

NORTH LAKE TAHOE FIRE PROTECTION DISTRICT

Standard Operating Guidelines for Construction and Permitting #700.01



NLTFPD Resolution 18-1 The 2018 International Fire Code

NLTFPD Resolution 18-2 The 2018 International Urban-Wildland Interface Code

NLTFPD Resolution 16-01 Fees for Fire & Life Safety Activities

North Lake Tahoe Fire Protection District
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on the web at www.nltpd.net



ISO Class 1 Fire District

The North Lake Tahoe Fire Protection District serves the communities of Incline Village and Crystal Bay, Nevada

The Fire District protects Life and Property through efficient delivery of quality community services

How to contact us:

Our Address: 866 Oriole Way, Incline Village, NV 89451

Telephone Numbers:

Administration Office
(775) 831-0351

Fire District facsimile
(775) 831-2072

Interim Fire Marshal
Jennifer Donohue
(775) 831-0351, ext. 8127

Fire Inspector Jeffrey Smith
(775) 831-0351, ext. 8107

This guide contains a brief summary of the key fire and life safety points for construction projects in our Fire District. The actual requirements and detailed supplemental information for each item can be found in the referenced Codes and Standards and in the Resolutions adopted by the Fire District's Board of Directors.

Copies of the Fire District's adopted Resolutions are available at the Fire District's office in Incline Village or on the Fire Prevention pages at our website, www.nltfpd.net.

Before You Build

Pre-submittal conferences between Owners and their Builders/Professional Designers and the Fire Prevention Division are welcomed and encouraged, especially for large, complex or challenging projects. Information that is helpful at pre-submittal conferences includes a scaled site plan, floor plans and cross-sections of proposed construction.

Codes Currently in Effect

2018 International Fire Code (IFC)
2018 International Urban-Wildland Interface Code (IUWIC)
NLTFPD Resolution 18-1
NLTFPD Resolution 18-2
NLTFPD Resolution 16-1
International Building Code (IBC) (*Washoe County adoption*)
International Residential Code (IRC) (*Washoe County adoption*)
National Fire Protection Association Guides and Standards (as adopted by Nevada State Fire Marshal's Office or most current edition)

Permit Submittal Process

Permits for most construction activities are submitted through the Washoe County Building and Safety Department. Their office is located at 1001 East Ninth Street in Reno; the main office telephone number is (775)328-2020.

Please allow sufficient time for plan transit between Washoe County and Incline Village and review by NLTFPD staff. Approvals or plan corrections are electronically entered into Washoe County's *Accele* system. In cases of incomplete submittals or large, complex projects, additional time may be required.

Application and Fees

With the passing of Resolution 16-01, The North Lake Tahoe Fire Protection District is now accepting direct submittals and collecting associated fees.

All Fire Alarm Systems, Fire Sprinkler Systems, Alternative Automatic Extinguishing Systems and other related activities shall be submitted to the North Lake Tahoe Fire Protection District's Administration Office. Additionally, projects needing Pre TRPA approvals and all re-siding projects shall be submitted to North Lake Tahoe Fire Protections District's Administration Office.

Applications and fee schedules are available on our website, www.nltfpd.net, or at North Lake Tahoe Fire Protections District's Administration Office.

Plan Submittal Requirements

The following information should be provided in all permit application documents. Incomplete or missing information may cause a delay in the review and approval of an application:

- A statement of the **Scope of Work** for the intended project.
- **Design Criteria** identifying, among other items, the Type of Construction; Occupancy Group(s); number of stories; total floor area, including existing floor area, if this is an addition to an existing building; if automatic sprinklers are existing or will be installed throughout; and whether a monitored fire alarm system exists or will be provided.
- A scaled **Site Plan** showing the building footprint, public or private streets, access and driveways, fire hydrants and topographic information.
- Floor plans, elevation views, building sections, and reflected ceiling plans.
- Compliance with a mandatory **Defensible Space Evaluation**, as described further in this brochure, is necessary for all projects.
- For **Additions** to existing structures, provide a site plan and floor plans showing the existing structure with demolition areas distinguished (highlighted or dashed) in addition to floor plans showing the new construction areas.
- For **Remodels** within an existing structure where no new floor area is being added, only floor plans and section views as applicable are necessary.
- For **Re-Siding** projects, a Scope of Work letter and pertinent information about replacement materials is required.
- For **Decking** projects, a Scope of Work letter, site map and pertinent information about materials being used for decking and framing.
- For **Fencing** projects, a Scope of Work letter, site map and pertinent information about materials being used. Materials used zero to five feet from the structure shall be non-combustible.

Plans and permits are required for all new Fire Alarm Systems, Fire Sprinkler Systems, and Alternative Automatic Extinguishing Systems. Projects requiring addition of piping (e.g. branch lines, added heads, or detection devices) will require a full submittal package. Projects relocating existing heads, relocating existing detection or existing notification devices may be eligible for an over-the-counter review with a Scope of Work letter.

To assist with the Fire District's emergency response planning, all commercial projects are requested to provide a site plan in electronic format for internal use in developing a pre-fire response plan. A "pdf" file shall be provided. Other file formats and versions may be provided, please check with the Fire District prior to submittal.

Inspection Points

The Fire District will provide inspections at specific points in all construction activities. Please contact the Fire Prevention Division or Fuels Division at the earliest possible time to schedule your inspections. Just as construction activities vary seasonally, our inspection workload also varies following the workload peaks and valleys. We encourage scheduling inspection dates and times as soon as construction schedules are known.

Inspections are provided at these points in your construction project:

- **Rough Framing**—Inspection of fire alarm wiring installation, hydrostatic tests of automatic sprinkler system piping and flushing of underground sprinkler piping are typically done at this time.
- **Defensible Space Inspections**—Inspection of vegetation in accordance with the 2018 International Urban-Wildland Interface Code (IUWIC) with amendments in District Resolution 18-2. Properties will be inspected to ensure vegetation is minimized to effectively reduce the likelihood of fire transferring from the wildland to the structure and from the structure to the wildland.
- **Final Inspection**—Verification of Knox Box keys and contact info, fire alarm system functional testing, flow test of automatic sprinkler system riser and a complete walk-through of the project are done at this point.
- **Business License approval**—Commercial projects involving the issuance of a new or revised business license, the Fire District will approve the business license at the time of a successful Final Inspection.

Changes in Use or Occupancy Classification of an Existing Building

Changes in the Use or Occupancy Classification of an existing building shall be approved by the Washoe County Building and Safety Department.

Depending on the scope, Change in Use may require an application and plans be submitted to Washoe County Building & Safety.

TRPA Pre-Submittal Reviews

The Tahoe Regional Planning Agency (TRPA) requires some development plans submitted to TRPA for permitting to be pre-approved by the local fire districts in the Tahoe Basin.

Activities requiring TRPA review are listed in Chapter 4 of the TRPA Code of Ordinances. As of June 20, 2008, permit applications that TRPA requires fire agency pre-approval include:

- All single and multi-family residential additions/modifications and new construction
- All commercial additions/modifications and new construction
- Qualified exempt activities that involve construction
- Baseline scenic assessments
- Public service projects involving construction
- Recreation projects involving construction

Check TRPA's website (www.trpa.org) for changes and the most current TRPA requirements.

Note: For projects submitted to Washoe County for the TRPA permit reviews, a separate submittal to the Fire District is not necessary.

Pre-TRPA approval drawing requirements

The following guidelines are to be used for all drawing submittals to the Fire District for the Defensible Space Landscape plans and Fire Apparatus Access Plans for Fire District pre-approval.

Information for Defensible Space and Fire Apparatus Access may be combined on the same sheet(s). A scope of work letter shall be provided with each drawing.

Defensible Space Drawing:

- Minimum 18" x 24" sheet size
- Provide 2' contour interval lines (maximum)
- Indicate all current and proposed structures on the property
- Show all property boundaries
- Indicate scale and North arrow
- Show all trees and vegetation taller than 3 feet in height regardless of diameter
- Show all individual plant or brush fields 20 square feet or larger in area
- Show all tree drip lines
- Show all roads (public or private) and driveways in and abutting the property

Fire Apparatus Access Drawing:

- Minimum 18" x 24" sheetsize
- Provide 2' contour interval lines (maximum)
- Indicate all current and proposed structures on the property
- Show all property boundaries
- Indicate scale and North arrow
- Show all roads (public or private) and driveways in and abutting the property
- Indicate slope gradient on all roads and driveways inside the property boundary
- Show all current and proposed fire hydrants on or adjacent to the property

All plans shall be submitted with a [NLTFPD application](#) and required fees to 866 Oriole Way, Incline Village, NV 89451. Provide a contact name and phone number. Complex projects or those requiring a site visit may require additional time for review. Review of projects with snow covered property may not be possible until later in the season.

Wildland-Urban Interface Defensible Space

The Fire District has adopted portions of the 2018 International Urban-Wildland Interface Code (IUWIC) with amendments in District Resolution 18-2.

A **Defensible Space Evaluation** is required for all building permits within the Fire District. Completion of all deficiencies noted in the DSE is required prior to Fire District approval at the Final Inspection of a project.

Fuel Modification within the Defensible Space around a structure is required. Guidelines for Defensible Space Distances are detailed below and in the IUWIC.

Trees are allowed within the Defensible Space. Horizontal distances between trees are determined by a Fire District forester or by the fire code official based on fire risk.

Similarly, **ornamental vegetative fuels or cultivated ground cover is allowed** to be within the designated Defensible Space, provided they do not form a means of transmitting fire from the native growth to any structure.

Vegetation Parameters to Accomplish Defensible Space

The following parameters may be used to assist in determining Defensible Space needs for projects. This information is also the basis for The Fire District pre-approval of project applications prior to submittal to TRPA:

- Remove all dead vegetation, including trees, brush and other vegetation.
- Limb residual trees to a height of **ten feet (10')** above the ground on the high side. Removal of lower branches should not exceed **one-third** of the total tree height. If more than one-third of the live crown must be removed to accomplish this limbing, then use the horizontal spacing guidelines listed for brush below. Please see spacing guidelines below for steep slope.
- Limb all residual trees to achieve a **ten foot (10')** clearance from any part of the house to the branches of the tree. If less than **60%** of the live crown would be left after limbing, the tree should be removed.
- Remove all brush, trees, and flammable materials from under the drip line of residual trees or tree groupings.
- Remove all flammable vegetation and materials **within five feet (5')** of the foundation or support posts of any part of the structure or an outbuilding.
- 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. Storage of firewood and combustible material shall be located a minimum **30 feet (30')** from structures. Fire Retardant Canvas Tarps meeting NFPA-701 and CPAI-84. The tarps must prevent embers from getting in or around the wood pile and be properly secured.
- Limit vegetation to single, well-spaced specimen plants **within the five foot (5') to thirty foot (30') zone**. If some flammable brush remains, it must be thinned and maintained to the extent that it cannot transfer fire to the structure or other vegetation.
- Space brush fields horizontally a minimum distance equal to or greater than **twice** the height of the brush when **within the thirty foot (30') to one hundred fifty foot (150') zone**, Individual brush plants cannot exceed **100-square feet (100 sq. ft.)** in area and **three-feet (3')** in height.
- Thin trees to create an average crown spacing of at least ten feet (10') **within one hundred and fifty feet (150')** of a structure. Trees adjacent to a structure should be removed if a continuous pathway of vegetation and other trees can carry fire to the structure. Trees grouped close enough together to act as one unit may be considered as one crown for spacing purposes. The required crown spacing may be modified by the Fire District forester or code official based on site conditions.

Any final approval of Defensible Space will be made in the field, by NLTFPD after snow has melted sufficiently to determine compliance with the IWUIC.

Defensible Space Evaluations

A **Defensible Space Evaluation** can be arranged through the Fire District by contacting our Fuels Management Division at (775) 833-8130 or make a request by [on-line](#) at www.nltfpd.net/fuels-management/defensible-space/

Evaluations are only conducted seasonally after all snow cover has melted and prior to the onset of winter. Hazardous vegetation identified in the survey must be removed within a specified time frame following the survey. Defensible space inspections required for construction are conducted year around.

For more information, see the publication “Fire Adapted Communities: The Next Step in Wildfire Preparedness” produced in Association with the University of Nevada Reno, Nevada Division of Forestry, and North Lake Tahoe Fire Protection District. Copies are available in the Fire District’s office. Please also refer to Living with Fire’s *“Guidelines for Creating Defensible Space”* at www.livingwithfire.info/tahoe

This information does not represent an interpretation of any TRPA code or ordinance.

Maintenance of Defensible space

The Fire District strongly recommends routine maintenance of vegetation as vegetation will continue to grow, even when cut back to safe levels. A new Defensible Space Evaluation should be conducted every three years. Fire District evaluations older than 36 months will not be honored for new construction permit activities.

Address Identification

Residential addresses are a minimum of **6-inches** in height with at least a 3/4-inch stroke (*IFC 505.1, per District Resolution 18-1*).

Commercial property addresses are a minimum of **12-inches** in height with at least a 1-1/2-inch stroke (*IFC 505.1, per District Resolution 18-1*).

Address numbers or letters of a color that contrasts with their background, readily visible from the street are essential for prompt emergency response.

Address numbers should also be at a sufficient height and location such that snow accumulations, vegetation, and parked vehicles will not block their view from the street.

Key Box Access

For residential structures protected by an automatic sprinkler system, a monitored fire alarm system or when access is blocked by automatic or locked gates, an approved key box, key switch, padlock or other approved means of emergency operation is required. All commercial structures shall provide an approved key box, with current keys.

Applications for these items may be made on-line at www.knoxbox.com or by contacting the Fire District's office.

Building keys are required to be provided in the key box at the time of the final inspection. Additionally, Owner/Occupant contact information and location of Sprinkler Riser and/or Fire Alarm Panel is required.

Similarly, key switch override of any gate operation is required to be functional and must be successfully tested at the time of final inspection.

When a building is re-keyed, please contact the Fire District to make an appointment to meet you at the box to replace the old keys.

Fire Apparatus and Emergency Vehicle Access

Access from public streets or fire and emergency vehicle access roadways to any grade level point on the exterior of all buildings is required with a maximum travel distance of **150-feet**. Travel is measured along an established walking pathway that is maintained clear at all times (*IFC 503.1.1*).

Due to building location issues, topography or winter weather conditions, it may not be possible for structures to comply with the 150-foot maximum travel distance. In these cases, the Fire District can still approve the construction, when automatic sprinkler protection is provided throughout the structure (*IFC 503.1.1*).

Fire Apparatus Access Roadways shall be not less than **20-feet** in width, except when serving one or two single family dwellings, in which case they shall be not less than **12-feet** in width (*IFC 503.2.1*)

Vehicle Turnarounds are required when the dead-end length of an access roadway exceeds **150-feet** (*IFC 503.2.5*) See details on next two pages.

When an access roadway is less than 20-feet in width and is longer than 200-feet, **Road Turnouts** in addition to turnarounds may be required on a case-by-case basis (*IFC 503.1.2*) See details on next two pages.

The minimum outside **Turning Radius** for access roadways is **45-feet** with the minimum inside turning radius being **30-feet** (*IFC 503.2.4*) See details on next two pages.

The minimum clear height for all access roadways and driveways intended for emergency access is **13-feet, 6-inches** (*IFC 503.2.1*) See details on next two pages.



Fire Apparatus Access Drawings

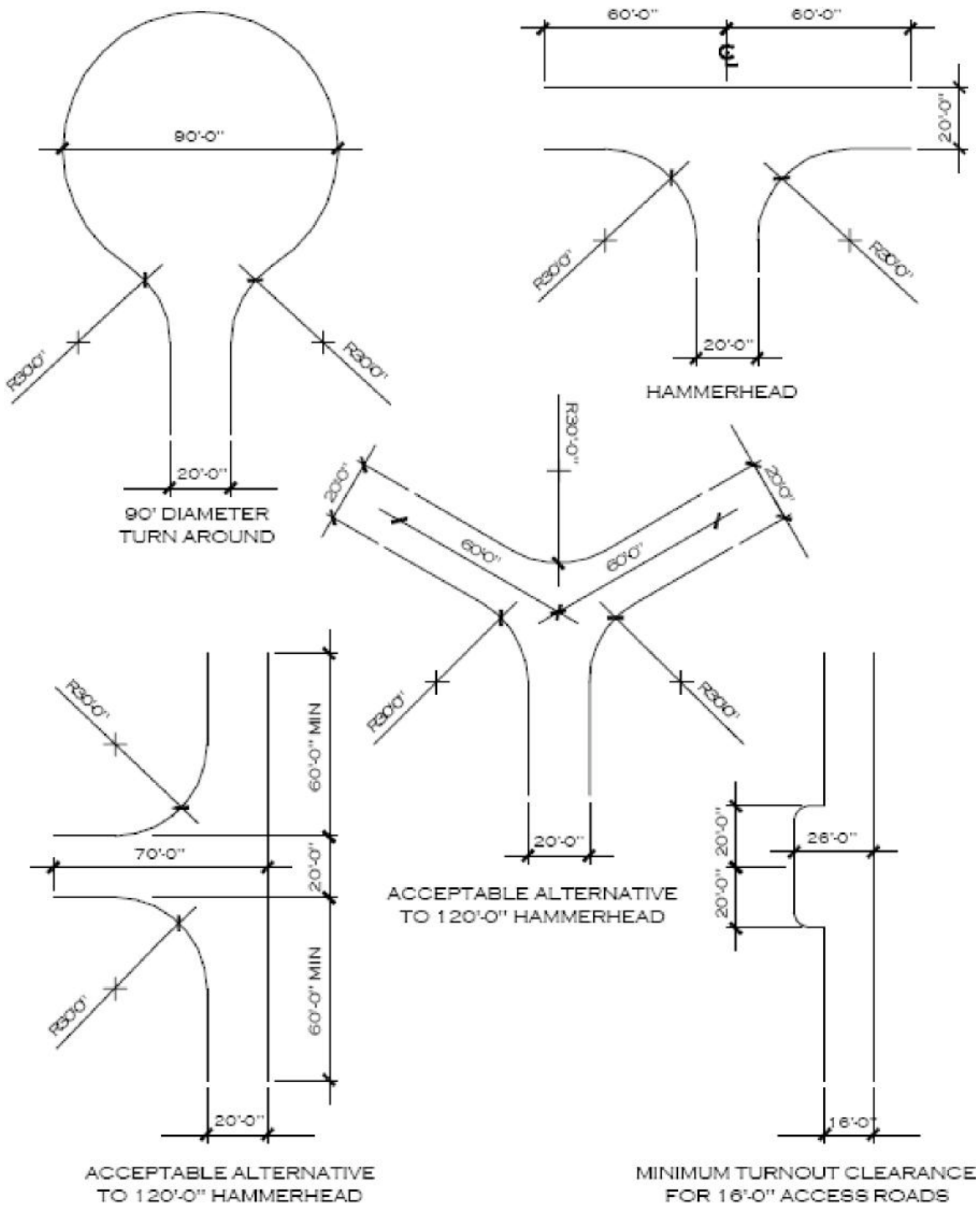


Figure 503-A - 20-foot Fire Apparatus Access Roadway Details

Fire Apparatus Access Drawings

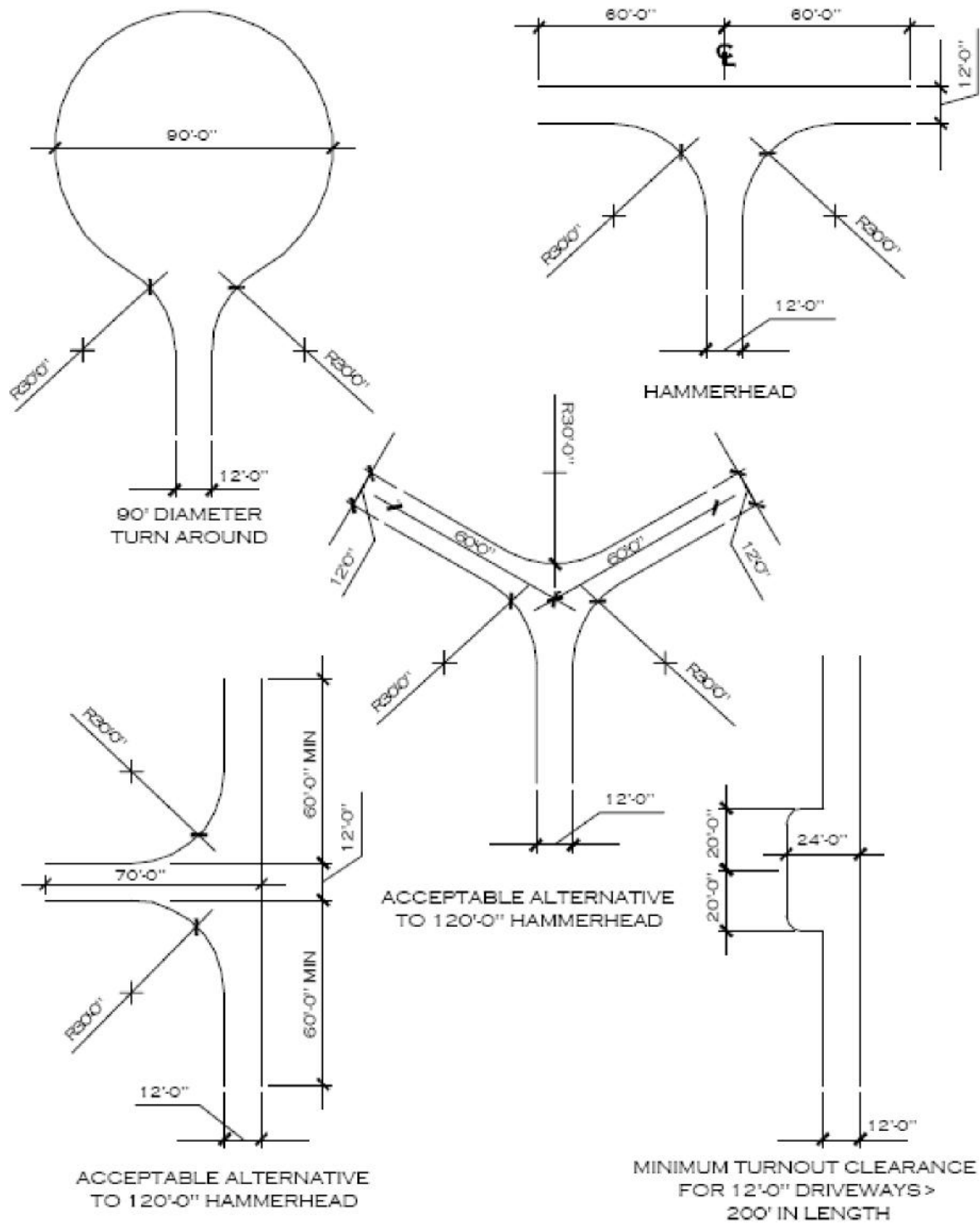


Figure 503-B - 12-Foot Driveway Access Details serving not more than two (2) Single-Family Dwellings

Fire Flow Requirements

The **Fire Flow** is evaluated for each individual building. The “**Fire Area**” of the building includes the total floor area of all levels of the building. Only a four-hour rated wall with no openings may subdivide a building into separate “**Fire Areas**” or determining Fire Flow.

The Fire Flow is determined by using IFC Table B105.1(2). The “**Fire Area**” is found under the appropriate Type of Construction column and reading to the right. This initial Fire Flow may be adjusted further by applying a 50% credit if the building is fully sprinklered, but in no case can it be less than 1,000-gpm for one- and two-family dwellings no larger than 3,600 square feet (*IFC Appendix B, sections B105.1 and B105.2*).

Fire Hydrants

Buildings constructed in the Fire District, including single-family dwellings, are required to have fire hydrants providing the required fire flow, spaced in accordance with IFC Table C102.1 (*IFC Appendix C*).

For construction projects that do not meet the above requirement, consultation with the Fire District is necessary. A detailed fire hydrant diagram can be found on the following page.

Minimum clearances around all fire hydrants are required as follows (*Resolution 18-1 507.5.5 and Figure 507-A*):

- 7-1/2-feet side to side when viewed from the street.
- 4-feet to the rear of the fire hydrant.
- 15-feet to the front (street side) of the hydrant.
- Outlets are at least 30-42 -inches above grade or curb (where exists).

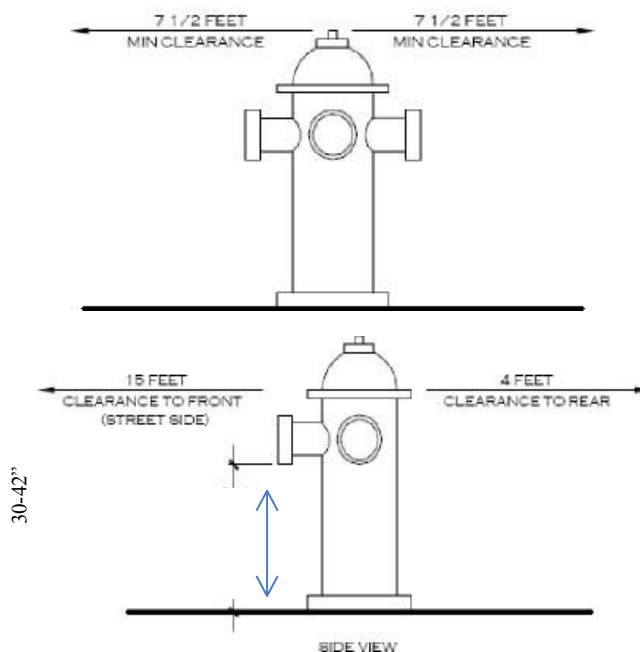
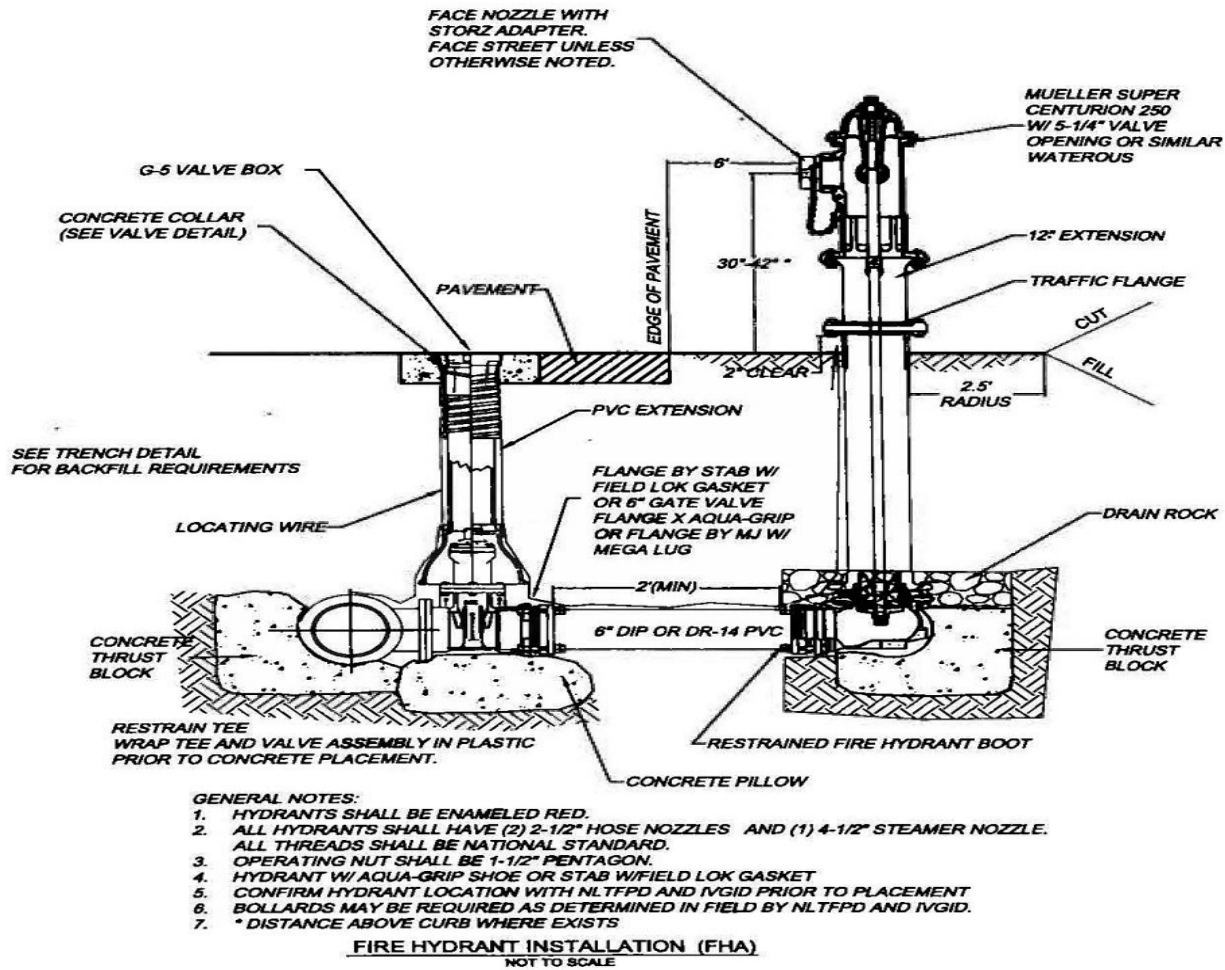


Figure 507-A – Fire hydrant clearance details



Automatic Sprinkler Systems

An automatic sprinkler system for the control and containment of a fire in a structure, including single family dwellings, is required in new construction, alterations, additions, changes in use or change in structures meeting any one of the following:

- **New buildings** that are required to meet the the requirements for **Class 1 Ignition-Resistant Construction(IR1)**. Please note all of Incline Village and Crystal Bay is rated as IR1.(IWUIC 602.1)
- The building is **5,000-square feet** or larger for a new structure or if an addition causes the total area of the structure to increase above this amount. For the purpose of determining the area of a structure, enclosed garages are included (*IFC903.2*)
- The building is **two stories with a basement** or **three or more stories** in height.
- There is a **deficient fire flow** available at the site and no improvements to correct the deficiency in the water supply system are included in the proposed construction project (*IFC Appendix B, sections B105.1 and B105.2*)
- Fire apparatus **access exceeds 150-feet** to the furthest point at grade around the exterior of the building (*IFC 503.1.1 and 901.4.4*)

- Occupancy requirements in the Building Code and the Fire Code (*IBC 903 and IFC 903.2*)

Note: All “R” occupancies built under the IBC require sprinkler protection regardless of size, except single-family dwellings (R-3 occupancies). Single-family (R-3 occupancies) built under the IRC require sprinkler protection when one or more items listed above exist.

Automatic Sprinkler System Design Criteria

Design criteria for automatic sprinkler systems can be found in the most currently adopted editions of The National Fire Protection Association (NFPA) Standard 13 and NFPA Standard 13R with amendments. NFPA 13D systems are prohibited for new construction (*IFC 903.3.1.3*).

Designers of fire sprinkler systems must hold a minimum Level II certification from the National Institute for Certification in Engineering Technologies (NICET), be a licensed as a professional engineer pursuant to Chapter 625 of NRS or hold an equivalent certification.

- All single-family dwellings larger than 10,000 square feet or more than four (4) stories in height must conform to the design requirements in NFPA 13 (*IFC 903.3.1.1*).
- A modified 13R System may be considered for remodel projects less than 10,000 square feet. The 13R System shall provide a minimum 2 head calculation, coverage in accordance with IFC 903.3.1.2.1 and 13R and shall provide a Fire Department Connection. Modified 13R systems will be approved on a case-by-case basis.
- The one-time increase of 360 square feet of fire area, as noted in the footnotes of Tables 903.2.1 and 903.2.2 of the 2018 Northern Nevada Amendments, applies to fire flow and square footage only. Building height (basement or above ground stories) is not eligible for increase.

A minimum 10-psi margin between the available water supply and the system demand point (including any required inside hose stream allowance) is required by NAC 477.465. (Customary margin allowance of only 10-percent common in other regions is not allowed by this Nevada State Fire Marshal regulation.)

Exterior balconies, decks and ground floor patios of dwelling units where the building is of Type “V” construction (such as wood frame buildings) require automatic sprinkler protection. Sidewall sprinklers that are used to protect such areas shall be permitted to be located such that their deflectors are within one (1) inch to six (6) inches below the structural members and a maximum distance of 14 inches below the deck of the exterior balconies and decks that are constructed of open wood joist construction (*IFC 903.3.1.2.1*).

Balconies, decks and eaves of dwellings where the building is of other than Type “V” construction require automatic sprinkler protection only when the overhang exceeds four (4) feet per NFPA 13. Exceptions to this coverage will not be permitted over occupied areas, including storage spaces.

Attics shall be protected in accordance with *IFC 903.3.1.2.3*.

Backflow prevention must satisfy Incline Village General Improvement District (IVGID) requirements. Contact IVGID Public Utilities at (775) 832-1209, www.yourtahoeplace.com/public-works for information and details.

Drains must be provided and sized to accommodate the full discharge of the backflow device. Contact the backflow manufacturer for information on adequate drainage facilities.

Pressure reducing valves are not encouraged by the Fire District and will need *project specific approval from the Fire District*.

Automatic Sprinkler Requirements in Non-Residential Facilities

Casinos (as defined by NAC 477.283.5) are required by NAC 477.283.1.j to be built with a sprinkler system classified as an ordinary Hazard Group 2.

Automotive and woodworking shops in sprinklered high schools are required by NAC 477.283.2.h to be protected by at least an Ordinary Hazard, Group 1 design.

Fire Sprinkler Riser Locations

Sprinkler risers must be located in a heated/conditioned space. Residential garages are typically unacceptable locations for exposed sprinkler risers due to past experience of an increased potential for damage from freezing. Risers and Backflow devices shall be accessible and have clear work space for servicing and repair.

Antifreeze Protection in Residences

Due to the severe winter weather conditions that occur in the Fire District, all single-family residential sprinkler systems shall be filled with approved UL listed anti-freeze. A remote test port is required on all anti-freeze systems.

Audible Sprinkler Water-flow Alarm

An exterior water-flow alarm, independent of a fire alarm system, is required for all buildings with an automatic sprinkler system. The exterior water-flow alarm shall be placed in the general area of the fire department connection. Exterior water-flow alarms, on systems not supervised or monitored by a central station, shall have an approved identification sign for exterior alarm devices. The sign shall be located near the device, in a conspicuous position, and shall be worded as follows: SRINKLER FIRE ALARM – WHEN BELL RINGS CALL 9-1-1

Residential occupancies require audible notification on all levels and in all sleeping rooms. This requirement can typically be accomplished by activating the household smoke alarms upon water-flow activation.

Fire Department Connection

Fire department connection locations shall be approved by the fire code official and placed in a position that is plainly visible and accessible for emergency response. Connections shall be located not less than 3ft. and not more than 5ft above the level of grade and arranged so that hose lines can be readily and conveniently attached without interference from nearby objects.

Approved locking caps are required on all new automatic sprinkler and standpipe installations at tie of final inspection, except for 1-1/2-inch fire department connections on an R-3 occupancy (single-family dwelling).

Existing standpipe and automatic sprinkler connections require approved locking caps be installed.

Applications for locking caps may be made at www.knoxbox.com

Monitored Fire Alarm Systems

A monitored fire alarm system is required in all buildings equipped with an automatic sprinkler system (*IFC 903.4 See Exceptions*).

All single-family dwellings larger than 10,000 square feet or more than four (4) stories in height shall have a monitored fire alarm system meeting NFPA 72. The system shall monitor the flow switch and smoke alarms.

Single station smoke alarms shall be replaced by an NFPA 72 "Household" compliant Fire Alarm System if more than twelve (12) single station smoke alarms are required (NFPA 72 29.8.2.2).

Fire Alarm Systems

All fire alarm systems installed in the Fire District are required to comply with NFPA 72 without exception. Deviations from NFPA 72 are not acceptable. Contact the Fire District for additional information.

All fire alarm installation contractors are required to be licensed by both the Nevada State Contractor's Board and the Nevada State Fire Marshal Division ("F" license).

Designers of fire alarm systems must hold a minimum Level II certification from the National Institute for Certification in Engineering Technologies (NICET), be a licensed as a professional engineer pursuant to Chapter 625 of NRS or hold an equivalent certification.

Maintenance of Fire Alarm and Automatic Sprinkler Systems

A written agreement for the maintenance of fire alarm and/or automatic sprinkler system must be provided at the time of the acceptance test/final inspection. The agreement must be maintained at all times during the life of the structure (*NAC 477.465.2*).

Residential Smoke Alarms and Carbon Monoxide Alarms

Interconnected smoke alarms are required in all single-family dwellings in the following areas (*IFC 907.2.10*):

- In each room used for sleeping purposes.
- Outside each separate sleeping area in the immediate vicinity of the bedrooms(s).
- In each story within a dwelling unit, including basements but **not** including crawl spaces, uninhabitable attics and garages.

Carbon Monoxide alarms, for new construction, shall be installed outside each separate sleeping area in the immediate vicinity of the bedrooms in dwelling units within which fuel fired appliances are installed and in dwelling units that have attached garages. Carbon monoxide alarms, in existing dwellings, are required when work requiring a permit occurs and the dwelling has an attached garage or within which fuel-fired appliances exit (*IFC 915*).

The **Power Supply** to the smoke alarms is required to be provided by the house wiring system and be provided with a battery back-up. Smoke detectors that are a part of a fire alarm system complying with NFPA 72 are also acceptable. (IBC 907.2.10, IRC R313, and IFC 907.2.10)

Single station smoke alarms may be replaced by an NFPA 72 “Household” compliant Fire Alarm System. Plans shall be submitted and permit obtained prior to installation. All fire alarm installation contractors are required to be licensed by both the Nevada State Contractor’s Board and the Nevada State Fire Marshal Division (“F” license).

Single station smoke alarms shall be replaced by an NFPA 72 “Household” compliant Fire Alarm System if more than twelve (12) single station smoke alarms are required. Plans shall be submitted, and permit obtained prior to installation. All fire alarm installation contractors are required to be licensed by both the Nevada State Contractor’s Board and the Nevada State Fire Marshal Division (“F” license).

Designers of fire alarm systems must hold a minimum Level II certification from the National Institute for Certification in Engineering Technologies (NICET), be a licensed as a professional engineer pursuant to Chapter 625 of NRS or hold an equivalent certification.

Fireplace and Flue Shaft Construction

The interior of any firewood-burning fire place enclosure and the flue shaft needs to be lined with fire-taped, listed Type “X” drywall applied to combustible framing. (IFC 704.3 Amendment 18-1)

Gas Meter Protection

A protective cover shall be installed over Natural Gas Meter Assemblies. The protective cover shall be designed to be equal to or greater than the Building Design Load (determined by the Building Department). The cover shall be approved by the 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 for the supports shall be founded 6 inches below finished grade. Pre-cast concrete piers may be used in lieu of poured footings, provided they are placed on stable soil.(2018 NNV Amendments 320.1)

More information about protective covers can be found on-line at <https://www.swgas.com/en/safety-resources>

Decking, Roofing, and Siding Materials

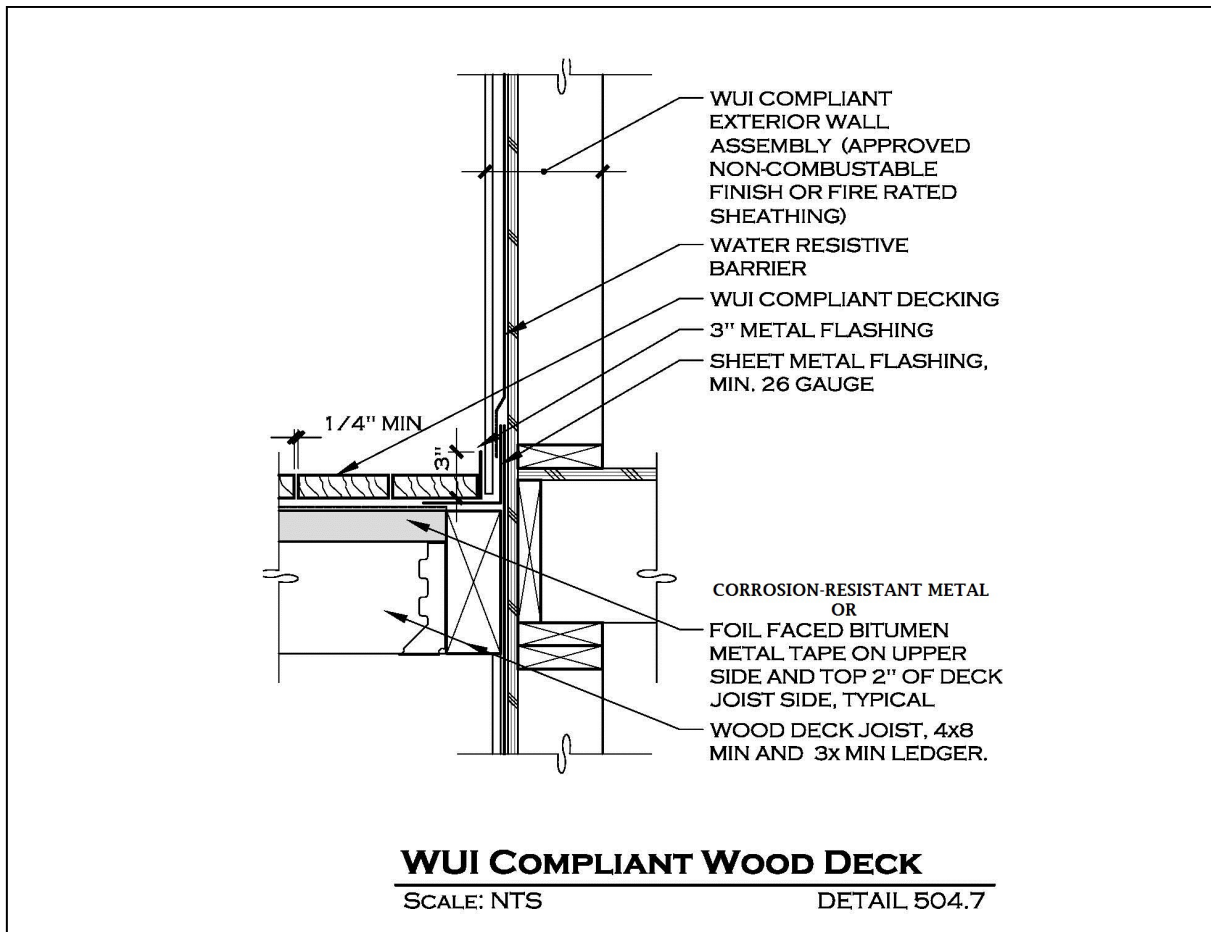
Decking materials shall be a minimum 1 hour fire-resistance-rated construction, approved noncombustible material, heavy timber construction, fire retardant treated wood labeled for exterior use or ignition-resistant (IR) material. (IWUIC 503)

All decks shall be constructed with the following: (Resolution 18-2, 504.7 and Detail)

1. Three-inch-high or greater metal flashing separating the decking and combustible exterior walls.
2. Quarter inch deck board spacing with foil-faced bitumen tape or corrosion-resistant metal applied to the top and upper side surfaces of the supporting joist. If Decking has zero board spacing foil-faced bitumen tape or corrosion-resistant metal is not required.

NLTFPD accept the type of heavy timber construction for decks, patio covers and similar structures: Minimum 6x6 columns, 4x8 floor joists, 4x10 or 6x8 beams, 3x ledgers and 2x decking.

More information about approved decking material may be found on our website, nltfpd.net



A residential or commercial building shall not be constructed, altered, changed or repaired if the construction uses roofing materials other than a listed Class "A" fire retardant roof covering or assembly. Roof coverings consisting of shakes or shingles made of wood are not approved as fire retardant roofing materials

(Resolution 18-2, 504.2 and NAC Sections 472.020 and 472.030 (2)).

Wood shake or shingle siding is required to be a Class "B" or better material. Existing wood shingle siding can only be repaired with Class "B" or better materials, and 5/8" Type "X" exterior gypsum or LP Flame Block sheathing. An application and Scope of Work letter shall be submitted to the Fire District and a permit obtained prior to any residing project (Resolution 18-2).

Outdoor Open Burning, Recreational Burning and Fire Pits

Burn permits are required for any open burning conducted in The North Lake Tahoe Fire Protection District. Please contact our office, (775) 831-0351, or check our website, nlfpd.net for the latest burning restrictions for the Fire District.

Burn permits are required for both solid-fuel and gas (portable and fixed) fire pits.

All burning is prohibited during **RED FLAG WARNING** days.

Hot Work

Hot work permits are required for any Hot work operations (IFC 105.6.23), Cutting and welding (IFC 105.6.11), Open Flames, Torch work and Grinding in The North Lake Tahoe Fire Protection District. Please contact our office, (775) 831-0351, or check our website, nlfpd.net for the latest Hot Work requirements for the Fire District. (IFC 105.6.61).

Hot work, cutting or welding, open flames, torch work and grinding is prohibited during **RED FLAG WARNING** days.

Blasting and Pyrotechnics

A permit is required for any blasting or other pyrotechnic-related activity in the Fire District. Permits must be obtained prior to the arrival of explosive materials within the Fire District's boundary. Blasting permits may be issued for one-time events or continuing activities at the discretion of the Fire District.

The "blaster" or "shooter" must present a Nevada State Fire Marshal Division license and current proof of insurance in person to the Fire District's Administration Office located at 866 Oriole Way, Incline Village, Nevada. The North Lake Tahoe Fire Protection District must be listed as an additional insured. At least \$1,000,000 liability coverage must be provided.

Fireworks permits are issued only for a single performance. Fireworks may only be fired from an approved off-shore platform directed over Lake Tahoe. The platform must be located a distance away from the shore as required by NFPA 1123, Table 5.1.3.1. No reduction in the minimum separation distances or discharge over forested lands will be approved due to the severe fire hazard conditions that exist in the Tahoe Basin.