findings in writing to the appellant, with a duplicate copy to the code official. The East Fork Fire Board of Directors be known as the Board of Appeals in accordance with this section and Section 112.3, and shall have authority to interpret the administrative provisions of this code, but shall not have authority to waive the requirements of this code. The East Fork Fire Board of Directors is prohibited from granting waivers, variances, or approvals of alternate methods, or materials differing from the regulations or adopted codes and standards of the State Fire Marshal. All requests for variances must be reviewed and approved by the State Fire Marshal through the use of the State Fire Marshal's Variance Request procedure in accordance with NAC 477.287. Variances shall be approved only if the State Fire Marshal concurs that the request provides an acceptable alternate means to achieve a comparable level of safety. The State Fire Marshal may, within its discretion, seek input from East Fork Fire in the review of variance requests related, but not limited to, fire apparatus access and water supply, however, the final decision to approve, approve with conditions or reject the variance request remains solely with the State Fire Marshal. The fee for review by the State Fire Marshal shall be paid by the applicant seeking appeal.

Fire hazard severity in accordance with Section 503.1: moderate. The fire hazard rating of moderate (Number 5) shall include moderate ratings according to the wildfire threat assessment map as designated by the Nevada Division of Forestry
<https://nevadaresourcesandwildfireinfo.com/Map/Pro/#map-themes>

Fire hazard severity in accordance with Section 503.1: high. The fire hazard rating of high shall include moderate - high and high (Numbers 6 and 7) ratings according to the wildfire threat assessment map as designated by the Nevada Division of Forestry
<https://nevadaresourcesandwildfireinfo.com/Map/Pro/#map-themes>

Fire hazard severity in accordance with Section 503.1: extreme. The fire hazard rating of extreme shall include very high and extreme (Numbers 8 and 9) ratings according to the wildfire threat assessment map as designated by the Nevada Division of Forestry <https://nevadaresourcesandwildfireinfo.com/Map/Pro/#map-themes>

Modification. The addition to a structure of greater than or equal to 25% of the existing square footage in accordance with Section 503.1 and Table 503.1. If the existing structure is located in the high, very high or extreme hazard zone in accordance with the Nevada Division of Forestry wildfire threat assessment map
<https://nevadaresourcesandwildfireinfo.com/Map/Pro/#map-themes>

Wildland-Urban Interface Area. That geographical area where structures and other human development meets or intermingles with wildland or vegetative fuels. Within the East Fork Fire Protection District, the Wildland-Urban Interface area is defined as all areas not within the boundaries of the Minden, Gardnerville and Genoa townships.

302.3 Review of wildland-urban interface areas. The fire code official shall reevaluate and recommend modification to the *wildland-urban interface areas* in accordance with Section 302.1 as deemed necessary by the fire code official.

Section 402.2.2 Water Supply. Individual structures hereinafter constructed or relocated into or within wildland-urban interface areas shall be provided with a conforming water supply in accordance with Section 404.

Exceptions:

1. Structures constructed to meet the requirements for the class of ignition-resistant construction specified in Table 503.1 for a nonconforming water supply.
2. Buildings containing only private garages, carports, sheds and agricultural buildings with a floor area of

not more than 600 square feet (56 m²).

3. Agricultural buildings constructed for the storage limited to harvested commodities, without electrical or fuel gas services.

403.8 Security gates. The installation of security gates across a fire apparatus access road shall be *approved* by the *fire code official*. Where security gates are installed, they shall have an *approved* means of emergency operation. The security gates and the emergency operation shall be maintained operational at all times. Electric gate operators, where provided, shall be *listed* in accordance with UL 325. Gates intended for automatic operation shall be designed, constructed and installed to comply with the requirements of ASTM F2200.

1. All gates across driveways and access roads shall be approved by the AHJ.
2. All gates must be provided with a "Knox key switch" which will open the gate.
3. The clear opening of the gate must be 2' wider (one foot on either side) than the required driveway or road width. This width shall be maintained to a height of 13' 6".
4. The gate shall be designed to operate in all weather conditions and shall be designed so that the operation cannot be impaired by snow/ice.
5. The gate shall be designed to automatically open and remain in the open position in the event of a power failure.
6. The gate shall be capable of being opened manually. Instructions on activating this feature shall be provided to the Fire District.

404.1 General. Where provided in order to qualify as a conforming water supply for the purpose of Table 503.1 or as required for new subdivisions in accordance with Section 402.1.2, an *approved* water source shall have an adequate water supply for the use of the fire protection service to protect buildings and structures from exterior fire sources or to suppress structure fires within the *wildland-urban interface area* of the jurisdiction in accordance with this section.

Exception: Buildings containing only private garages, carports, sheds and agricultural buildings with a floor area of not more than 600 square feet (56 m²), and agricultural buildings constructed for the storage of harvested crops or agricultural commodities without electrical or fuel gas services.

404.2 Water sources. The point at which a water source is available for use shall be located not more than 1,000 feet (305 m) from the building and be *approved* by the fire code official. The distance shall be measured along an unobstructed line of travel. Water sources shall comply with the following:

1. Water tanks shall have a minimum usable water volume as determined by the adequate water supply needs in accordance with Section 404.5. Water tanks shall be equipped with an *approved* hydrant. The water level of the water tanks shall be maintained full by, water pumped from a well or water hauled by a tanker to maintain the required water supply. The design, construction, location, water level maintenance, access and access maintenance of water tanks shall be *approved* by the fire code official. The water tank shall have a dedicated supply for fire suppression. If the tank is to be used for domestic purposes, the domestic average daily use shall be in addition to the fire suppression gallonage required.

404.3 Draft sites. *Approved* draft sites shall be equipped with an *approved* hydrant. The use, design, construction, location, access and access maintenance of draft sites shall be *approved* by the code official.

404.5 Adequate water supply. Adequate water supply shall be determined for purposes of initial attack and flame front control as follows:

1. One- and two-family dwellings. The required water supply for one- and two-family dwellings having a fire flow calculation area that does not exceed 3,600 square feet (334 m²) shall be 1,000 gallons per minute (63.1 L/s) for a minimum duration of 30 minutes. The required water supply for one- and two-family dwellings having a fire flow calculation area in excess of 3,600 square feet (334 m²) shall be 1,500 gallons per minute (95 L/s) for a minimum duration of 30 minutes.

Exception: A reduction in the required flow rate of 50 percent, as *approved* by the code official, is allowed where the building is provided with an *approved* automatic sprinkler system.

2. Buildings other than one- and two-family dwellings. The water supply required for buildings other than one and two-family dwellings shall be as *approved* by the code official but shall be not less than 1,500 gallons per minute (95 L/s) for a duration of 2 hours.

Exception: A reduction in the required flow rate of up to ~~75~~ 50 percent, as *approved* by the code official, is allowed where the building is provided with an *approved* automatic sprinkler system. The resulting water supply shall not be less than 1,500 gallons per minute (94.6 L/s).

In areas without water supply, NFPA 1142 may be used to determine adequate water supply. Adequate water supply shall be calculated as required in the most current Edition of NFPA 1142 as adopted by the Nevada State Fire Marshal. Prior to calculating the minimum water supply for any structure, the structure shall be surveyed to obtain the following information:

- (1) Occupancy hazard
- (2) Type of construction
- (3) Structure dimensions (length, width, and height)
- (4) Exposures, if any

For new construction, plans shall be submitted to the District for determination of the minimum water supply required before construction is started. See NFPA 1142 Sections 4.2.2 and 4.3.2 for minimum water supply requirements.

Exception: A reduction in required flow rate of 50 percent, as approved by the fire code official, is allowed where the building is provided with an approved automatic sprinkler system.

To meet adequate water supply, one of the following options shall be chosen:

1. Fire sprinklers shall be installed in accordance with NFPA 13D. A separate plan submittal and permit shall be required.
2. Installation of an approved water tank and draft site appurtenances that are in compliance with NFPA 1142 and include a dedicated access and a water use agreement. Smoke alarms installed in the home are required to be monitored by a licensed monitoring company for the life of the home. Activation of smoke alarms shall transmit a signal to provide early notification of any fire. A copy of the monitoring agreement shall be required at final inspection for C of O.
3. A one-time fee paid to the EFFPD water supply initiative based on the required fire flow. This amount shall be paid in full prior to approval of the residential WUI plan review. Smoke alarms installed in the home are required to be monitored by a licensed monitoring company for the life of the home. Activation of smoke alarms shall transmit a signal to provide early notification of any fire. A copy of the monitoring agreement shall be required at final inspection for C of O.

501.2 Objective. The objective of this chapter is to establish minimum standards to locate, design and construct buildings and structures or portions thereof for the protection of life and property, to resist damage from wildfires, and to mitigate building and structure fires from spreading to wildland fuels. The minimum standards set forth in this chapter vary with the critical *fire weather*, slope and fuel type to provide increased protection, above the requirements set forth in the *International Building Code*, from the various levels of hazards. The minimum standards set forth in this chapter vary with the critical *fire weather*, slope and fuel type to provide increased protection, above the requirements set forth in the *International Building Code* and the *International Residential Code*, from the various levels of hazards.

502.1 General. The fire hazard severity of building sites for all buildings hereafter constructed, modified or relocated into *wildland-urban interface areas* shall be established in accordance with Table 503.1, the wildfire threat assessment map, or Appendix C.

<https://nevadaresourcesandwildfireinfo.com/Map/Pro/#map-themes>

502.1.1 Application of Appendix C. Per Appendix C, where a new subdivision is being developed, it must comply with the requirements in Chapter 4. When one is evaluating a property in an existing subdivision, this form can be used to review the adequacy of the subdivision itself. Per NRS 278.320 and Douglas County Code, “Subdivision” means any land, vacant or improved, which is divided or proposed to be divided into five or more lots, parcels, sites, units or plots, for the purpose of any transfer or development, or any proposed transfer or development, unless exempted within the NRS.

Table 503.1 Ignition-Resistant Construction

Table 503.1

IGNITION-RESISTANT CONSTRUCTION ^{a,g}

DEFENSIBLE SPACE ^{c,i}	FIRE HAZARD SEVERITY					
	Moderate Hazard		High Hazard		Extreme Hazard	
	Water supply ^b		Water supply ^b		Water supply ^b	
	Conforming^d	Nonconforming^e	Conforming^d	Nonconforming^e	Conforming^d	Nonconforming^e
Nonconforming	IR 2	IR 1	IR 1	IR 1 N.C.	IR 1 N.C.	Not Permitted
Conforming	IR 3	IR 2	IR 2	IR 1	IR 1	IR 1 N.C.
1.5 x Conforming ^{f,h}	Not Required	IR 3	IR 3	IR 2	IR 2	IR 1

- a. Access shall be in accordance with Section 403.
- b. Subdivisions shall have a conforming water supply in accordance with Section 402.1.
- c. IR 1= Ignition-resistant construction in accordance with Section 504.
IR 2= Ignition-resistant construction in accordance with Section 505. IR 3= Ignition-resistant construction in accordance with Section 506.
N.C.= Exterior walls shall have a fire-resistance rating of not less than 1 hour and the exterior surfaces of such walls shall be noncombustible. Usage of log wall construction is allowed.
- d. Conformance based on Section 603.
- e. Conformance based on Section 404 and EFFPD regulations.
- f. A nonconforming water supply is any water system or source that does not comply with Section 404 and EFFPD regulations, including situations where there is not water supply for structure protection or fire suppression.
- g. A fire protection plan in accordance with the requirements specified in Section 405 shall be submitted for approval by the fire code official.
- h. If required, the fire sprinkler system shall be installed throughout the ~~fire area~~ structure, in accordance with NFPA 13D, to include the garage.
- i. Only with the approval of the fire code official
- j. If the fuel modification required in Table 603.2 cannot be met based on an actual shorter distance to the lot line, then the required defensible space is nonconforming.

505.2 Roof Assembly. Roofs shall have a roof assembly that complies with not less than a Class A rating when tested in accordance with ASTM E108 or UL 790. For roof assemblies where the profile allows a space between the roof covering and roof deck, the space at the eave ends shall be fire stopped to preclude entry of flames or embers, or have one layer of 72-pound mineral-surfaced, nonperforated cap sheet complying with ASTM D3909 installed over the combustible deck.

602.1.1 Required automatic fire sprinkler systems in IBC structures.

All new structures built under the requirements of the *International Building Code* greater than or equal to 5,000 square feet or greater than 2 stories in height, shall be required to install an automatic fire sprinkler system in accordance with NFPA 13 or NFPA 13R. This requirement applies to all A, B, E, F, H, I, M, S and U Occupancies. This requirement shall be in addition to any other requirements as listed in NRS 278.586 Section 6(6), IFC Section 102.5, NFPA 1142, or as per this Code. The system shall be installed by a contractor licensed in the State of Nevada. This requirement shall apply to any addition or remodel that increases the square footage to greater than or equal to 5,000 square feet, in accordance with NRS 278.586. Fire areas may be separated in accordance with IBC 707.3.10, or as required. Pursuant to NRS 278.586 Section 6(6). As used in this section:

- (a) "Automatic fire sprinkler system" has the meaning ascribed to it in NRS 202.580.
- (b) "Residential dwelling unit" does not include a condominium unit, an apartment unit or a townhouse unit that shares a common wall with more than one other such unit.

Exception:

Airport control towers complying with IBC 406.5 are exempt from this table.

602.1.2 Required automatic fire sprinkler systems in IRC structures.

All new structures built under the requirements of the *International Residential Code* and greater than or equal to 5,000 square feet of living space, shall be required to install a residential automatic fire sprinkler system in accordance with NFPA 13D. This system shall be extended to and include protection in the garage. This requirement shall be in addition to any other requirements as listed in NRS 278.586 Section 6(6), IFC Section 102.5, NFPA 1142, IWUIC or as per this Code. The system shall be installed by a contractor licensed in the State of Nevada. This requirement shall apply to any addition that increases the living space to greater than or equal to 5,000 square feet, in accordance with NRS 278.586. Fire walls and fire barriers shall not be used to separate fire areas within the living space. This shall include accessory dwellings. Pursuant to NRS 278.586 Section 6(6) 6. As used in this section:

- (a) "Automatic fire sprinkler system" has the meaning ascribed to it in NRS 202.580.
- (b) "Residential dwelling unit" does not include a condominium unit, an apartment unit or a townhouse unit that shares a common wall with more than one other such unit.

Exception:

Accessory structures over 5,000 square feet are exempt from the requirement for installation of residential fire sprinklers, unless they are modified to include living space, but are not exempted from the requirements for fire flow in accordance with Sections 507.3 and 507.3.1 of these Regulations.

604.4 Trees. Tree crowns extending to within 10 feet (3048 mm) of any structure shall be pruned to maintain a minimum clearance of 10 feet (3048 mm). Tree crowns within the *defensible space* shall be pruned to remove limbs located less than 10 feet (3048 mm) above the ground surface adjacent to the trees.

604.4.1 Chimney clearance. Portions of tree crowns that extend to within 10 feet (3048 mm) of the outlet of a chimney shall be pruned to maintain a minimum clearance of 10 feet (3048 mm).

604.5 Non-combustible area. The area extending from the base of any structure to 5 feet beyond the base of such structure shall be composed entirely of non-combustible material or fire resistive vegetation.

607.1 General. Firewood and combustible material shall not be stored in unenclosed spaces beneath buildings or structures, or on decks or under eaves, canopies or other projections or overhangs. Where required by the fire code official, storage of firewood and combustible material stored in the *defensible space* shall be located not less than 30 feet (9144 mm) from structures and separated from the crown of trees by a horizontal distance of not less than 15 feet (4572 mm).

Exception. Approved fire-resistance-rated coverings used in accordance with their listing and as approved and allowed by the fire code official.