

TAHOE DOUGLAS FIRE PROTECTION DISTRICT

RESOLUTION #012-2023

A resolution of the Tahoe Douglas Fire Protection District adopting the *International Fire Code, International Building Code, International Existing Building Code, International Wildland Urban Interface Code, Uniform Mechanical Code and Uniform Plumbing Code* as regulation; prescribing regulations governing conditions hazardous to life and property from fire, hazardous materials or explosion; providing for the issuance of permits for hazardous uses or operations; and establishing a bureau of fire prevention and providing officers therefore and defining their powers and duties.

The Board of Directors of the Tahoe Douglas Fire Protection

District does ordain as follows:

WHEREAS, Nevada Revised Statutes Chapter 318 authorizes Tahoe Douglas Fire Protection District as a duly organized fire protection district; and

WHEREAS, Nevada Revised Statutes Chapter 474 authorizes a duly organized fire protection district to provide for the prevention and extinguishment of fires; and

WHEREAS, Nevada Revised Statutes Chapter 474 provides that a Board of Fire Trustees shall promulgate and enforce all regulations necessary for the administration and government of the district and for the furnishing of fire protection; and

WHEREAS, Nevada Revised Statutes Chapter 474 authorizes Tahoe Douglas Fire Protection District through an Inter-local Agreement granting authority to adopt fire codes, model codes; and

WHEREAS, Nevada Revised Statutes Chapter 474 provides that a Board of Fire Trustees shall eliminate and remove fire hazards from the districts wherever practicable and possible, whether on private or public premises; and

WHEREAS, the Board of Fire Trustees of the Tahoe Douglas Fire Protection District does herewith find that the District has certain climatic, geologic, and topographical features that can have a deleterious or negative effect on the delivery of emergency services such as fire protection and emergency medical services; and

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WHEREAS, the Board of Fire Trustees of the Tahoe Douglas Fire Protection District finds that modifications and changes to the International Fire Code are reasonably necessary because of the following local climatic, geological, physical, and topographical conditions:

1. The Tahoe Douglas Fire Protection District is situated in mountainous inland terrain, where essentially the entire District is considered a wildland area covered by native vegetation on steep and frequently inaccessible mountainsides. The native groundcover is highly combustible and susceptible to producing ladder fuels and flying brands that will greatly increase the spread and severity of fire.

Further, the fire conditions described above carry the potential for overcoming the ability of the district fire suppression forces to aid or assist in fire control, evacuations, rescues and the emergency task demands inherent in such situations. The potential exists for the aforementioned conditions to result in catastrophic losses to life, property, and the scenic value of the community. The Tahoe Douglas Fire Protection District is situated near known geological faults, which are capable of generating earthquakes of significant and destructive magnitude. These faults are therefore capable of incapacitating the district water supply, roadways, communications, power, and physical properties at a time of emergent need.

2. The seasonal climatic conditions during the late summer and fall create numerous serious difficulties regarding the control of and protection against fires in the Lake Tahoe basin area and the Tahoe Douglas Fire Protection District specifically. The hot, dry weather typical of this area in the summer and fall coupled with prevailing winds from the southwest frequently affect wildfires that threaten or could threaten the Tahoe Douglas Fire Protection District. Natural vegetation occurring in the area of the fire district is highly flammable.

While some code requirements, such as fire-resistive roof classification, have a direct bearing on building survival in a wildland fire situation, others, such as residential fire sprinklers also have a positive and mitigating effect. During dry climatic conditions many materials are much more easily ignited, and fires are more likely to occur. Any fire, once started, can expand rapidly given the influences of typical climatic conditions of low humidity and winds. Residential fire sprinklers can arrest a fire starting within a structure before it could spread to adjacent wildland fuels or structures.

Winter months present additional challenges to the delivery of fire and emergency medical services where ice and accumulated snow adversely affect apparatus operation; these same climatic conditions limit fire suppression efforts and impede effective and safe access to

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buildings which may be involved with fire. The inclusion of built-in automatic fire suppression systems can effectively mitigate, control, or extinguish any structure fire in a protected premise, and thereby decrease the risk of structure firefighting and assist in the preservation of the community and the district's fire suppression forces.

3. Continued expansion or other additions to existing structures by property owners produces an increased assumption of risk by the Tahoe Douglas Fire Protection District and requires the addition of additional fire protection throughout the resulting structure. Automatic sprinkler systems can effectively manage this increased risk and further assist in the preservation of the community by providing the Tahoe Douglas Fire Protection District's fire suppression forces additional control and containment strategies in the event of a structure fire.
4. THEREFORE, be it resolved by the Board of Fire Trustees of the Tahoe Douglas Fire Protection District that the following amendments be adopted for the protection of persons and property within the District:

The following changes are made to the 2018 edition of the *International Fire Code* as adopted by reference in NAC 477.281:

“*International Fuel Gas Code*” is deleted and replaced with “N.F.P.A. Standard 54, 2018 edition, or the most current version adopted by the Board for the Regulation of the Liquefied Petroleum Gas in NAC 590.610.”

“*International Mechanical Code*” is deleted and replaced with “2018 *Uniform Mechanical Code*.”

“*International Plumbing Code*” is deleted and replaced with “2018 *Uniform Plumbing Code*.”

102.5 Application of Residential Code.

Where structures are designed and constructed in accordance with the *International Residential Code*, the provisions of this code shall apply as follows:

1. Construction and design provisions of this code pertaining to the exterior of the structure shall apply including, but not limited to, premises identification, fire apparatus access and water supplies. The water supply shall be approved by the fire code official. Where interior or exterior systems or devices are installed, construction permits required by Section 105.7 shall apply, to include residential solar photovoltaic systems, generators and energy storage systems.

2. Administrative, operational and maintenance provisions of this code shall apply.

102.7 Referenced Codes and Standards.

The codes and standards referenced in this code shall be the most current that are listed in Chapter 80, and such codes and standards shall be considered to be part of the requirements of this

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code to the prescribed extent of each such reference and as further regulated in Section 102.7.1 and 102.7.2.

103.1 General.

The department of fire prevention is established within the jurisdiction under the direction of the *fire code official*. The function of the department shall be the implementation, administration and enforcement of the provisions of this code.

A. Except as otherwise provided the IFC 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.

103.3 Deputies.

The chief and members of the department of fire prevention have the ability to perform their duties pursuant to this code including the authority to issue citations for the violation of any and all provisions of the *International Fire Code* and NAC 477.

105.6.20 Hazardous Materials.

An operational permit is required to store, transport on site, dispense, use or handle hazardous materials in excess of the amounts listed in Table 105.6.20. When a permit is required to be obtained for hazardous materials, the Nevada Combined Agency Hazardous Material Facility Report must be completed and the appropriate fees paid.

105.6.51 Fire Fighter Air Replenishment Systems.

An operational permit is required to maintain a Fire Fighter Air Replenishment System.

105.6.52 Emergency Responder Radio Coverage System.

An operational permit is required for the operation and maintenance of an emergency radio coverage system and related equipment, as specified in Section 510.

105.6.53 Energy Storage Systems.

An operational permit is required for stationary and mobile energy storage systems regulated by Section 1207 and NFPA 855.

105.7.26 Firefighter Air Replenishment Systems.

A construction permit is required for installations of or modification to a Fire Fighter Air Replenishment System. The construction permit application shall include documentation of an acceptance and testing plan as specified in Section L103.2.

105.7.27 Energy Storage Systems.

A construction permit is required to install energy storage systems regulated by Section 1207 and NFPA 855. Plans shall be submitted for review and approval.

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Section 106 Fees.

A fee for each permit shall be paid as required, in accordance with the schedule as established by the applicable governing authority. The applicant for a permit shall provide an estimated permit value at the time of application. Permit valuations shall include the total value of work, including materials and labor, for which the permit is being issued, such as electrical, gas, mechanical, plumbing equipment and permanent systems. If, in the opinion of the fire code official, the valuation is underestimated on the application, the permit shall be denied unless the applicant can show detailed estimates to meet the approval of the fire code official. Final permit valuation shall be set by the fire code official.

108.2 Testing and Operation.

All fire sprinkler systems, fire alarm systems, portable fire extinguishers, smoke detection systems, and other fire protective or extinguishing systems or appliances installed or required to be installed in a building which has a commercial or industrial occupancy shall have an annual maintenance inspection performed by a fire protection firm which is licensed by the Nevada State Fire Marshal. All costs for maintenance or repair shall be the responsibility of the property owner. A written report shall be forwarded to the fire protection agency having jurisdiction indicating the adequacy or inadequacy of the system.

109.1 Board of Appeals Established.

In order to determine the suitability of alternate materials or other means of construction an appeal may be made to the Tahoe Douglas Fire Board of Directors, who shall be the final authority on such appeal.

110.4 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 *fire 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.

Section 202 General Definitions.

Lithium metal polymer battery. A storage battery that is similar to the lithium-ion battery except that it has a lithium metal anode in the place of the traditional carbon or graphite anode.

Nickel-metal hydride (Ni-MH). An alkaline storage battery in which the positive active material is nickel oxide, the negative electrode is an intermetallic compound, and the electrolyte is usually potassium hydroxide.

High Rise Building. A building with an occupied floor located more than 55 feet above the lowest level of fire department vehicle access.

Factory Industrial F-1 Moderate-hazard occupancy. Factory industrial uses that are not classified as Factory Industrial F-2 Low Hazard shall be classified as F-1 Moderate Hazard and shall include, but not be limited to, the following:

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Energy storage systems (ESS) in dedicated-use buildings

Institutional Group I-2. Institutional Group I-2 occupancy shall include buildings and structures used for medical care on a 24-hour basis for more than five persons who are not capable of self-preservation. All portions of a care facility which houses patients or residents which are classified by the State Board of Health as a 'Category 2 resident' and which has an occupant load of more than 10 residents, is classified as an 'I-1' occupancy classification. This group shall include, but not be limited to, the following:

- Foster care facilities
- Detoxification facilities
- Hospitals
- Nursing homes
- Psychiatric hospitals

Institutional Group I-4, day care facilities. Institutional Group I-4 shall include buildings and structures occupied by more than three persons of any age who receive custodial care for less than 24 hours by persons other than parents or guardians, relatives by blood, marriage, or adoption, and in a place other than the home of the person cared for. This group shall include, but not be limited to, the following:

- Adult day care
- Child day care

Classification as Group E. A child day care facility that provides care for more than five but not more than 100 children 2 1/2 years or less of age, where the rooms in which the children are cared for are located on a *level of exit discharge* serving such rooms and each of these child care rooms has an *exit* door directly to the exterior, shall be classified as Group E.

Within a place of religious worship. Rooms and spaces within places of religious worship providing such care during religious functions shall be classified as part of the primary occupancy.

Six or fewer occupants receiving care. A facility having six or fewer persons receiving custodial care shall be classified as part of the primary occupancy.

Six or fewer occupants receiving care in a dwelling unit. A facility such as the above within a dwelling unit and having six or fewer persons receiving custodial care shall be classified as a Group R-3 occupancy or shall comply with the International Residential Code.

Residential Group R-1. Residential Group R-1 occupancies containing *sleeping units* where the occupants are primarily transient in nature, including:

Boarding houses (transient) with more than 10 occupants

Brothels

Boarding houses (transient)

Congregate living facilities (transient) with more than 10 occupants

Hotels (transient)

Motels (transient)

Residential Group R-2. Residential Group R-2 occupancies containing *sleeping units* or more than two *dwelling units* where the occupants are primarily permanent in nature, including:

Apartment houses

Congregate living facilities (nontransient) with more than 16 occupants

Boarding houses (nontransient)

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- Convents
- Dormitories*
- Fraternities and sororities
- Monasteries
- Hotels (nontransient)
- Live/work units*
- Motels (nontransient)
- Vacation timeshare properties

Residential Group R-3. Residential occupancies where the occupants are primarily permanent in nature and not classified as Group R-1, R-2, R-4 or I, including:

- Buildings that do not contain more than two *dwelling units*
- Care facilities that provide accommodations for three or fewer persons receiving care
- Congregate living facilities* (nontransient) with 16 or fewer occupants
- Boarding houses (nontransient)
- Convents
- Dormitories
- Fraternities and sororities
- Monasteries
- Congregate living facilities* (transient) with 10 or fewer occupants
- Boarding houses* (nontransient)
- Lodging houses* (transient) with five or fewer *guestrooms* and 10 or fewer occupants

Residential Group R-4. Residential Group R-4 shall include buildings, structures or portions thereof for more than five but not more than 16 persons, excluding staff, who reside on a 24-hour basis in a supervised residential environment and receive custodial care. Buildings of Group R-4 shall be classified as one of the occupancy conditions indicated below. This group shall include, but not be limited to, the following:

- Alcohol and drug centers
- Assisted living facilities
- Congregate care facilities
- Group homes
- Halfway houses
- Residential board and care facilities
- Reintegration facilities
- Social rehabilitation facilities
- Transient living facilities

Group R-4 occupancies shall meet the requirements for construction as defined for Group R-3, except as otherwise provided for in the *International Building Code*.

Condition 1. This occupancy condition shall include buildings in which all persons receiving custodial care, without any assistance, are capable of responding to an emergency situation to complete building evacuation.

Condition 2. This occupancy condition shall include buildings in which there are any persons receiving custodial care who require limited

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verbal or physical assistance while responding to an emergency situation to complete building evacuation.

SPECIAL HAZARD FOR EMERGENCY SERVICE COMMUNICATIONS. Construction features which have been found to limit communications as determined by the fire code official.

UNWANTED ALARM. Any alarm that occurs that is not the result of a potentially hazardous condition.

307.2 Permit Required.

A permit shall be obtained from Tahoe Douglas Fire in accordance with Section 105.6 prior to kindling a fire for recognized open burn, silvicultural or range or wildlife management practices, prevention or control of disease or pests, or vegetation management Application for such approval shall only be presented by and permits issued to the *owner* of the land on which the fire is to be kindled.

307.2.1 Burn Barrels Prohibited:

The use of burn barrels within the boundary of Tahoe Douglas Fire Protection District is prohibited.

307.2.2 Garbage Burning Prohibited:

Any person who attempts to burn or burns kitchen and table refuse, offal, swill, other parts and accumulation of animals (whether domestic or wild), vegetables, meats, fish, fowl, birds or fruits, waste matter and/or papers is in violation of this Chapter and Code Section.

307.2.3 Rubbish Burning Prohibited:

Any person who attempts to burn or burns waste including, but not limited to, treated wood, construction debris, roofing materials, paper boxes, rags, moist grass clippings, old hay or straw, barn sweepings, railroad ties treated with creosote or other preservatives, latex paints and thinners, brushes, tools, wet storage, alkaline and lithium batteries, furniture, plastic pipe and fittings, galvanized pipe and fittings, and all other combustible materials deemed by Tahoe Douglas Fire District to be garbage, rubbish, or trash is in violation of this Chapter and Code Section.

307.2.4 Toxic, Dangerous or Hydrocarbon Product Burning Prohibited:

Any person who attempts to burn or burns any combustible liquid, waste oil, gasoline, diesel fuel, alcohol or liquid byproducts of any commercial process is in violation of this Chapter and Code Section.

307.2.5 Plastic or Rubber Products:

Any person who attempts to burn or burns any plastic or rubber product, no matter what the chemical compound, unless cellulose base is over 95% by weight, is in violation of this Chapter and Code Section.

307.2.6 Water Supply and Tools:

All Open Burns shall have a ready water supply and proper hand tools, or farm or heavy equipment available at the burn site that is sufficient to halt the spread of a fire that escapes control by the attendant.

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307.2.8 Powers and Duties of Fire District:

Tahoe Douglas Fire Protection District and its officers or agents may, without further process of law, enter onto the private or public property of another for the purposes of investigating any smoke or fire observed, to determine if a Permit has been issued in accordance with this Section, and to determine if violations of Code Sections 307.2 through 307.13 inclusive, or state law or regulation have occurred.

307.2.9 Cost of Extinguishment:

The fire district having jurisdiction and its officers or agents may initiate, through the Tahoe Douglas Fire District, appropriate legal action to recover all costs incurred to extinguish any fire and/or remove fire debris or other material involved in any fire, ignited or maintained in violation of this Chapter. The Tahoe Douglas Fire District may record a lien against the real property where the Open Burn occurred in the amount of the costs incurred, and/or pursue all other appropriate legal remedies to recover the costs incurred.

307.2.10 Penalty for Violation of Provisions:

Any person, persons, firm, partnership, trust, company, association, corporation, or other entity that violates any provision of this Chapter, is guilty of a misdemeanor, and is subject to a maximum fine of \$1000 and six months in jail for each violation.

307.2.11 Suspension or Revocation of Permit:

The Fire Chief or his designee, of Tahoe Douglas Fire District, may immediately suspend any permit issued under this Chapter by issuance of a "Stop Order" in writing to the attendant of the fire, or by posting the "Stop Order" visibly and conspicuously on the property where the Open Burn occurred or is expected to occur.

307.3 Extinguishment Authority.

Where open burning creates or adds to a hazardous situation, or a required permit for open burning has not been obtained, Tahoe Douglas Fire District, the fire agency having jurisdiction, its officers or agents may, without further process of law, extinguish any fire ignited or maintained in violation of the requirements or this Chapter.

NRS 474.550 Provides that: "Any person, firm, association, or agency which willfully or negligently causes a fire ... may be charged with the expense incurred in the extinguishing the fire..."

Section 307.4.3 Portable Outdoor Fireplaces.

Portable outdoor fireplaces shall be used in accordance with manufacturer's instructions and shall not be operated within 15 feet (3048 mm) of a structure or combustible material.

Exception: Portable outdoor fireplaces used at one- and two-family *dwelling*s shall be used in accordance with manufacturer's instructions. Permits required.

Section 308.1.6.3 Sky Lanterns.

A person shall not release or cause to be released sky lantern or similar device with an open flame fuel source.

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Section 315.4.3 Pallets and Firewood

The storage height for scrap pallets and all firewood shall be a maximum height of 10 feet (3048 mm) and such materials shall be stored and secured in a manner to assure stability and prevent the materials from slipping, sliding, toppling, collapsing, or falling.

Section 319.4.1 Fire Protection for Cooking Equipment.

Cooking equipment shall be protected by automatic fire extinguishing systems in accordance with Sections 607.2 and 904.12.

Section 320 Natural Gas Meter Protection.

Section 320.1 General. A protective cover shall be provided over natural gas meter assemblies serving buildings, or portions thereof, located at an elevation of 5,800 feet (1767.48 m) or higher. The protective cover shall be designed to be equal to or greater than the Building Design Load (as determined by the Building Department having jurisdiction). The cover shall be approved by the natural gas supplier, shall be installed over the meter assembly, and securely supported to the ground or diagonally to the building wall. When supported to the ground, the footing of the supports shall extend a minimum of 6-inches (152.4 mm) below finished grade. Pre-cast concrete piers may be used in lieu of poured footings, provided they are placed on stable soil.

Section 403.12.3.2 Training.

Training for crowd managers shall be in compliance with the latest International Code Council or National Fire Protection Association's standards or guidelines.

Section 503.2.3 Surface.

Fire apparatus access roads shall be designed and maintained to support the imposed loads of fire apparatus and shall be surfaced and paved so as to provide all-weather driving capabilities that are acceptable to and approved by the authority having jurisdiction.

Exception: Temporary access roads serving only buildings under construction are not required to be paved.

Section 503.4 Obstruction of Fire Apparatus Access.

Fire apparatus access roads shall not be obstructed in any manner, including the parking of vehicles. The minimum widths and clearances established in Sections 503.2.1 and 503.2.2 shall be maintained at all times. In addition to the penalty or code violation contained in Douglas County Code Title 20, and in addition to the regulation set forth in title 10, "Vehicles and Traffic", vehicles in violation of this subsection may be cited or towed at the owner's expense. The Sheriff's Office is given concurrent jurisdiction with the Tahoe Douglas Fire Chief in Douglas County to enforce the provisions of this title.

503.6 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. All gates shall meet the following requirements:

Gates:

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Automatic Gate Requirements

- All gates across driveways and access roads shall be approved by the Fire Chief.
- All gates must be provided with a “Knox key switch” which will open the gate.
- Gates serving more than five structures shall be provided with a strobe light activation system that is compatible with the Fire District’s pre-emptor system.
- 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”.
- 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.
- The gate shall be designed to automatically open and remain in the open position in the event of a power failure.
- The gate shall be capable of being opened manually. Instructions on activating this feature shall be provided to the Fire District.
- The property owner shall provide documentation to the Fire District in which the owner agrees to maintain the gate in operable condition, the owner shall also agree to lock the gate in the open position should the gate become inoperable
- The property owner shall provide documentation to the Fire District in which the property owner agrees to indemnify the Fire District from:
 - any damages to the gate arising from Fire District operation
 - any loss or damage arising from any delayed emergency services
 - the property owner shall also acknowledge responsibility for any damage to Fire District property arising from the use of the gate.

This documentation shall be recorded with the parcel.

505.1 Address Identification.

New and existing buildings must be provided with approved, maintained all-weather address numbers, building numbers or address identification. The address numbers, building numbers or address identification must be legible and placed in a position that is visible from the street or road fronting the property. The characters in address numbers, building numbers or address identification must contrast with their background. Address numbers, building numbers or address identification must be Arabic numbers or alphabetical letters. Each number, character and letter must be a minimum of 6 inches (152.4 mm) high for buildings that are within 50 feet of the street, 12 inches high for buildings that are within 51 to 100 feet of the street and 18 inches high for buildings that are over 100 feet from the street. Each number, character and letter must be a minimum stroke width of 0.5 inch (12.7 mm). Each character shall be 6 inches high with a minimum stroke width of ½-inch for residential occupancies. Where access is by means of a private road or driveway and the building cannot be viewed from the public way, a monument, pole or other sign or means must be used to identify the structure. Where required by fire code official, address identification shall be provided in additional approved locations to facilitate emergency response. The requirements of this paragraph can be adjusted to allow large Arabic numbers or alphabetical letters as required by the fire code official for the needs of campuses and complexes for planning and coordination as listed under N.F.P.A. 3000, 2018 edition. Address identification shall be maintained.

Section 507.3 Fire Flow.

Fire flow requirements for buildings or portions of buildings and facilities shall be determined by an approved method. Subject to the approval of the fire authority, if the required fire flow is not

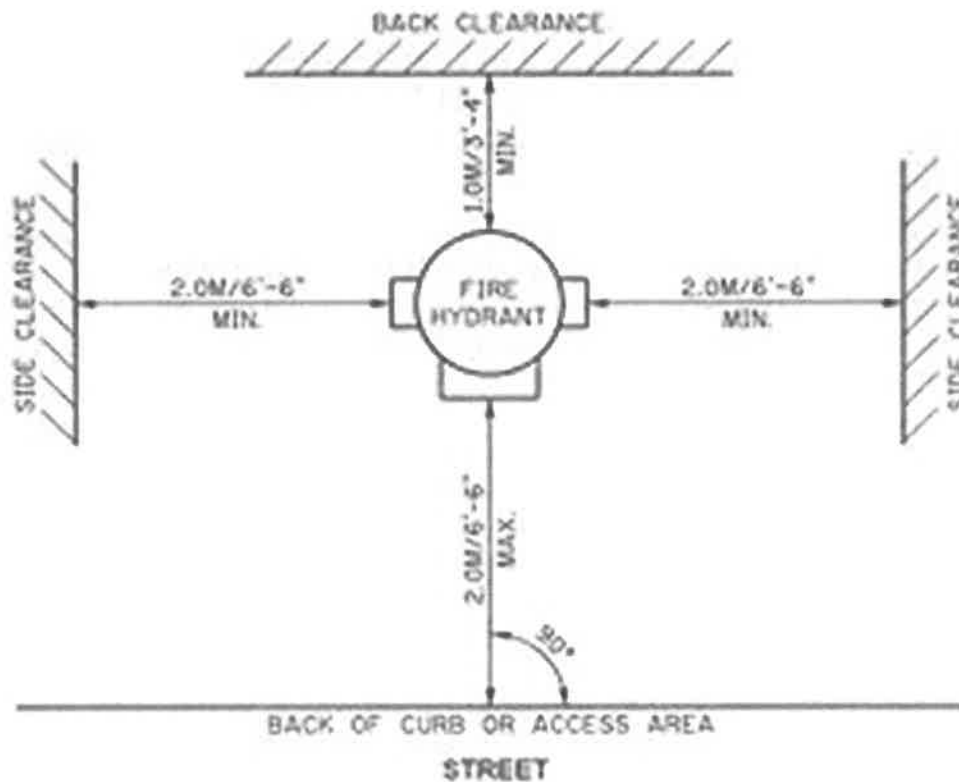
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available for adequate fire protection, an approved automatic fire sprinkler system shall be installed throughout the building or buildings. The sprinkler system must meet the requirements of the appropriate N.F.P.A. standard. The provisions of this paragraph do not apply if a fire sprinkler system is otherwise required by this chapter or the adopted codes.

Section 507.3.1 Fire Flow for Residential Construction.

Fire flow for residential construction, in accordance with the requirements of Section 102.5 (1), shall be calculated in accordance with NFPA 1142. All residential plan submittals shall include the explanatory, calculations in accordance with Chapter 4. Calculations shall be based on the volume calculation of the total building area (that is everything under a roof, including garages, covered entry and covered patios).

Section 507.5.5 Clear Space Around Hydrants.



507.5.5 Diagram

A 3-foot (914 mm) clear space shall be maintained around the circumference of fire hydrants, except as otherwise required or approved. In addition, a minimum clear space of seven- and one-half feet (2286 mm) shall be maintained to both sides directly in front of the pumper connection. This requirement shall apply to any public or private property. This includes but is not limited to snow, ice, debris and vegetation.

Section 508.1.6 Required Features.

The fire command center shall comply with NFPA 72 and shall contain the following features:

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1. The emergency voice/alarm communication system control unit.
2. The fire department communications system.
3. Fire detection and alarm system annunciator.
4. Annunciator unit visually indicating the location of the elevators and whether they are operational.
5. Status indicators and controls for the air distribution systems.
6. The fire fighter's control panel required by Section 909.16 for smoke control systems installed in the building.
7. Controls for unlocking interior exit stairway doors simultaneously.
8. Sprinkler valve and water-flow detector display panels.
9. Emergency and standby power status indicators.
10. A telephone for fire department use with controlled access to the public telephone system.
11. Fire pump status indicators.
12. Schematic building plans indicating the typical floor plan and detailing the building core, *means of egress, fire protection systems, fire-fighter air-replenishment systems, fire-fighting equipment and fire department access, and the location of fire walls, fire barriers, fire partitions, smoke barriers and smoke partitions.*
13. An approved Building Information Card that includes, but is not limited to, all of the following information:
 - 13.1. General building information that includes: the number of floors in the building above and below grade, use, and occupancy classification (for mixed uses, identify the different types of occupancies on each floor) and the estimated building population during the day, night, and weekend;
 - 13.2. Building emergency contact information that includes: a list of the building's emergency contacts including, but not limited to, building manager, building engineer and their respective work phone number, cell phone number and e-mail address;
 - 13.3. Building construction information that includes: type of building construction including but not limited to floors, walls, columns and roof assembly;
 - 13.4. Exit access stairway and exit stairway information that includes: number of exit access stairways and exit stairways in building; each exit access stairway and exit stairway designation and floors served; location where each exit access stairway and exit stairway discharges, interior exit stairways that are pressurized; exit stairways that are provided with emergency lighting; each exit stairway that allows reentry; exit stairways providing roof access; elevator information that includes: number of elevator banks, elevator bank designation, elevator car numbers and respective floors that they serve; location of elevator machine rooms, control rooms, and control spaces; location of sky lobby; and location of freight elevator banks;
 - 13.5. Building Services and system information that includes: location of mechanical rooms, location of building management system, location and capacity of all fuel oil tanks, location of emergency generator and locations of natural gas service.
 - 13.6. Fire protection system information that includes: location of standpipes, location of fire pump room, location of fire department connections, floors protected by automatic sprinklers and location of different types of automatic sprinkler systems installed including but not limited to dry, wet, and pre-action;
 - 13.7. Hazardous material information that includes: location and quantity of hazardous material;
14. Work table.

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15. Generator supervision devices, manual start and transfer features.
16. Public address system, where specifically required by other sections of this code.
17. Elevator fire recall switch in accordance with ASME A17.1/CSA B44.
18. Elevator emergency or standby power selector switch(es), where emergency or standby power is provided.
19. The central control station shall be provided with heating, cooling, and ventilation (HVAC) systems that are independent of any other building system or area. HVAC for the central control station shall be connected to the emergency power system.
20. Lighting shall provide adequate illumination and shall be on emergency service with additional battery backup emergency lighting.
21. Inside Telephone Line. A telephone connected to the premise's telephone exchange shall be provided. A current premise's telephone directory shall be placed next to this telephone.
22. The main switch for disconnecting the utility power and any alternate power sources shall be in the fire command center. Switches shall be covered to prevent utility power feeds and any alternate power sources before entering the building. After the switch is operated, no live electrical panels, conductors, or feeds within the premises shall remain energized excluding the emergency electrical circuits.

510.1 Emergency Responder Radio Coverage in New Buildings.

Emergency responder radio coverage systems must be provided throughout any building that meets one of the following standards:

1. *High-rise buildings:* Buildings with a floor used for human occupancy that is located more than 55 feet above the lowest level of fire department vehicle access.
2. *Underground and below-grade buildings:* Buildings with a floor level that is below the finished floor of the lowest level of the exit discharge of any level.
3. *Other buildings:* The fire code official is authorized to require a technical opinion and report, in accordance with section 104.7.2, for buildings whose design, due to location, size, construction type or other factors, could impede radio coverage as required by section 510.4.1. The report shall make a recommendation regarding the need for an emergency responder radio coverage system.

The installation of the Emergency Responder Radio Coverage shall be in accordance with the IFC and NFPA 1225.

510.2 Emergency Responder Radio Coverage in Existing Buildings.

Existing buildings, other than buildings with an occupational classification of Residential Group R-3, which do not have approved radio coverage for emergency responders in the building based on existing coverage levels of the public safety communications systems, must be *equipped* with such coverage according to one of the following conditions:

1. Existing buildings that do not have approved radio coverage, as determined by the Fire Chief, in accordance with section 510.4.1.
2. Where an existing wired communication system cannot be repaired or is being replaced.
3. Within a time frame established by the adopting authority.

Exception: An existing building is not required to be equipped with such coverage where the fire code official determines that the radio coverage for emergency responders is not needed.

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The installation of the Emergency Responder Radio Coverage shall be in accordance with the IFC and NFPA 1225.

604.3 .2 Service Disconnect Location.

The service disconnecting means shall be installed at a readily accessible location outside of a building or structure inside nearest the point of entrance of the service conductors. The disconnecting means may be located independent of the building or structure served, in direct line of sight, but not to exceed thirty (30) feet.

Exception: The service disconnecting means may be installed within a building when an external remote shunt trip switch is provided. All shunt trip switches shall be located at seven feet (7') above finish grade at a location approved by the fire department. All shunt trip switches shall be located within twelve inches (12") equilateral triangle, red in color.

Section 704.3 Wood-burning Appliances and Flue Shafts.

The interior of any firewood-burning fireplace enclosure and flue shaft constructed of combustible framing materials shall be completely lined with taped 5/8" type "X" drywall.

Section 901.11 Problematic Unwanted Fire Alarms.

Problematic unwanted fire alarms are a violation of this code. When a fire alarm system is required by this code, it shall be the responsibility of the property owner or owner's authorized agent to maintain the system and properly educate occupants, tenants, and/or employees in accepted behavioral practices that will minimize or eliminate false and/or nuisance alarms. This includes nuisance activations in response to predictable environmental stimuli such as but not limited to cooking fumes, smoking, and construction activities. Where unwanted alarms become repetitive, the fire code official is authorized to charge fees or issue administrative citations to the property owner in accordance with the fee schedule or administrative code as established by the applicable governing authority.

Section 901.4.6.2 Marking on Access Door.

Access doors for automatic sprinkler system riser rooms and fire pump rooms shall be labeled with an approved and maintained approved all-weather sign. The lettering shall be in contrasting color to the background. Letters shall have a minimum height of 2 inches (51 mm) with a minimum stroke of 3/8 inch (10 mm).

Section 903.2 Where Required.

Approved automatic sprinkler systems in new buildings and structures shall be provided in the locations described in Sections 903.2.1 through 903.2.12.

In all occupancies, including any height added by usable floor space, must have an automatic sprinkler system throughout. Any open parking garage and any airport control tower is exempt from this requirement to install an automatic sprinkler system.

Exception: Spaces or areas in telecommunications buildings used exclusively for telecommunications equipment, associated electrical power distribution equipment, batteries and standby engines, provided those spaces or areas are equipped throughout with an automatic smoke detection system in accordance with Section 907.2 and are

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separated from the remainder of the building by not less than 1-hour fire barriers constructed in accordance with Section 707 of the International Building Code or not less than 2-hour horizontal assemblies constructed in accordance with Section 711 of the *International Building Code*, or both.

Section 903.2.1.2 Group A-2.

An automatic sprinkler system shall be provided for Group A-2 occupancies and throughout all stories from the Group A-2 occupancy to and including the levels of exit discharge serving that occupancy where one of the following conditions exists:

1. The fire area exceeds 5,000 square feet (464 m²).
2. The fire area has an occupant load of 100 or more.
3. The fire area is located on a floor other than a level of exit discharge serving such occupancies.

Occupancies containing a casino, regardless of occupancy classification, must be designed and built with a sprinkler system classified as an Ordinary Hazard Group 2.

903.2.8.5 Required Automatic Fire Sprinkler Systems in IBC Structures.

All new structures built under the requirements of the *International Building Code*, 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 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 3600 square feet. Fire areas may be separated in accordance with IBC 707.3.10, or as required.

903.2.9.3 Required Automatic Fire Sprinkler Systems in IRC Structures.

All new structures built under the requirements of the *International Residential Code* in the Tahoe Douglas Fire District 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 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. Fire walls and fire barriers shall not be used to separate fire areas to get around the fire sprinkler requirement. This requirement shall apply to any addition or remodel that increases the living space to greater than or equal to 3600 square feet. This shall include accessory dwellings.

Section 903.2.3 Group E.

An automatic sprinkler system shall be provided for Group E occupancies as follows:

1. Throughout all Group E fire areas greater than 5,000 square feet (1115 m²) in area.
2. The Group E fire area is located on a floor other than a level of exit discharge serving

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such occupancies.

Exception: An automatic sprinkler system is not required in any area below the lowest level of exit discharge serving that area where every classroom throughout the building has at least one exterior exit door at ground level.

3. The Group E fire area has an occupant load of 300 or more.

Exception: In buildings where every classroom has not fewer than one exterior exit door at ground level, an automatic sprinkler system is not required in any area below the lowest.

4. Daycare facilities where there is occupancy from 12:00 am to 6:00 am and care for 7 or more children.

In high schools where automatic fire sprinkler systems are provided, the automatic fire sprinkler systems for automotive and woodworking shops must be designed to Ordinary Hazard, Group 1 automatic fire sprinkler systems criteria, or as required by the authority having jurisdiction.

Where the provisions of this code require that a building or portion thereof be equipped throughout with an automatic sprinkler system in accordance with this section, sprinklers shall be installed throughout in accordance with NFPA 13 except as provided in Section 903.3.1.1.1 or 903.1.1.2. An R-1 or R-2 occupancy that has more than two stories must have an NFPA 13 system installed.

Section 903.3.1.2 NFPA 13R Sprinkler System.

Automatic sprinkler systems in Group R occupancies up to and including two stories in height shall be permitted to be installed throughout in accordance with NFPA 13R. An R-1 or R-2 occupancy that has more than two stories shall have an N.F.P.A. 13 system installed.

903.4 Sprinkler System Supervision and Alarms.

All valves controlling the water supply for automatic sprinkler systems, pumps, tanks, water levels and temperatures, critical air pressures and water-flow switches on all sprinkler systems shall be electrically supervised by a listed fire alarm control unit.

Exceptions:

1. Automatic sprinkler systems protecting one-and two-family dwellings.
2. Limited area systems in accordance with Section 903.3.8.
3. Automatic sprinkler systems installed in accordance with NFPA 13R where a common supply main is used to supply both domestic water and the automatic sprinkler system, and a separate shutoff valve for the automatic sprinkler system is not provided.
4. Jockey pump control valves that are sealed or locked in the open position.
5. Control valves to commercial kitchen hoods, paint spray booths or dip tanks that are sealed or locked in the open position. This exception will not apply to any of the above-mentioned control valves if they are located in a building equipped with any fire alarm or protection system that is required to be monitored by a central station fire alarm company.
6. Valves controlling the fuel supply to fire pump engines that are sealed or locked in the open position.
7. Trim valves to pressure switches in dry, pre-action and deluge sprinkler systems that are sealed or locked in the open position.

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Section 903.4.2 Alarms.

An approved alarm notification appliance, located on the exterior of the building in an *approved* location, shall be connected to each *automatic sprinkler system*. Approved alarm notification appliances shall be provided within each tenant space on the interior of the building and in an approved location. Such sprinkler water flow alarm devices shall be activated by water flow equivalent to the flow of a single sprinkler of the smallest orifice size installed in the system. Where a fire alarm system is installed, actuation of the *automatic sprinkler system* shall actuate the building fire alarm system. When residential (single family dwelling) automatic sprinkler systems are provided, water flow activation shall provide occupant notification at all occupied levels and sleeping units, with minimum audible notification level of 75 dba sound pressure at pillow height. Where a fire alarm system is installed, actuation of the automatic sprinkler system shall actuate the building fire alarm system.

Section 903.4.3 Floor Control Valves.

Approved supervised indicating control valves shall be provided at the point of connection to the riser on each floor in buildings two stories or greater and in any building that contains a basement.

Section 906.2 General Requirements.

Portable fire extinguishers shall be selected, installed, and maintained in accordance with this section and NFPA 10. The internal components of carbon dioxide, wet chemical, halogenated agent, aqueous film-forming foam (AFFF) and film-forming fluoroprotein (FFFP) portable fire extinguishers shall be examined in accordance with N.F.P.A. Standard 10, 2018 edition, table 7.3.3.1. The internal components of all other portable fire extinguishers shall be examined annually.

Exceptions:

1. Travel distance to reach an extinguisher shall not apply to the spectator seating portions of Group A-5 occupancies.
2. Thirty-day inspections shall not be required, and maintenance shall be allowed to be annually for dry-chemical or halogenated agent portable fire extinguishers that are supervised by a listed and approved electronic monitoring device, provided that all of the following conditions are met:
 - 2.1 Electronic monitoring shall confirm that extinguishers are properly positioned, properly charged and unobstructed.
 - 2.2 Loss of power or circuit continuity to the electronic monitoring device shall initiate a trouble signal.
 - 2.3 The extinguishers shall be installed inside of a building or cabinet in a noncorrosive environment.
 - 2.4 Electronic monitoring devices and supervisory circuits shall be tested annually when extinguisher maintenance is performed.
 - 2.5 A written log of required hydrostatic test dates for extinguishers shall be maintained by the owner to verify that hydrostatic tests are conducted at the frequency required by NFPA 10.
3. In Group I-3, portable fire extinguishers shall be permitted to be located at staff locations.

Carbon dioxide, wet chemical, halogenated agent, AFFF and FFFP portable fire extinguishers shall be internally examined in accordance with NFPA 10. All other portable fire extinguishers shall be internally examined annually.

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Section 907.2.9.4 Automatic Smoke Detection Systems in Group R-4.

An automatic smoke detection system that activates the occupant notification system in accordance with Section 907.5 shall be installed in corridors, waiting areas open to corridors and habitable spaces other than sleeping units and kitchens.

Exceptions:

1. Smoke detection in habitable spaces is not required where the facility is equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1.
2. An automatic smoke detection system is not required in buildings that do not have interior corridors serving sleeping units and where each sleeping unit has a means of egress door opening directly to an exit or to an exterior exit access that leads directly to an exit.

Section 907.2.10.2.1 Alternative to Single and Multiple-station Smoke Alarms.

Fire alarm in place of single and multiple-station smoke alarms may be replaced by an NFPA 72 Household compliant fire alarm system. Plans shall be submitted to the local fire authority and permit obtained prior to installation. All fire alarm installation contractors shall be required to be licensed by both the Nevada State Contractors Board and Nevada State Fire Marshal (F license).

Section 907.2.10.2.2 Monitored Household Fire Alarm System.

All new dwelling or units built under the requirements of the *International Residential Code* and greater than 1000 feet from a fire hydrant, shall have a monitored household fire alarm system installed in accordance with NFPA 72, Chapter 29. This requirement shall be in addition to any other requirements as listed in IFC Section 102.5 or as under the Code. The system shall be maintained and monitored throughout the life of the structure, including annual servicing by a contractor licensed in the State of Nevada.

Fire Alarms are required for Vacation Home rentals in the Tahoe Douglas Fire District when one of the following conditions exist:

1. Three (3) levels
2. Ten (10) or more occupants
3. Attached dwelling units/structures (i.e. apartments, condominiums, duplexes or townhouses)

Section 907.5.2.1.1 Average Sound Pressure.

The audible alarm notification appliances shall provide a sound pressure level of 15 decibels (dBA) above the average ambient sound level or 5 dBA above the maximum sound level having a duration of at least 60 seconds, whichever is greater, in every occupiable space within the building.

The minimum sound pressure levels shall be 90 dBA in mechanical equipment rooms and 80 dBA in all other occupancies.

Section 907.5.2.3 Visible Alarms.

Visible alarm notification appliances shall be provided in accordance with Sections 907.5.2.3.1 through 907.5.2.3.3.

Exceptions:

1. Visible alarm notification appliances are not required in *alterations*, except where an existing fire alarm system is upgraded or replaced, or a new fire alarm system is installed.
2. Visible alarm notification appliances shall not be required in *exits* as defined in Chapter 2.
3. Visible alarm notification appliances shall not be required in elevator cars.

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4. Visual alarm notification appliances are not required in critical care areas of Group I-2, Condition 2 occupancies that are in compliance with Section 907.2.6, Exception 2.
5. Visible alarm notification appliances are not required in storage rooms, electrical rooms and mechanical rooms that are not normally occupied and are less than 400 square feet.
6. Visible alarm notification appliances are not required in janitor closets.

Section 907.10 Smoke Alarm Maintenance.

Smoke alarms shall be tested and maintained in accordance with the manufacturer's instructions. Smoke alarms shall be replaced when they fail to respond to operability tests, or when they exceed 10 years from the date of manufacture, unless an earlier replacement is specified in the manufacturer's published instructions. The provisions of this section apply when any work that requires a permit is conducted on a new or existing building or structure.

Section 910.1 General (Smoke and Heat Removal).

Where required by this code or otherwise installed, smoke and heat vents or mechanical smoke exhaust systems and draft curtains shall conform to the requirements of this section.

Exceptions:

1. Frozen food warehouses used solely for storage of Class I and II commodities where protected by an approved automatic sprinkler system.
2. Automatic smoke and heat vents are not required within areas of buildings equipped with early suppression fast-response (ESFR) sprinklers unless the area of a Group F-1 or S-1 occupancy protected with the ESFR sprinklers has an exit access travel distance of more than 250 feet (76 200 mm).

Section 910.2.2 High-piled Combustible Storage.

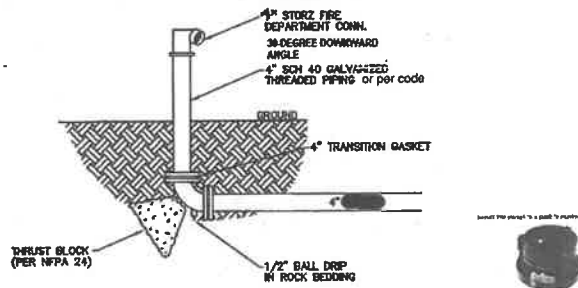
Smoke and heat removal required by Table 3206.2 for buildings and portions thereof containing high-piled combustible storage shall be installed in accordance with Section 910.3 in unsprinklered buildings. In buildings and portions thereof containing high-piled combustible storage equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1, a smoke and heat removal system shall be installed in accordance with 910.3 or 910.4. Smoke and heat vents shall be activated by manual controls only per Section 910.4. In occupied portions of a building equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 where the upper surface of the story is not a roof assembly, a mechanical smoke removal system in accordance with 910.4 shall be installed.

912.1 Installation.

Fire department connections shall be installed in accordance with the NFPA standard applicable to the system design and shall comply with Sections 912.2 through 912.7. The fire department connection in the Tahoe Douglas Fire District shall be provided as below:

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Remote FDC Detail



Section 912.5 Signs.

An approved all-weather sign with raised letters not less than 1 inch (25 mm) in size indicating the building address or areas served by the fire department connections serving automatic sprinklers, standpipes or fire pump connections shall be mounted on all fire department connections serving automatic sprinklers, standpipes or fire pump connections. Such signs shall read: AUTOMATIC SPRINKLERS or STANDPIPES or TEST CONNECTION or a combination thereof as applicable. Where the fire department connection does not serve the entire building, a sign shall be provided on the fire department connection indicating the portions of the building served or as required by the fire code official.

Section 913.4 Valve Supervision.

Where provided, the fire pump suction, discharge and bypass valves, and the isolation valves on the backflow prevention device or assembly shall be supervised open by one of the following methods.

1. Central-station, proprietary or remote-station signaling service.
2. Local signaling service that will cause the sounding of an audible signal at a constantly attended location.

915.1.1 Where Required.

Carbon monoxide detection shall be provided in Group I-1, I-2, I-4 and R, including, without limitation, Residential Group R-3 occupancies used for transient occupancy of less than 30 days, and in classrooms in Group E occupancies in the locations specified in Section 915.2 where any of the conditions in Sections 915.1.2 through 915.1.6 exist.

1010.1.10 Panic and Fire Exit Hardware.

Swinging doors serving a Group H occupancy and swinging doors serving rooms or spaces with an *occupant load* of 50 or more in a Group A or E occupancy shall not be provided with a latch or lock other than *panic hardware* or *fire exit hardware*.

Exceptions:

1. A main *exit* of a Group A occupancy shall be permitted to have locking devices in accordance with Section 1010.1.9.4, Item 2.
2. Doors provided with *panic hardware* or *fire exit hardware* and serving a Group A or E occupancy shall be permitted to be electrically locked in accordance with Section 1010.1.9.9 or 1010.1.9.10.

Exit or exit access doors serving transformer vaults, rooms designated for batteries or energy storage systems, or modular data centers shall be equipped with panic hardware or fire exit hardware. Rooms containing electrical equipment rated 800 amperes or more that contain overcurrent devices,

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switching devices or control devices and where the exit or exit access door is less than 25 feet (7620 mm) from the equipment working space as required by NFPA 70, such doors shall not be provided with a latch or lock other than panic hardware or fire exit hardware. The doors shall swing in the direction of egress travel.

Section 1023.9.1 Signage Requirements.

Stairway identification signs shall comply with all of the following requirements:

1. The signs shall be a minimum size of 18 inches (457 mm) by 12 inches (305 mm).
2. The letters designating the identification of the interior exit stairway and ramp shall be not less than 1 ½ inches (38 mm) in height.
3. The number designating the floor level shall be not less than 5 inches (127 mm) in height and located in the center of the sign.
4. Other lettering and numbers shall be not less than 1 inch (25 mm) in height.
5. Characters and their background shall have a non-glare finish. Characters shall contrast with their background, with either light characters on a dark background or dark characters on a light background.
6. Where signs required by Section 1023.9 are installed in the interior exit stairways and ramps of buildings subject to Section 1025, the signs shall be made of the same materials as required by Section 1025.4.
7. The background color of the sign shall be green if roof access is available from the signed stairway. The background color of the signs shall be red if roof access is not available from the signed stairway.

1204.2.1 Solar Photovoltaic Systems for Group R-3 Buildings.

Solar photovoltaic systems for Group R-3 buildings shall comply with Sections 1204.2.1.1 through 1204.2.1.3. A construction permit shall be obtained in accordance with IFC Section 102.5 and Section 105.

Exceptions:

These requirements shall not apply to roofs with slopes of 2 units vertical in 12 units horizontal or less.

Section 2809.1 General (Exterior Storage).

Exterior storage of finished lumber products, fire wood, chips, hogged material and associated raw products shall comply with Sections 2809.1 through 2809.5.

3104.3 Label.

Membrane structures or tents shall have a permanently affixed label bearing the following information:

1. The identification of size and fabric or material type.
2. The names and addresses of the manufacturers of the tent or air-supported structure.
3. A statement that the fabric or material meets the requirements of Section 3104.2.
4. If treated, the date the fabric or material was last treated with flame-retardant solution, the trade name or kind of chemical used in treatment, name of person or firm treating the fabric or material, and name of testing agency and test standard by which the fabric or material was tested.
5. If untreated, a statement that no treatment was applied when the fabric or material met the requirements of Section 3104.2.

3209.4 Automated Rack Storage.

High-piled storage areas with automated rack storage shall be provided with a manually activated emergency shutdown switch. High-piled storage areas with automated rack storage shall be provided with a manually activated emergency shutdown switch and automatic shutdown in accordance with Sections 3209.4.1 and 3209.4.2.

3209.4.1 Manual Activated Shutdown.

A manually activated switch shall be provided to initiate the approved automatic shutdown process. The switch shall be clearly identified and shall be in a location approved by the fire code official.

3209.4.2 Automatic Shutdown.

Automatic shutdown shall be required for high-piled combustible storage areas greater than 500 square feet (46 m²). The approved automatic shutdown process shall commence upon any of the following events:

1. Water flow is detected in the automatic sprinkler system, if present.
2. Activation of the fire detection system, if present.

Section 3903.3 Location.

The extraction equipment and extraction processes utilizing hydrocarbon solvents shall be located in a room or area dedicated to extraction. For other than CO₂ and nonhazardous extraction process, the extraction equipment and process shall be located in a room of noncombustible construction dedicated to the extraction process and the room shall not be used for any other purpose.

Section 3903.5 Use of Flammable and Combustible Liquids.

Extraction and post oil processing operations, including dispensing of flammable liquids between containers, shall be performed in one of the following locations:

1. A chemical fume hood in accordance with Chapter of NFPA 45.
2. A room with an approved exhaust system installed in accordance with the

International Mechanical Code or Uniform Mechanical Code.

Electrical equipment used within the hazardous exhaust fume hood shall be rated for use in flammable atmospheres. Heating of flammable or combustible liquids over an open flame is prohibited.

Exception 1: The use of a heating element not rated for flammable atmospheres, where documentation from the manufacture, or approved testing laboratory indicates the element is rated for heating of flammable liquids.

Exception 2: Unheated processes at atmospheric pressure using less than 16 oz. (473 ml) of flammable liquids shall not be required to comply with 3903.5(1) or 3903.5(2).

Section 3903.5.1 Electrical Components.

All electrical components within the chemical fume hood or exhausted enclosure shall be approved permanent wiring, interlocked such that the exhaust system shall be in operation for lighting and components to be used.

Section 3903.6 Liquefied Petroleum Gas.

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Liquefied petroleum gases (LPG) shall not be released to the atmosphere except where released in accordance with Section 7.3 of NFPA 58. LPG liquid piping systems shall be in compliance with NFPA 58.

Section 3903.6.1 Exhaust.

An approved exhaust system shall be provided for LPG extractions.

Section 3903.6.1.1 Installation.

The exhaust systems shall be installed and maintained in accordance with the Uniform Mechanical Code as adopted by the Authority Having Jurisdiction.

Section 3903.6.1.2 Processes.

All LPG extraction operations, including processes for off-gassing spent plant material and oil retrieval, shall be conducted within a chemical fume hood, enclosure, or room in compliance with the International or Uniform Mechanical Code as adopted by the Authority Having Jurisdiction and the Board for the Regulation of the Liquefied Petroleum Gas.

Section 3903.6.2 Electrical Bonding and Grounding.

All conductive equipment and conductive objects within the exhaust room shall be bonded and grounded with a resistance of less than 1.0×10^6 ohms in accordance with NFPA 70.

Section 3903.6.2.1 Classified Areas.

The area within a hood or enclosure used of LPG extractions shall be classified as a Class 1, Division 1 hazardous location in accordance with NFPA 70. Areas adjacent to Class 1, Division 1 locations shall be classified in accordance with NFPA 70.

Section 3903.6.2.2 Interlocks.

All electrical components within the extraction room shall be interlocked with the hazardous exhaust system such that room lighting and other extraction room electrical equipment will only operate when the exhaust system is in operation.

Section 3903.6.2.3 Emergency Power.

An automatic emergency power system shall be provided for the following items, when installed:

1. Extraction room lighting
2. Extraction room ventilation system
3. Solvent gas detection system

Section 3903.6.2.4 Gas Detection Systems.

Gas detection systems shall be provided with constant non-interlocked power.

Section 3903.7 Carbon Dioxide Extraction.

Carbon Dioxide extraction shall comply with sections 3903.7.1, 3903.7.2, and 3903.7.3.

Section 3903.7.1 Storage and Handling.

All CO₂ compressed gas cylinders shall be secured in approved method to prevent falling.

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Section 3903.7.2 CO₂ Gas Detection.

An approved, listed CO₂ detection system complying with 5307.4.3 shall be installed in the CO₂ extraction room. Auto-calibrating and self-zeroing devices or detectors shall be prohibited.

Section 3903.7.3 CO₂ Discharge.

The extraction equipment pressure relief devices and blow-off valves shall be piped to the exterior of the building.

Section 3903.8 Means of Egress.

For extraction rooms using hazardous materials, each room shall be provided with at least one exit access door complying with the following:

1. The door shall swing in the direction of egress travel.
2. The door shall be provided with a self-closing or automatic closing device.
3. The door shall be equipped with panic or fire exit hardware.
4. The exit access travel distance cannot be increased as allowed in Section 1017.2.2 for extraction/cultivation facilities.

Section 3903.9 Signage.

The NFPA 704 hazard rating diamond sign, minimum 10" in size, and no smoking signs shall be posted on the exterior of the extraction room door.

Section 3903.9.1 Safety data sheets.

All applicable safety data sheets (SDS) shall be posted in the approved location.

Section 3903.9.2 Warning Signage.

Applicable hazard warning signage shall be posted throughout the facility as applicable for emergency equipment.

Section 3904.4 Site Inspection.

Prior to the operation of the extraction equipment, , the engineer of record or approved professional, as approved in Section 3904.2, shall inspect the site of the extraction process once equipment has been installed for compliance with the technical report and the building analysis. The engineer of record or approved professional shall provide a report of findings and observations of the site inspection to the fire code official prior to the approval of the extraction process. The field inspection report authored by the engineer of record shall include the serial number of the equipment used in the process and shall confirm that the equipment installed is the same model and type of equipment identified in the technical report.

Section 3904.5 Change of Extraction Medium.

Where the medium of extraction or solvent is changed from the material indicated in the technical report or as required by the manufacturer, the technical report shall be revised at the cost of the facility owner and submitted for review and approval by the fire code official prior to the use of the equipment with the new medium or solvent.

Section 5601.1.3 Fireworks.

Except as otherwise provided in this section, the possession, manufacture, storage, sale, use and handling of Class 1.3 and Class 1.4 pyrotechnics are only allowed in jurisdictions where specifically approved by local ordinance.

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Exceptions:

1. Storage and handling of fireworks as allowed in Section 5604.
2. Manufacture, assembly and testing of fireworks as allowed in Section 5605.
3. The use of fireworks for fireworks displays as allowed in Section 5608.
4. The possession, storage, sale, handling and use of specific types of Division 1.4G fireworks where allowed by applicable laws, ordinances and regulations, provided that such fireworks and facilities comply with NFPA 1124, CPSC 16 CFR Parts 1500 and 1507, and DOTn 49 CFR Parts 100-185, as applicable for consumer fireworks.

Section 5601.1.6 Exploding Targets.

The possession, manufacture, sale, and use of exploding targets, including binary exploding targets, are prohibited.

Section 6101.1 Scope.

Section 6101.1 of the IFC is deleted and amended substituting the following language:

6101.1 Scope. Storage, handling and transportation of liquefied petroleum gas (LP-gas) and the installation of LP-gas equipment pertinent to systems for such uses shall comply with this chapter and NFPA 58. Properties of LP-gases shall be determined in accordance with Appendix B of NFPA 58. In the event of a conflict between any provision in this chapter and the regulations of the Board for the Regulation of Liquefied Petroleum Gas, the regulations of the Board take precedence.

Chapter 80 – Referenced Standards

Add language to include NFPA 855 Standard for the Installation of Stationary Energy Storage Systems as a referenced standard.

Add language to include NFPA 1225 Standard for Emergency Services Communications as a referenced standard.

APPENDIX B FIRE-FLOW REQUIREMENTS FOR BUILDINGS

Appendix B is adopted in whole in accordance with 2018 Edition of the *International Fire Code* Section 101.2.

Special Fire Protection Problem Facilities.

Special Fire Protection Problem Facilities are those facilities that consist of uses similar to fires that may result in large size fires or fires with high heat release such as bulk flammable liquid storage, bulk flammable gas storage, large varnish and paint factories, some plastics manufacturing and storage, aircraft hangars, distilleries, refineries, lumberyards, grain elevators, chemical plants, coal mines, tunnels, subterranean structures, storage facilities, and warehouses using high rack/piled storage for flammables or pressurized aerosols.

Section B103.3 Areas Without Water Supply Systems.

For information regarding water supplies for fire-fighting purposes in rural and suburban areas in which adequate and reliable water supply systems do not exist, the fire code official is authorized to utilize the *International Wildland-Urban Interface Code* or NFPA 1142.

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APPENDIX C FIRE HYDRANT LOCATIONS AND DISTRIBUTION

Appendix C is adopted in whole in accordance with 2018 Edition of the *International Fire Code* Section 101.2.1.

Section C102.2 Distance to a Fire Department Connection (FDC).

The maximum distance from a fire hydrant to a fire department connection (FDC) supplying fire sprinklers and/or standpipes shall not exceed 100 feet, or as determined by the fire code official.

APPENDIX D FIRE APPARATUS ROADS

Appendix D is adopted in whole in accordance with 2018 Edition of the *International Fire Code* Section 101.2.1.

APPENDIX F REQUIREMENTS FOR HAZARD RANKING

Appendix F is adopted in whole in accordance with 2018 Edition of the *International Fire Code* Section 101.2.1.

APPENDIX H REQUIREMENTS FOR HAZARD RANKING

Appendix H is adopted in whole in accordance with 2018 Edition of the *International Fire Code* Section 101.2.1.

APPENDIX L REQUIREMENTS FOR FIRE FIGHTER AIR REPLENISHMENT SYSTEMS

Appendix L is adopted in whole in accordance with 2018 Edition of the *International Fire Code* Section 101.2.1.

The following changes are made to the 2018 edition of the *International Building Code* as adopted by reference in NAC 477.281:

“*International Fuel Gas Code*” is deleted and replaced with “N.F.P.A. Standard 54, 2018 edition, or the most current version adopted by the Board for the Regulation of Liquefied Petroleum Gas in NAC 590.610.”

“*International Mechanical Code*” is deleted and replaced with “*2018 Uniform Mechanical Code*.”

“*International Plumbing Code*” is deleted and replaced with “*2018 Uniform Plumbing Code*.”

113.1 Appeals.

In order to determine the suitability of alternate materials or other means of construction an appeal may be made to the Tahoe Douglas Fire Board of Directors who shall be the final authority on such appeal.

Section 202 General Definitions.

The following definitions are amended or added to Section 202 General Definitions to read:

Lithium metal polymer battery. A storage battery that is similar to the lithium ion battery except that it has a lithium metal anode in the place of the traditional carbon or graphite anode.

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Nickel-metal hydride (Ni-MH). An alkaline storage battery in which the positive active material is nickel oxide, the negative electrode is an intermetallic compound and the electrolyte is usually potassium hydroxide.

High-rise Building. A building with an occupied floor located more than 55 feet above the lowest level of fire department vehicle access.

306.2 Moderate-hazard Factory Industrial, Group F-1.

Factory industrial uses that are not classified as Factory Industrial F-2 Low Hazard shall be classified as F-1 Moderate Hazard and shall include, but not be limited to, the following:

Energy storage systems (ESS) in dedicated-use buildings

308.3 Institutional Group I-2.

Institutional Group I-2 occupancy shall include buildings and structures used for medical care on a 24-hour basis for more than five persons who are not capable of self-preservation. All portions of a care facility which houses patients or residents which are classified by the State Board of Health as a 'Category 2 resident' and which has an occupant load of more than 10 residents, is classified as an 'I-1' occupancy classification.

This group shall include, but not be limited to, the following:

Foster care facilities
Detoxification facilities
Hospitals
Nursing homes
Psychiatric hospitals

308.5 Institutional Group I-4, Day Care Facilities.

Institutional Group I-4 occupancy shall include buildings and structures occupied by more than three persons of any age who receive *custodial care* for fewer than 24 hours per day by persons other than parents or guardians, relatives by blood, marriage or adoption, and in a place other than the home of the person cared for. This group shall include, but not be limited to, the following:

Adult day care
Child day care

308.5.1 Classification as Group E.

A child day care facility that provides care for more than six but no more than 100 children 2 1/2 years or less of age, where the rooms in which the children are cared for are located on a level of exit discharge serving such rooms and each of these child care rooms has an exit door directly to the exterior, shall be classified as Group E.

Within a place of religious worship. Rooms and spaces within places of religious worship providing such care during religious functions shall be classified as part of the primary occupancy.

Six or fewer occupants receiving care. A facility having six or fewer persons receiving custodial care shall be classified as part of the primary occupancy.

Six or fewer occupants receiving care in a dwelling unit. A facility such as the above within a dwelling unit and having six or fewer persons receiving custodial care shall be classified as a Group R-3 occupancy or shall comply with the International Residential Code.

310.2 Residential Group R-1.

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Residential Group R-1 occupancies containing sleeping units where the occupants are primarily transient in nature, including:

Boarding houses (transient) with more than 10 occupants

Brothels

Congregate living facilities (transient) with more than 10 occupants

Hotels (transient)

Motels (transient)

Residential Group R-2. Residential Group R-2 occupancies containing *sleeping units* or more than two *dwelling units* where the occupants are primarily permanent in nature, including:

Apartment houses

Congregate living facilities (nontransient) with more than 16 occupants

Boarding houses (nontransient)

Convents

Dormitories

Fraternities and sororities

Monasteries

Hotels (nontransient)

Live/work units

Motels (nontransient)

Vacation timeshare properties

310.4 Residential Group R-3.

Residential occupancies where the occupants are primarily permanent in nature and not classified as Group R-1, R-2, R-4 or I, including:

Boarding houses (nontransient)

Boarding houses (transient)

Buildings that do not contain more than two dwelling units

Care facilities that provide accommodations for three or more persons receiving care

Congregate living facilities (nontransient) with 16 or fewer occupants

Congregate living facilities (transient) with 10 or fewer occupants

Convents

Dormitories

Fraternities and sororities

Monasteries

Lodging houses (transient) with five or fewer guest rooms and 10 or fewer occupants

310.5 Residential Group R-4.

Residential Group R-4 shall include buildings, structures or portions thereof for more than five but not more than 16 persons, excluding staff, who reside on a 24-hour basis in a supervised residential environment and receive custodial care. Buildings of Group R-4 shall be classified as one of the occupancy conditions indicated below. This group shall include, but not be limited to, the following:

Alcohol and drug centers

Assisted living facilities

Congregate care facilities

Group homes

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Halfway houses

Residential board and care facilities

Reintegration facilities

Social rehabilitation facilities

Transient living facilities

Group R-4 occupancies shall meet the requirements for construction as defined for Group R-3, except as otherwise provided for in the *International Building Code*.

Condition 1. This occupancy condition shall include buildings in which all persons receiving custodial care, without any assistance, are capable of responding to an emergency situation to complete building evacuation.

Condition 2. This occupancy condition shall include buildings in which there are any persons receiving custodial care who require limited verbal or physical assistance while responding to an emergency situation to complete building evacuation.

Group R-4 occupancies shall meet the requirements for construction as defined for Group R-3, except as otherwise provided for in this code.

403.5.3 Stairway Door Operation.

Stairway doors other than the *exit discharge* doors shall be permitted to be locked from the *stairway* side. *Stairway* doors that are locked from the *stairway* side shall be capable of being unlocked simultaneously without unlatching upon a signal from the *fire command center* or an activation of any fire alarm initiating device within the building or a failure of both the primary and backup power supplies.

403.5.4 Smoke Proof Enclosures.

Every required *interior exit stairway* serving floors more than 55 feet (16 764 mm) above the lowest level of fire department vehicle access shall be a *smoke proof enclosure* in accordance with Sections 909.20 and 1023.11.

901.8. Automatic Fire Extinguishing Systems--Special Provisions.

All buildings or structures outside the jurisdiction of the Tahoe-Douglas Fire Protection District having a total building area of 5,000 square feet or more, and all buildings or structures greater than two stories or in excess of 45 feet in height, whichever is less, must be provided with automatic fire sprinkler protection, except as provided for in this section.

Exceptions. New buildings or structures designated as R-3, Group U occupancies are exempted from the sprinkler system requirements.

903.2.1.2 Group A-2.

An *automatic sprinkler system* shall be provided throughout stories containing Group A-2 occupancies and throughout all stories from the Group A-2 occupancy to and including the levels of exit discharge serving that occupancy where one of the following conditions exists:

1. The *fire area* exceeds 5,000 square feet
2. The *fire area* has an *occupant load* of 100 or more.

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3. The *fire area* is located on a floor other than a *level of exit discharge* serving such occupancies.

Occupancies containing a casino, regardless of occupancy classification, must be designed and built with a sprinkler system classified as an ordinary Hazard Group 2.

903.2.3 Group E.

An *automatic sprinkler system* shall be provided for Group E occupancies as follows:

1. Throughout all Group E *fire areas* greater than 5,000 square feet in area.
2. The Group E fire area is located on a floor other than a level of exit discharge serving such occupancies.

Exception: In buildings where every classroom has not fewer than one exterior exit door at ground level, an *automatic sprinkler system* is not required in any area below the lowest level of exit discharge serving that area.

3. The Group E fire area has an occupant load of 300 or more.

In high schools where automatic sprinkler systems are provided, the automatic sprinkler systems for the automotive and woodworking shops must be designed to meet ordinary hazard group 1 criteria.

Section 903.2 Where Required.

Approved automatic sprinkler systems in new buildings and structures shall be provided in the locations described in Sections 903.2.1 through 903.2.12.

In all occupancies except group R-3 and U occupancies, a building that is more than two stories in height, including any height added by usable floor space, must have an automatic sprinkler system throughout. Any open parking garage and any airport control tower is exempt from this requirement to install an automatic sprinkler system.

Exception: Spaces or areas in telecommunications buildings used exclusively for telecommunications equipment, associated electrical power distribution equipment, batteries and standby engines, provided those spaces or areas are equipped throughout with an automatic smoke detection system in accordance with Section 907.2 and are separated from the remainder of the building by not less than 1-hour fire barriers constructed in accordance with Section 707 of the International Building Code or not less than 2-hour horizontal assemblies constructed in accordance with Section 711 of the *International Building Code*, or both.

907.5.2.1.1 System Initiation in Group A Occupancies With an Occupant Load of 1,000 or more.

Activation of the fire alarm in Group A occupancies with an *occupant load* of 1,000 or more shall initiate a signal using an emergency voice/alarm communications system in accordance with Section 907.5.2.2. The minimum sound pressure level of audible alarm notification appliances shall be 90 dBA in mechanical equipment rooms and 80 dBA in all other occupancies.

Exception: Where *approved*, the prerecorded announcement is allowed to be manually deactivated for a period of time, not to exceed 3 minutes, for the sole purpose of allowing a live voice announcement from an *approved, constantly attended location*.

907.5.2.3 Visible Alarms.

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Visible alarm notification appliances shall be provided in accordance with Sections 907.5.2.3.1 through 907.5.2.3.3.

Exceptions:

1. Visible alarm notification appliances are not required in *alterations*, except where an existing fire alarm system is upgraded or replaced, or a new fire alarm system is installed.
2. Visible alarm notification appliances shall not be required in *exits* as defined in Chapter 2.
3. Visible alarm notification appliances shall not be required in elevator cars.
4. Visual alarm notification appliances are not required in critical care areas of Group I-2, Condition 2 occupancies that are in compliance with Section 907.2.6, Exception 2.
5. Visible alarm notification appliances are not required in storage rooms, electrical rooms and mechanical rooms that are not normally occupied and are less than 400 square feet.
6. Visible alarm notification appliances are not required in janitor closets

1010.1.9.12 Stairway Doors.

Interior *stairway means of egress* doors shall be openable from both sides without the use of a key or special knowledge or effort.

Exceptions:

1. *Stairway* discharge doors shall be openable from the egress side and shall only be locked from the opposite side.
2. This section shall not apply to doors arranged in accordance with Section 403.5.3.
3. In stairways serving buildings other than high-rise buildings, doors are permitted to be locked on the side opposite the egress side, provided that the doors can be opened from the egress side. Doors must automatically unlock upon the activation of a fire alarm system or a fire sprinkler water flow alarm, or for a power failure. Exit discharge doors must remain unlocked.
4. *Stairway exit* doors shall be openable from the egress side and shall only be locked from the opposite side in Group B, F, M and S occupancies where the only interior access to the tenant space is from a single *exit stairway* where permitted in Section 1006.3.3.
5. *Stairway exit* doors shall be openable from the egress side and shall only be locked from the opposite side in Group R-2 occupancies where the only interior access to the *dwelling unit* is from a single *exit stairway* where permitted in Section 1006.3.3.

The following changes are made to the 2018 edition of the *International Existing Building Code* as adopted by reference in NAC 477.281:

“*International Fuel Gas Code*” is deleted and replaced with “N.F.P.A. Standard 54, 2018 edition, or the most current version adopted by the Board for the Regulation of Liquefied Petroleum Gas in NAC 590.610.

“*International Mechanical Code*” is deleted and replaced with “2018 *Uniform Mechanical Code*.”

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“*International Plumbing Code*” is deleted and replaced with “2018 *Uniform Plumbing Code*.”

Section 902.2 High-rise buildings. Any building having occupied floors more than 55 feet (16,764 mm) above the lowest level of fire department vehicle access shall comply with the requirements of Sections 902.1.1 and 902.1.2.

The following changes are made to the 2018 edition of the *International Wildland-Urban Interface Code* as adopted by reference in NAC 477.281:

105.3 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*. An alternative material, design or method shall be *approved* where the fire chief finds that the proposed design is satisfactory and complies with the intent of the provisions of this code, and that the material, method or work offered is, for the purpose intended, not less than the equivalent of that prescribed in this code in quality, strength, effectiveness, *fire resistance*, durability and safety.

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

108.4 Vegetation management plans.

Where utilized by the permit applicant, vegetation management plans shall be prepared and shall be submitted to the code official for review and approval as part of the plans required for a permit.

Section 302.3 Review of Wildland-Urban Interface Areas.

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

Section 404.1 General.

Where 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)

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 under roof (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.

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Exception: A reduction in 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 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).

603.2 Fuel Modification.

For all other purposes the *fuel modification* distance shall be not less than 30 feet (9144 mm) or to the lot line, whichever is less. Distances specified in Table 603.2 shall be measured on a horizontal plane from the perimeter or projection of the building or structure as shown in Figure 603.2. Distances specified in Table 603.2 are allowed to be increased by the code official because of a site- specific analysis based on local conditions and the fire protection plan.

603.2.1 Responsible Party.

Persons owning, leasing, controlling, operating or maintaining buildings or structures requiring defensible spaces are responsible for modifying or removing nonfire-resistive vegetation on the property owned, leased or controlled by said person.

603.2.1.1 Adjacent land. Property owners of land that is directly adjacent to property containing buildings or structures requiring defensible space are responsible for modifying or removing non-fire-resistive vegetation on their own property. Nothing in this provision shall be deemed to require an owner of real property to perform any work on land that he or she does not own.

603.2.2 Trees.

Trees are allowed within the *defensible space*, provided that the horizontal distance between crowns of adjacent trees and crowns of trees and structures, overhead electrical facilities or unmodified fuel is not less than 10 feet (3048 mm) or an acceptable distance as determined by the code official.

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) or an acceptable distance as determined by the code official. 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; or an acceptable distance as determined by the code official.

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.

APPENDIX GENERAL REQUIRMENTS

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Appendix A is adopted in whole in accordance with 2018 Edition of the *International Fire Code* Section 101.2.1.

APPENDIX B VEGETATION MANAGEMENT PLAN

Appendix B is adopted in whole in accordance with 2018 Edition of the *International Fire Code* Section 101.2.1.

B101.1 Scope.

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

The following changes are made to the 2018 edition of the *Uniform Mechanical Code* as adopted by reference in [NAC 477.281](#):

“*International Fuel Gas Code*” is deleted and replaced with “N.F.P.A. Standard 54, 2018 edition, or the most current version adopted by the Board for the Regulation of Liquefied Petroleum Gas in [NAC 590.610](#).”

“*International Plumbing Code*” is deleted and replaced with “2018 *Uniform Plumbing Code*.”

The following changes are made to the 2018 edition of the *Uniform Plumbing Code* as adopted by reference in [NAC 477.281](#):

“*International Fuel Gas Code*” is deleted and replaced with “N.F.P.A. Standard 54, 2018 edition, or the most current version adopted by the Board for the Regulation of Liquefied Petroleum Gas in NAC 590.610.”

“*International Plumbing Code*” is deleted and replaced with “2018 *Uniform Plumbing Code*.”

Section 312.7 Fire-Resistant Construction. Fire-Resistant Construction. Piping penetrations of fire-resistance-rated walls, partitions, floors, floor/ceiling assemblies, roof/ceiling assemblies, or shaft enclosures shall be protected in accordance with the requirements of the *International Building Code*, 2018 Ed..

NAC 477.283

6. As used in this section, “casino” means any room in which gaming is conducted, including, without limitation, any bar, cocktail lounge or other facility housed therein as well as the area occupied by the games. The term does not include any establishment that is operated pursuant to a restricted license as defined in [NRS 463.0189](#).

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2018 Tahoe Douglas Fire Protection District Wildland-Urban Interface Code Amendment

Section 101.2 Scope

101.2 Scope. The provisions of this code the *2018 International Wildland Urban Interface 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 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.

105.3 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. An alternative material, design or method shall be approved where the fire chief finds that the proposed design is satisfactory and complies with the intent of the provisions of this code, and that the material, method or work offered is, for the purpose intended, not less than the equivalent of that prescribed in this code in quality, strength, effectiveness, fire resistance, durability and safety.

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.

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 *International Fire Code* Section 109 as adopted by Tahoe Douglas Fire Protection District.

Section 107 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.

Where required by the code official, a permit shall be obtained for the following activities, operations, practices or functions within the Tahoe Douglas Fire Protection District:

Section 302.3 Review of Wildland-urban Interface Areas.

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

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 NFPA 1142, Tahoe Douglas Fire Protection District Regulations, and 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.

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

Fire flow requirements for buildings or portions of buildings and facilities shall be determined by an approved method. Subject to the approval of the Tahoe Douglas Fire Protection District, if the required fire flow is not available for adequate fire protection, an approved automatic fire sprinkler system shall be installed throughout the building or buildings. The sprinkler system must meet the requirements of the appropriate N.F.P.A. standard. The provisions of this paragraph do not apply if a fire sprinkler system is otherwise required by this chapter or the adopted codes.

Fire flow for residential construction, in accordance with the requirements of Section 102.5 (1), shall be calculated in accordance with NFPA 1142. All residential plan submittals shall include the explanatory, calculations in accordance with Chapter 4. Calculations shall be based on the volume calculation of the total building area (that is everything under a roof, including garages, covered entry and covered patios).

Section 501.2 Objective

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

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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* 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 502.1 or Appendix C or the map developed by the Tahoe Douglas Fire Protection District as determined by the code official.

503.1 General. Buildings and structures hereafter constructed, modified or relocated into or within *wildland-urban interface areas* shall meet the construction requirements in accordance with Table 503.1. Class 1, Class 2 or Class 3, ignition-resistant construction shall be in accordance with Sections 504, 505 and 506, respectively. Materials required to be ignition-resistant materials shall comply with the requirements of Section 503.2.

Table 503.1 Ignition-Resistant Construction

Table 503.1

IGNITION-RESISTANT CONSTRUCTION

DEFENSIBLE SPACE ^c	FIRE HAZARD SEVERITY					
	Moderate Hazard		High Hazard		Extreme Hazard	
	Water supply ^d		Water supply ^b		Water supply ^b	
	Conforming ^d	Nonconforming ^e	Conforming ^d	Nonconforming ^a	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.

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- a. Access shall be in accordance with Section 403.
- b. Subdivisions shall have a conforming water supply in accordance with Section 402.1. 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.
- c. Conformance based on Section 603.
- d. Conformance based on Section 404.
- e. A nonconforming water supply is any water system or source that does not comply with Section 404, including situations where there is not water supply for structure protection or fire suppression.

504.2 Roof Covering. Roofs shall have a roof assembly that complies with a Class A rating when tested in accordance with ASTM E108 or UL 790. For roof coverings where the profile allows a space between the roof covering and roof decking, the space at the eave ends and ridge line shall be firestopped to preclude entry of flames or embers, or have one layer of 72- pound (32.4 kg) mineral-surfaced, nonperforated cap sheet complying with ASTM D3909 installed over the combustible decking.

Exceptions:

1. Class A roof assemblies include those with coverings of brick, masonry or an exposed concrete roof deck.
2. Class A roof assemblies also include ferrous or copper shingles or sheets, metal sheets and shingles, clay or concrete roof tile or slate installed on noncombustible decks or ferrous, copper or metal sheets installed without a roof deck on noncombustible framing.
3. Class A roof assemblies include minimum 16 oz/sq. ft. (0.0416 kg/m²) copper sheets installed over combustible decks.

Section 504.7.1 Underfloor areas

When the attached structure is located and constructed so that the structure or any portion thereof projects over a descending slope surface greater than 10 percent, the area below the structure shall have all underfloor areas enclosed to within 6 inches (152 mm) of the ground, with exterior wall construction in accordance with Section 504.5.

Exception: When approved by the code official, unenclosed underfloor areas are allowed and are to be kept free of all combustible materials.

504.10.1 Vent Locations. Attic ventilation openings shall not be located in soffits, in eave overhangs, between rafters at eaves, or in other overhang areas. Ember-resistant gable end and dormer vents shall be located not less than at least 10 feet (3048 mm) from lot lines. Underfloor ventilation openings shall be located as close to grade as practical.

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Exceptions:

1. Listed vents complying with ASTM E2886.
 - 1.1 The Ember Intrusion Test shall have no flaming ignition of the cotton material.
 - 1.2 There shall be no flaming ignition during the Integrity Test portion of the Flame Intrusion Test. The maximum temperature of the unexposed side of the vent shall not exceed 662 degrees Fahrenheit (350 degrees Celsius).
2. The fire code official may accept or approve special eave and cornice vents that resist the intrusion of flame and burning embers.

505.2 Roof Covering. Roofs shall have a roof assembly that complies with not less than a Class A ~~B~~ rating when tested in accordance with ASTM E108 or UL 790. For roof coverings where the profile allows a space between the roof covering and roof decking, the space at the eave ends and ridge line 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 decking.

505.10.1 Vent Locations. Attic ventilation openings shall not be located in soffits, in eave overhangs, between rafters at eaves, or in other overhang areas. Ember-resistant gable end and dormer vents shall be located at least 10 feet (3048 mm) from lot lines. Underfloor ventilation openings shall be located as close to grade as practical.

Exceptions:

1. Listed vents complying with ASTM E2886.
 - 1.1 The Ember Intrusion Test shall have no flaming ignition of the cotton material. There shall be no flaming ignition during the Integrity Test portion of the Flame Intrusion Test. The maximum temperature of the unexposed side of the vent shall not exceed 662 degrees Fahrenheit (350 degrees Celsius). The fire code official may accept or approve special eave and cornice vents that resist the intrusion of flame and burning embers.

603.2.1 Responsible party. Persons owning, leasing, controlling, operating or maintaining buildings or structures requiring defensible spaces are responsible for modifying or removing non-fire-resistive vegetation on the property owned, leased or controlled by said person.

603.2.1.1 Adjacent land. Property owners of land that is directly adjacent to property containing buildings or structures requiring defensible space are responsible for modifying or removing non-fire-resistive vegetation on their own property. Nothing in this provision shall be deemed to require an owner of real property to perform any work on land that he or she does not own.

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603.2.2 Trees (Defensible Space)

603.2.2 Trees. Trees are allowed within the *defensible space*, provided the distance between crowns of adjacent trees and crowns of trees and structures, overhead electrical facilities or unmodified fuel is not less than 10 feet (3048 mm) or an acceptable distance as determined by the code official.

Section 604.4 Trees (Maintenance of Defensible Space)

604.4 Trees. Tree crowns extending to within 10 feet (3048 mm) of any structure shall be pruned to maintain a minimum horizontal clearance of 10 feet (3048 mm) or an acceptable distance as determined by the code official. 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; or an acceptable distance as determined by the code official.

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 code official, storage of firewood and combustible material stored in the *defensible space* shall be located a minimum of 30 feet (~~6096~~ 9144 mm) from structures and separated from the crown of trees by a minimum horizontal distance of 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.

Section 608 Residential Generator Installation

Section 608.1 General. Stationary emergency and standby power generators required by this code shall be listed in accordance with UL 2200. A permit in accordance with Section 107 shall be required. Plans shall be submitted for review and approval. Plan content shall include:

1. Site plan showing access and proposed location
2. Specification sheets
3. Shut-off location

APPENDIX A GENERAL REQUIRMENTS

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Appendix A is adopted in whole in accordance with 2018 Edition of the International Fire Code Section 101.2.1.

APPENDIX B VEGETATION MANAGEMENT PLAN

Appendix B is adopted in whole in accordance with 2018 Edition of the International Fire Code Section 101.2.1.

B101.1 Scope. Where required vegetation management plans shall 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.

Section B102 Defensible Space Plans.

B102.1 General. Where required, defensible space plans must be submitted to the code official 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 *defensible space* requirements.
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.

Section B102 Defensible Space Plans.

B102.1 General. Where required, defensible space plans must be submitted to the 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. 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 abutting the property.

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7. Roads and driveways accessing the property.

APPENDIX C GENERAL REQUIRMENTS

Appendix C is adopted in whole in accordance with 2018 Edition of the International Fire Code Section 101.2.1.

Upon motion of Vice Chair Felton, seconded by Trustee Johnson, the foregoing Resolutions were passed and adopted this 18th day of October, 2023 by the following vote of the Tahoe Douglas Fire Protection Board:

Those Voting Aye:

Those Voting Nay:

Trustee Noyes
Trustee Johnson
Trustee Murphy
Chairman Schusseel
Vice Chair Felton

Abstain: 0


Absent: 0

TAHOE DOUGLAS FIRE PROTECTION DISTRICT

Approved this 18th day of October, 2023.



Larry Schussel, Chairperson



Scott Lindgren, Fire Chief - ASSISTANT
BRYCE CRANCH