

HUMBOLDT COUNTY BUILDING DEPARTMENT
2018 CODE AMENDMENTS

(Note: This is formatted for Humboldt County Ordinance)

Adopted Codes

- ❖ 2018 International Building Code and Building Code Standards with Changes, Modifications, Appendices and Supplements
- ❖ 2018 International Residential Code And Building Code Standards with Changes, Modifications, Appendices and Supplements excluding the Mechanical, Plumbing and Electrical Chapters and Appendices
- ❖ 2018 International Fire Code with Changes, Modifications, Appendices and Supplements
- ❖ 2009 International Energy Conservation Code with Changes, Modifications, Appendices and Supplements
- ❖ 2018 International Swimming Pool & Spa Code with Changes, Modifications, Appendices and Supplements and Related NFPA Standards
- ❖ 2018 Uniform Mechanical Code with Changes and Modifications
- ❖ 2018 Uniform Plumbing Code with Changes and Modifications
- ❖ 2017 National Electric Code
- ❖ 2006 ICC Electric Code – Administrative Provisions
- ❖ 2017 Accessible and Usable Buildings and Facilities ICC A117.1-2017
- ❖ 2018 International Existing Building Code
- ❖ 1997 Uniform Code for the Abatement of Dangerous Buildings
- ❖ 1997 Uniform Housing Code
- ❖ Mobile Home/Manufactured Home Standards Act – Current Edition as adopted by Nevada Revised Statutes.

Chapter 15.04 of the Humboldt County Code is amended to read as follows:

15.04.010 – International Building Code

Admndments

1. Section 105.2 Exemptions from permit requirements
 - (1) One story detached accessory buildings such as tool and storage sheds, playhouses livestock shelters and greenhouses provided the floor area does not exceed 200 square feet.
 - (6) Sidewalks, decks, platforms, and driveways not more than 30 inches above adjacent grade and not over any basement or story below and which are not part of an accessible route.
 - (9) Prefabricated swimming pools accessory to a Group R-3 occupancy, as applicable in Section 101.2, which are less than 24" deep in the ground or less than 5' deep when installed entirely above ground.
 - (10) Shade cloth structures constructed for nursery storage (nonhazardous materials) or agricultural purposes and not including service systems provided the roof area does not exceed 250 square feet. Permits for temporary shade cloth structures shall be determined by the Building Official and the International Fire Code.

2. Section 108 shall be amended to read as follows:
 - (a) Building permit fees shall be set using the 1991 UBC Table + an increase of 15 percent (15%) fee schedule. The minimum permit fee shall be set at \$51.75 for construction valuation of \$1.00 to \$2,000.00.
 - (b)When submittal documents are required by Section 106.1, a plan review fee shall be paid at the time of submitting the submittal documents for plan review. Said plan review fee shall be 65 percent (65%) of the building permit fee as shown in Table 3-A 1991 of the Uniform Building Code plus an increase of 15 percent (15%).

The plan review fees specified in this section are separate fees from the permit fees specified in Section 108 and are in addition to the permit fees.

When submittal documents are incomplete or changed so as to require additional plan review or when the project involves deferred submittal items as defined in Section 106.3.4.2 an additional plan review fee shall be charged at the rate defined in this Ordinance.

Expiration of Plan Review - Applications for which no permit is issued within 180 days following the date of application shall expire by limitation, and plans and other data submitted for review may thereafter be returned to the applicant or destroyed by the building official. The building official may extend the time for action by the applicant for a period not exceeding 180 days on request by the applicant showing that the circumstances beyond the control of the applicant have prevented action from being taken. No application shall be extended more than once. In order to renew action on an application after expiration, the applicant shall resubmit plans and pay a new plan review fee.
 - (c) Additional plan review required by changes, additions or revisions to approved plans, \$50.00 per hour, minimum fee-one-half hour.
 - (d)Whenever any work for which a permit is required by this code has been commenced without first obtaining said permit, a special investigation shall be made before a permit may be issued for such work.

An investigation fee, in addition to the permit fee, shall be collected whether or not a permit is then or subsequently issued. The investigative fee shall be equal to the amount of the permit fee required by this code. The minimum investigative fee shall be the same as the minimum fee set forth in Table 3-A of the 1991 Uniform Building Code plus an increase of 15 percent (15%). The payment of such investigation fee shall not exempt any person from compliance with all other provisions of this code nor from any penalty prescribed by laws.
 - (e)The building official may authorize refunding of any fee paid hereunder which was erroneously paid or collected.

The building official may authorize refunding of not more than 80 percent (80%) of the permit fee paid when no work has been done under a permit issued in accordance with this code.

Fees paid for plan reviews are not refundable once the plan review has been completed.

The building official shall not authorize refunding of any fee paid except on written application filed by the original permittee not later than 180 days after the date of fee payment.
 - (f)Expiration of permits. We consider the project to be abandoned if there has been no inspection requested or passed within 180 days. If the permit is older than one year from issuance date the permit will be expired per Section 105.5. A renewal permit will be required.

(g) Permit renewal fees – Renewal permits are required when a permit has been expired. The applicant may be required to submit new plans for review if new codes have been adopted. At the time of request for renewal a plan review fee will be assessed. If applicant applies for a renewal permit within 6 month of the expiration of the previous permit for the same project the building permit fee will be 50% of current permit fee schedule. Fees for plumbing, electrical, and mechanical shall also be 50% of the current fee schedule.

(h) All permits for signs shall be set at fees as follows:

Signs with valuation up to \$25,000 shall be based on the Table 3-A of the 1991 Uniform Building Code plus an increase of 15 percent (15%).

Signs with a valuation of more than \$25,000 shall be a set at a standard fee of \$300.00.

(i) Grading Fees – IBC Appendix J

The permit fees for grading shall be based on the 1997 Uniform Building Code Fee Table A-33-B.

Plan review fees shall bases on 1997 Uniform Building Code Fee Table A-33-A

(j) All permits for photovoltaic projection fields with valuations up to \$25,000,000.00 shall be based on Table 3-A of the 1991 Uniform Building Code plus an increase of 15 percent (15%) plus 65% plan review fee as prescribed in the 2018 International Building Code.

Photovoltaic production fields with a valuation of more than \$25,000,000.00 shall be set at a standard fee of \$150,000 which includes the plan review fees as prescribed in the 2018 International Building Code.

3. Section 305.2 Group E, Day Care Facilities

This group includes buildings and structures or portions thereof occupied by more than six children older than 2 ½ years of age who receive educational, supervision or personal care service for fewer than 24 hours per day.

Section 305.2.1 Within Places of religious worship. Rooms and spaces within *places of religious worship* providing such day care during religious functions shall be classified as part of the primary occupation.

Section 305.2.2 Six or fewer children. A facility having six or fewer children receiving such day care shall be classified as part of the primary occupancy.

Section 305.2.3 Six or fewer children in a dwelling unit. A facility such as the above within a dwelling unit and have six or fewer children receiving such day care shall be classified as a Group R-3 occupancy or shall comply with the International Residential Code.

4. Section 308.2.5 Institutional, Group I-1 – Add new subsection to 308.2

308.2.5 Board of Health. All portions of a care facility which houses patients or residents, which is classified by the State Board of Health as ‘Category 2’, and which has an occupant load of more than 10 residents, is classified as an ‘I-1’ occupancy classifications.

5. Section 308.5 Institutional Group I-4, Day Care Facilities

308.6 Institutional Group I-4, day care facilities. This group shall include buildings and structures occupied by more than six 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 limited to, the following:

Adult day care

Child day care

308.6.1 Classification as Group E. A child day care facility that provides care for more than six but not more than 100 children 2 ½ 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

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

308.6.4 Six or fewer persons 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.

6. Section 310.2 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

Congregated living facilities (transient) with more than 10 occupants

Hotel (transient)

Motels (transient)

7. Section 311.2 Moderate-hazard storage, Group S-1 Amend to add:
Self-serve storage (mini-storage)
Delete: Dry boat storage (indoor)
8. Section 403.5.4 Smokeproof enclosures
Every required exit stairway serving floors more than 55 feet (16.764 m) above the lowest level of fire department vehicle access shall be a smokeproof enclosure in accordance with Sections 909.20 & 1023.10.
9. Section 906 Portable Fire Extinguishers – Delete in its entirety.
10. Amend Chapter 9 by replacing International Plumbing Code and Sections to Uniform Plumbing Code & Sections.
11. Section 910.1 General (Smoke and Heat Removal)
Exceptions:
 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 ESFR sprinklers has an exit access travel distance of more than 250 feet (76.200 m).
12. Section 1010.1.10 amended:
Electrical rooms with equipment rated ~~4,200~~ 800 amperes or more and over 6 feet (1829 mm) wide and that contain overcurrent devices, switching devices or control devices with an exit or exit access doors, shall be equipped with panic hardware or fire exit hardware. The doors shall swing in the direction of egress travel.
13. Amend Section 1209 by adding Section 1209.4 as follows:
1209.4 Baby Changing Tables. Diaper changing tables are required to be installed in both male, female and other restrooms, in permanent buildings that contain public restrooms as defined in Chapter 29 of the 2018 IBC. Changing tables are required when any of the following occur: new buildings, tenant improvements, new restrooms, alterations of existing restrooms, new additions, change of uses that require updating existing restrooms with additions to those facilities. Shall meet the guidelines of 603.5, 309, and 902 of ANSI/ICC A117.1-2017.
14. IBC Section 1609.3(Basic Wind Speed) and 1609.4 (Exposure) amended: The minimum basic wind speed at any site in Humboldt County shall be 90 miles per hour fastest 105 mph 3 second gust. An exposure of "C" shall be used as a minimum in the design of all structures within Humboldt County.
15. Amend Section 1704.2 Exception 2:
Unless otherwise required by the building official, special inspections and tests are not required for Group R-3 occupancies as applicable in Section 101.2 and Group U occupancies that are accessory to a residential occupancy including, but not limited to, those listed in Section 312.1.
16. Amend Section 1803.2 – Investigations Required as follows:
Exception: The building official need not require a geotechnical investigation where satisfactory data from adjacent areas is provided by a licensed design professional that demonstrates an investigation is not necessary for any of the conditions in Sections 1803.5.1 through 1803.5.6 and Sections 1803.5.10 and 1803.5.11.

17. Amend Section 1803.6 Reporting by adding:
 11. Where required by 1803.5.11, investigation of liquefaction hazards shall be performed in accordance with "Guidelines for Evaluating Liquefaction Hazards in Nevada," investigation of hazards associated with surface displacement due to faulting or seismically induced lateral spreading or lateral flow shall be performed in accordance with "Guidelines for Evaluating Potential Surface Fault Rupture/Land Subsidence Hazards in Nevada.:"
18. Section 1809.5 #1 Frost depth for Humboldt County shall be twenty four inches (24") deep.
19. Section 2901.1 Scope
Private sewage disposal systems shall conform to NAC Chapter 444
20. Amend Section 2902.1 Minimum number of fixtures. Plumbing fixtures shall be provided in the minimum number as shown in Table 2902.1 based on the actual use of the building or space. Uses not shown in Table 2090.1 shall be considered individually by the code official. The number of occupants shall be determined by this code. Suitable toilet facilities shall be provided and maintained in a sanitary condition for the use of workers during construction.
21. Amend Section 3102.7 by adding the following exception: Membrane structures intended to be in place for 30 days or less may be engineered to risk category I loads provided the installation and use are per the manufacturer's recommendations.
22. Appendix Chapter H
 1. Section H113.4 - A permit is not required for the following signs. These exemptions shall not be construed as relieving the owner of the sign from the responsibility for its erections, maintenance and compliance with the provisions of this code or other laws or ordinances regulating signs.
 - (a) Changing of the advertising copy or message on a painted or printed sign only. Except for theater marquees and similar signs specifically designed to the use of replaceable copy, electric signs shall not be included in this exception.
 - (b) Painting, repainting or cleaning of an advertising structure or changing the advertising copy or message thereon shall not be considered an erection or alteration that requires a sign permit unless a structural change is made.
 - (c) Signs less than 6 feet (1829 mm) above grade measured from the top of the sign and a maximum of 32 sq ft.
 - (d) Section H111.1 – Flat signs installed on building wall fronts, which do not exceed ~~4x8~~ 32 sq ft in size. This does not exempt the installer/owner from proper attachment for safety purposes.
 - (e) Temporary signs announcing the sale or rent of property.
 - (f) Signs erected by transportation authorities.
 2. Section H113.4 – The bottom of any marquee projecting over an alley shall not be less than fifteen and one-half (15.5) feet above the ground or pavement below.
23. Appendix Chapter I
Section I105.2 Footings – An unenclosed patio cover that projects 14 feet or less from the main structure shall be permitted to be supported on a concrete slab on grade without footings provided the slab conforms to the provisions of Chapter 19 of this code, is not less than 3 ½" thick and further provided that the columns do not support loads in excess of 750 pounds (3.36 kN) per column.

15.04.020 International Residential Code

Admendments

1. Section R105.2 Exemptions from permits
 - (1) One story detached accessory buildings such as tool and storage sheds, playhouses, livestock shelters and greenhouses provided the floor area does not exceed 200 square feet.
 - (5) Sidewalks, platforms, and driveways not more than 30 inches above adjacent grade and not over any basement or story below.
 - (7) Prefabricated swimming pools that are less than 24" deep in the ground or less than 5' deep when installed entirely above ground

- (10) Decks that are not more than 30 inches above grade at any point.
- (11) Shade cloth covers not exceeding 250 square feet of roof area.

- 2. Section R108 shall be amended to read as follows:
 - (a) Building permit fees shall be set using the 1991 UBC Table + an increase of 15 percent (15%) fee schedule. The minimum permit fee shall be set at \$51.75 for construction valuation of \$1.00 to \$2,000.00.
 - (b) When submittal documents are required by Section R106.1, plan review fees shall be paid at the time of submitting the submittal documents for plan review. Said plan review fee shall be 65 percent of the building permit fee as shown in Table 3-A 1991 of the Uniform Building Code plus an increase of 15 percent (15%).

The plan review fees specified in this section are separate fees from the permit fees specified in Section R108 and are in addition to the permit fees.

Expiration of Plan Review - Applications for which no permit is issued within 180 days following the date of application shall expire by limitation, and plans and other data submitted for review may thereafter be returned to the applicant or destroyed by the building official. The building official may extend the time for action by the applicant for a period not exceeding 180 days on request by the applicant showing that the circumstances beyond the control of the applicant have prevented action from being taken. No application shall be extended more than once. In order to renew action on an application after expiration, the applicant shall resubmit plans and pay a new plan review fee.
 - (c) Additional plan review required by changes, additions or revisions to approved plans, \$50.00 per hour, minimum fee-one-half hour.
 - (d) Whenever any work for which a permit is required by this code has been commenced without first obtaining said permit, a special investigation shall be made before a permit may be issued for such work.

An investigation fee, in addition to the permit fee, shall be collected whether or not a permit is then or subsequently issued. The investigative fee shall be equal to the amount of the permit fee required by this code. The minimum investigative fee shall be the same as the minimum fee set forth in Table 3-A of the 1991 Uniform Building Code plus an increase of 15 percent (15%). The payment of such investigation fee shall not exempt any person from compliance with all other provisions of this code nor from any penalty prescribed by laws.
 - (e) The building official may authorize refunding of any fee paid hereunder which was erroneously paid or collected.

The building official may authorize refunding of not more than 80 percent (80%) of the permit fee paid when no work has been done under a permit issued in accordance with this code. Fees paid for plan reviews are not refundable once the plan review has been completed. The building official shall not authorize refunding of any fee paid except on written application filed by the original permittee not later than 180 days after the date of fee payment.
 - (f) Expiration of permits. We consider the project to be abandoned if there has been no inspection requested or passed within 6 months. If the permit is older than one year from issuance date the permit will be expired per Section 105.5. A renewal permit will be required.
 - (g) Permit renewal fees – Renewal permits are required when a permit has been expired. The applicant may be required to submit new plans for review if new codes have been adopted. At the time of request for renewal a plan review fee will be assessed. If applicant applies for a renewal permit within 6 month of the expiration of the previous permit for the same project the building permit fee will be 50% of current permit fee schedule. Fees for plumbing, electrical, and mechanical shall also be 50% of the current fee schedule.
- 3. Section R202 Definition of Sleeping Room – Any bedroom or other room that is intended to be or is ordinarily used for sleeping purposes. The term is deemed to include any room that contains a closet and provides for occupant privacy.
- 4. Section R303.1. All unfinished residential basements shall be provided with natural light by means of exterior glazed openings with an area not less than five percent of the total floor area.

The unfinished basement shall be provided with one emergency escape window or door complying with International Residential Code Section R310.

The unfinished basement shall also be provided with smoke detectors complying with International Residential Code Section R313.

All finished residential basements shall be provided with a minimum of one window in each habitable room.

Sleeping rooms and required emergency escape or rescue windows and doors shall comply with International Residential Code, Section R310.

Smoke detectors shall be provided per International Residential Code Section R313.

5. Chapter 2 Definitions

Whole –House Mechanical Ventilation – Delete For definition applicable in Chapter 11, See Section N1101.6

Surcharge. A vertical load imposed on the retained soil that may impose a lateral force in addition to the lateral earth pressure of the retained soil. Examples include:

- Sloped retained soil
- Structure footings supported by the retained soil
- Adjacent vehicle loads supported by the retained soil

6. IRC Section R301.2.2 Seismic Zone shall be D-1.

7. IRC Section R301.2.1(Basic Wind Speed) and 1609.4 (Exposure) amended: The minimum basic wind speed at any site in Humboldt County shall be 90 miles per hour fastest mile and 105 miles per hour 3 second gust. An exposure of “C” shall be used as a minimum in the design of all structures within Humboldt County.

8. IRC Section R302.2 Townhouses

1. A common 2-hour fire-resistance-rated wall assembly tested in accordance with ASTM E 119 or UL 263 is permitted for townhouses if such walls do not contain plumbing or mechanical equipment, ducts or vents in the cavity of the common wall. Electrical installations shall be installed in accordance with 2017 National Electric Code. Penetrations of electrical outlets boxes shall be in accordance with Section R302.4.

2. Where the building is equipped throughout with an automatic sprinkler system, a common 1-hour fire-resistance-rated wall assembly test in accordance with ASTM E 119 or UL 263 is permitted for townhouses if such walls do not contain plumbing or mechanical equipment, ducts or vents in the cavity of the common wall. The wall shall be rated for fire exposure from both sides and shall extend to and be tight against exterior walls and the underside of roof sheathing. Electrical installations shall be installed in accordance with National Electric Code. Penetrations of electrical outlet boxes shall be in Accordance with R302.4.

3. An automatic residential fire sprinkler system shall not be required in townhouses less than 5,000 sq. ft. of living space unless the AHJ has amended the International Fire Code to include provisions pertaining to townhouses in accordance with NRS 278.586.

9. IRC Section 302.2.4 Structural Independence

Townhouses separated by a common fire resistance-rated wall as provided in Section R302.2.6

10. IRC Section R303.4 Mechanical Ventilation – Delete entire section

11. IRC Section R309.2 Breezeway. Where a breezeway separates a single-family dwelling and a garage, the interior wall and gable end wall of the garage adjacent to the dwelling shall be protected with one layer of ½” sheetrock from the floor to the underside of the roof sheathing.

12. IRC Section R313.1 Townhouse Fire Sprinkler Requirement **add exception:**

An automatic residential fire sprinkler system shall not be required in townhouses less than 5,000 sq. ft. of living space unless the AHJ has amended the International Fire Code to include provisions pertaining to townhouses in accordance with NRS 278.586.

13. IRC Section R313.2 One-and-two family Dwellings Automatic Fire Systems – Add exception:

An automatic residential fire sprinkler system shall not be required in one-and two-family dwellings less than 5,000 sq. ft. of living space unless the AHJ has amended the International Fire Code to include provisions pertaining to one-and two-family dwellings in accordance with NRS 278.586.

14. IRC Section R315.2.2 Where Required in Existing Dwellings
Where work requiring a permit occurs in existing dwellings, carbon monoxide alarms shall be provided in accordance with Section R315.1 for the following:
 1. Addition and/or renovation of attached garages with communicating openings requiring building permit.
Exception: Work involving the exterior surfaces of dwellings, such as the replacement of roofing or siding, or the addition or replacement of windows or doors, or the addition or a porch or deck and installation, alteration or repair of plumbing systems are exempt from the requirements of this section.
15. Exclude Chapter 11 Energy Efficiency
16. Exclude Mechanical Chapters 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, and Appendices B, C & D.
17. Exclude Plumbing Chapters 24, 25, 26, 27, 28, 29, 30, 31, 32, 33 and Appendices A, I, N and P.
18. Exclude Electrical Chapters 33, 34, 35, 36, 37, 38, 39, 40, and Appendix Q.
19. Exclude Swimming Pool Chapter 42.
20. Appendix H – Patio Covers
Section AH105.2 Footings - An unenclosed patio cover that projects 14 feet or less from the main structure shall be permitted to be supported on a concrete slab on grade without footings provided the slab conforms to the provisions of Section R506 of this code, is not less than 3 ½” thick and further provided that the columns do not support loads in excess of 750 pounds (3.36 kN) per column.
21. Exclude Appendix Chapter M – Home Day Care
22. Bathrooms shall not be constructed in a garage/accessory building until a residence is located on the parcel.

15.04.030 Uniform Mechanical Code.

Amendments

1. There is added to Section 115 "Fees," the following paragraph:
 - (a) For new residential construction, three and one-half (.035) cents per square foot.
 - (b) Issuance fee of \$51.75 will be assessed for each mechanical permit issued.
 - (c) Plan review fees, investigative fees and fee refunds shall be as set in 15.04.010 (C) 2 (a)(b)(c)(d) of this ordinance.
2. Section 304.3 Access to Appliances on Roofs. Appliances located on roofs or other elevated locations above 30 inches shall be accessible. (NPFA 4:9,4.3.11)
Section 304.3.1.1 Access Type. The inside means of access shall be a permanent, or foldable inside stairway or ladder, terminating in an enclosure, scuttle, or trap door. such scuttles or trap doors shall be not less than 22 inches by 24 inches (559 mm by 610 mm) in size, shall open easily and safely under all conditions, especially snow; and shall be constructed so as to permit access from the roof side unless deliberately locked on the inside.
Not less than ~~6~~ 10 feet (3048 mm) of clearance shall be between the access opening and the edge of the roof or similar hazard or rigidly fixed rails or guards not less than 42 inches (1067 mm) in height shall be provided on structures are utilized in lieu of guards or rails, they shall be not less than 42 inches (1067 mm) in height. (NFPA 54:9.4.3.1)
Section 304.3.1.2 Permanent Ladders – Amend as follows:
 - (6) Fall protection or guards of not less than 42 inches in height, measured from the roof walking surface shall extend min. 6' on each side of ladder at the roofs edge.
3. Section 937 Installation of Gaseous Hydrogen Systems: Add new section to Chapter 39.
937.2 Installation of Gaseous Hydrogen Systems. All hydrogen systems shall comply with NFPA 2 Chapter 13 Hydrogen Technology Code, Building Code, and the Fire Code.

4. Section ~~508.5.5~~ Evaporative Cooling Systems – Add new subsection 508.1.3 to Section 508.1: 508.1.36 Evaporative Cooling Systems. Evaporative cooling systems will comply with this chapter. Evaporative coolers shall not be used for make-up air units on commercial hoods and kitchen ventilation systems.
Exception: Evaporative cooling systems that are part of a listed heating air system for kitchen make up air systems. The temperature differential between the makeup air and the air in the conditioned space shall not exceed 100 F (60 C) except where the added heating and cooling load of makeup air do not exceed the capacity of the HVAC system.
5. Section 511.2.2.2 Capture and Containment Test. The permit holder shall verify the capture and containment performance of ~~the Type I hoods~~. A field test shall be conducted with the all appliances under the hood at operating temperatures, ~~with the outdoor air providing makeup air for all the hoods operating and with the source of recirculated air providing conditioning for the space in which the hood operating in located~~ at design airflows, and with all sources of replacement air operating at design airflows for the restaurant. Capture and containment shall be verified by observing smoke or steam produced by actual ~~or simulated~~ cooking operation or by simulating cooking using devices such as smoke candles or smoke puffers. Smoke bombs shall not be used [ASHRAE 154:4.8.2 4.7.2]
Exception: Capture and containment test not required if hood is UL and NFPA listed and manufacturer's data lists the individual equipment below the hood.
6. Section 604.1 General (Insulation of Ducts) Amend Section 604.1 to read as follows:
Supply-air ducts, return air-ducts, and plenum of a heating or cooling system shall be insulated to achieve a minimum thermal (R) value in accordance with the 2009 International Energy Conservation Code Section 403.2.1 for residential and 503.2.7 for commercial.
Delete Exceptions.
7. 608.1 Air-Moving Systems and Smoke Detectors. Air-moving systems supplying air in excess of 2000 cubic feet per minute (ft³/min) (0.9439 m³/s) to enclosed spaces within buildings shall be equipped with an automatic shutoff. Automatic shutoff shall be accomplished by interrupting the power source of the air-moving equipment upon detection of smoke in the main supply return-air duct or plenum upstream of any filters, exhaust air connections, outdoor air connections, or decontamination equipment and appliances ~~air duct~~ served by such equipment. Duct smoke detectors shall comply with UL 268A and shall be installed in accordance with the manufacturer's installation instructions. Such devices shall be compatible with the operating velocities, pressures, temperatures, and humidities of the system. Where fire-detection or alarm systems are provided for the building, the smoke detectors shall be supervised by such systems in an approved manner.
8. Section 609.0 Performance Test of Automatic Shutoffs. Add new Section 609.0 to Chapter 6. Upon completion and before final approval on the air-moving system, provide with the required smoke detectors, a performance test shall be performed to verify compliance of detector installation to manufacturer's instructions and system compatibility as specified in this chapter. The permittee shall furnish the necessary test equipment and devices to perform tests and shall provide jurisdiction with an accurate, completed, and signed test report. The report shall provide the jurisdiction a form containing equivalent information. At the discretion of the Authority Having Jurisdiction, the performance test may be required to be witnessed by the Authority Having Jurisdiction, or performed by an approved third party testing agency.
9. Section 939.0 Sauna Heaters Add Section 939.1 to Section 939.0 Sauna Heaters to read as follows: 939.0 Sauna Heaters. 939.1 General. Sauna heaters shall be listed and installed in accordance with the manufacturer's installation instructions. Approved guards or barriers shall be installed to prevent accidental contact with the sauna heater. Ventilation shall be provided in accordance with its listing and combustion air for gas-fired heaters shall comply with Chapter 7.
10. Amend Section 1001.1 to read as follows:
For boilers and water heaters less than 120 gallon capacity, or a BTU input rating less than 200,000, or less than 160 pounds per square inch of pressure, see Chapter 5 of the Uniform Plumbing Code. For all other units contact the Mechanical Compliance Section of the Nevada Division of Industrial Relations, part of the Department of Business and Industry.

11. Amend Section 1301.1 to read as follows: 1301.1 Applicability. The regulations of this chapter shall govern the installation of fuel gas piping in or in connection with a building, structure or within the property lines of premises up to 5 pounds-force per square inch (psi) (34 kPa) ~~for natural gas and 10 psi (69 kPa) for undiluted propane~~, other than service pipe.
 Fuel oil piping systems shall be installed in accordance with NFPA 31. Whenever there is a conflict between this code and NFPA 54 and NFPA 58 as adopted by the Nevada LP-Gas Board for LP-Gas installations, the adopted codes of the Nevada LP-Gas Board shall govern.

15.04.050 Uniform Plumbing Code.

Amendments.

1. There are added to Section ~~403.4~~ 104.3.2:
 - (a) For new residential construction, three and one-half (.035) cents per square foot.
 - (b) For temporary gas service \$25.00
 - (c) Issuance fee shall be \$51.75 assessed for each permit issued.
 - (d) Plan review fees, investigative fees and fee refunds shall be as set in 15.04.010(C)2(a)(b)(c)
 - (e) of this ordinance.
2. Section 216 Non Combustible Materials – Add new definition
 Materials that, when tested in accordance with ASTM E 136, have at least three of four specimen tested meeting all of the following criteria:
 1. The recorded temperature of the surface and interior thermocouples shall not at any time during the test rise more than 54°F (30°C) above the furnace temperature at the beginning of the test.
 2. There shall not be flaming from the specimen after first 30 seconds
 3. If the weight loss of the specimen during testing exceeds 50 percent, the recorded temperature of the surface and interior thermocouples shall not at any time during the test rise above the furnace air temperature at the beginning of the test, and there shall not be flaming of the specimen.
3. Section 218 Penetration Firestop System – Delete section in its entirety.
4. Section 220 T Rating – Delete entirely
5. Section 312.7 Fire-Resistive Construction – Amend as follows:
 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 building code.
6. Section 422 Minimum Number of Required Fixtures – Delete section in its entirety.
7. Table 422.1 Minimum Plumbing Facilities – Delete Table in its entirety.
8. Amend Section 712.1 to read as follows: 712.1 Media. The piping of the plumbing, drainage and venting systems shall be tested with water or air ~~except that plastic piping shall not be tested with air~~. The authority Having Jurisdiction shall be permitted to require the removal of cleanouts, etc., to ascertain whether the pressure has reached all parts of the system. After the plumbing fixtures have been set and their traps filled with water, they shall be submitted to final test.
9. Amend Section 723.1 to read as follows: 723.1 General. Building sewers shall be tested by plugging the end of the building sewer at its points of connection with the public sewer or private sewage disposal system and completely filling the building sewer with water from the lowest to highest point thereof, or by approved equivalent low-pressure air test. ~~Plastic DWV piping systems shall not be tested by the air test method.~~ The building sewer shall be watertight.
10. Amend Section 1107.2 to read as follows: 1107.2 Methods of Testing Storm Drainage Systems. Except for outside leaders and perforated or open-jointed drain tile, the piping of storm drain systems shall be tested upon completion of the rough piping installation by water or air, ~~except~~

~~that plastic pipe shall not be tested with air~~, and proved tight. The Authority Having Jurisdiction shall be permitted to require the removal of cleanout plugs to ascertain whether the pressure has reached parts of the system. One of the following test methods shall be used in accordance with Section 1109.2.1 through Section 1109.2.3.

11. Section 1202.1 Installation - Add the following
Whenever there is a conflict between this code and NFPA 54 and NFPA 58 as adopted by the Nevada LP-Gas Board for LP-Gas installations, the adopted codes of the Nevada LP-Gas Board shall govern
12. Delete Chapter 14 as follows: Chapter 14 Firestop Protection

15.04.060 National Electric Code.

Amendments.

1. There are added to the schedule of fees as set out in Section 80.19 (E) of the 2011 Edition of the National Electric Code the following fees:
 - (a) Issuance fee of \$51.75 will be assess for each electrical permit issued.
 - (b) Residential solar systems shall be assessed the following fees:
 1. Panels - \$3.00 each
 2. Inverters - \$11.00 each
 3. Miscellaneous Equipment & Conduits - \$11.00
 4. Issuance fee of \$20.00
 - (c) For temporary electric service \$25.00
 - (d) Plan review fees, investigative fees and fee refunds shall be as set in 15.04.010(C)2(a)(b)(c)(d) of this ordinance
2. Article 210.52(A)(2) Wall Spacing
Add the following exceptions:
Exception No. 1: The space behind operable doors
Exception No. 2: Vestibules, hallways, and similar areas less than 5 ft wide in bedrooms
3. Article 225.32 Locaton – Add new exception
Exception 5: The disconnecting means may be located independent of the building or structure served, in direct line of sight, but not to exceed thirty feet (30')
4. Article 230.2, Services of the National Electric Code is amended to read as follows:
 - (a) A residential building or structure, individual parcel or lot of land, shall be supplied by only one service
5. Article 230.70(A)(1) of the National Electric Code is amended to read as follows:
 - (a) The service disconnection means shall be installed outside of a building or other structure at a readily accessible location 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 feet (30').
~~Exception: The service disconnect 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 finished grade at a location approved by the fire department. All shunt trip switches shall be located within a twelve inch (12") equilateral triangle, red in color.~~
6. Amend Section 240.51(B) of Section 240.51 Edison-Base Fuses to read: 240.51(B) Replacement Only. Plug fuses of the Edison-base type shall be used only for replacements in existing installations where there is no evidence of overfusing or tampering. In any existing building where alterations or additions are made to any of the premises wiring, all fuse holders shall comply with Article 240.54.

7. Amend Section 250.118(4) of Section 250.118 Types of Equipment Grounding Conductors to read as follows:
 250.118 Types of Equipment Grounding Conductors (4) Electrical metallic tubing with the exception of where the metallic raceway is subject to either damage or likely to be disturbed in the future under normal operating conditions, this determination shall be made by the Authority Having Jurisdiction.
FPN: An example of "subject to damage" is a surface installed conduit running along a traffic path. An example of "likely to be disturbed" is a surface installed conduit running across a rooftop, where future re-roofing operations will require the conduit to be shifted, damaged, removed or relocated.
8. Amend Section 250.120 to read as follows:
 250.120 Equipment Grounding Conductor Installation. ~~An equipment grounding conductor shall be installed in accordance with 250.120(A), (B), and (C).~~ All raceways installed on roofs shall contain an equipment grounding conductor sized per Table 250.122 installed with the circuit conductors.
Exception: Low voltage, communication and similar type systems unless required elsewhere in the Code.
9. Amend Section 358.12 to read as follows:
 358.12 Uses Not Permitted. EMT shall not be used under the following conditions:
 (1) Where subject to severe physical damage.
 (2) For the support of luminaires or other equipment except conduit bodies no larger than the largest trade size of the tubing.
(3) In direct contact with earth.
10. 700.10(D) Fire Protection Amend Section 700.10(D) of Section 700.10 Wiring, Emergency System to read as follows:
 700.10(D) Fire Protection. Emergency systems shall meet the additional requirements in (D)(1) through (D)(3) in the following occupancies:
 (1) Assembly occupancies for not less than 1000 persons
 (2) Buildings above ~~23 m (75 ft)~~ 55 ft in height
 (3) Health care occupancies where persons are not capable of self-preservation.
 (4) Educational occupancies with more than 300 occupants
11. 700.12 General Requirements Amend Section 700.12 to read as follows:
 700.12 General Requirements. Current supply shall be such that, in the event of failure of the normal supply to, or within, the building or group of buildings concerned, emergency lighting, emergency power, or both shall be available within the time required for the application but not to exceed 10 seconds. The supply system for emergency purposes, in addition to the normal services to the building and meeting the general requirements of this section, shall be one or more of the types of systems described in 700.12(A) through (E). Unit equipment in accordance with 700.12(F) shall satisfy the applicable requirements of this article.
 In selecting an emergency source of power, consideration shall be given to the occupancy and the type of service to be rendered, whether of minimum duration, as for evacuation of a theater, or longer duration, as for supplying emergency power and lighting due to an indefinite period of current failure from trouble either inside or outside the building.
 Equipment shall be designed and located so as to minimize the hazards that might cause complete failure due to flooding, fires, icing, and vandalism.
 Equipment for sources of power as described in 700.12(A) through (E) shall be installed either in spaces fully protected by approved automatic fire suppression systems (sprinklers, carbon dioxide systems, and so forth) or in spaces with a ~~4-hour~~ 2-hour fire rating where located within the following:
 (1) Assembly occupancies for more than 1000 persons.
 (2) Buildings above ~~23 m (75 ft)~~ 55 feet in height with any of the following occupancy classes- assembly, educational, residential, detention and correctional, business, and mercantile
 (3) Health care occupancies where persons are not capable of self-preservation
 (4) Educational occupancies with more than 300 occupants

15.04.110 International Energy Conservation Code

Amendments

1. Exclude all references to International Residential Code (Mechanical) Chapters 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, and Appendices B, C & D and replace with ~~2018~~ 2018 Uniform Mechanical Code.
2. Exclude all references to International Residential Code (Plumbing) Chapters 24, 25, 26, 27, 28, 29, 30, 31, 32, ~~33~~ and Appendices A, I and N and replace with 2018 Uniform Plumbing Code.
3. Section 101.4.3 Additions, alterations, renovations or repairs. – Add the following exception:
 9. Relocations only of existing luminaries within an existing area enclosed by walls or floor to ceiling partitions.
4. Section 202 Definitions – Amend Section to include the following definitions.

Casino. A business with a Non-restricted Gaming License from the Nevada Gaming Commission and State Gaming Control Board. It includes the gaming area(s) as well as the adjacent areas within the building envelope.

Casino Gaming Area. The space within a casino wherein gaming is conducted. The area shall also include accessory uses within the same room(s) as, or substantially open to the gaming floor(s). Such areas shall include, but not be limited to lobbies, balconies, public circulation areas, assembly areas, restaurants, bars, lounges, food courts, retail spaces, mezzanines, convention pre-function areas, cashiers' cages, player's clubs, customer support, conservatories and promenades that share the same atmosphere, spillover lighting and theme lighting with the adjacent gaming floor area.

Occupant Sensor (Lighting). A device that detects the presence or absence of people within an area and causes lighting to be regulated accordingly. The term "occupant sensor" applies to a device that controls indoor lighting systems.

Motion Sensor (Lighting). A device used to control outdoor lighting system.
5. Section 303.1.3 Fenestration and product rating – Add two new subsections and amend Section 303.1.3 as follows:

U-factors of fenestration products (windows, doors and skylights) shall be determined in accordance with NFRC 100 by an accredited, independent laboratory, and labeled and certified by the manufacturer. Products lacking such a labeled U-factor shall be assigned a default U-Factor from Tables 303.1.2(1) or 303.1.3(2) or ASHRAE 90.1 Tables A-8.1 A and B or Table 8.2. The solar heat gain coefficient (SHGC) of glazed fenestration products (windows, glazed doors and skylights) shall be determined in accordance with NFRC 200 by an accredited, independent laboratory, and labeled and certified by the manufacturer. Products lacking such a labeled U-factor shall be assigned a default U-factor from Tables 303.1.3(1) or 303.1.3(2) or ASHRAE 90.1 Table A-8.1 B or Table 8.2.
6. Section 403 Systems – Amend as follows:

Section 403.2.2 - Sealing (Mandatory). Postpone the enforcement of mandatory duct testing requirements of Section 403.2.2(1)(2) indefinitely.
7. Section 403.6 – Equipment Sizing (Mandatory) amend as follows:

Heating and cooling equipment shall be sized in accordance with ACCA Manual S based on building load calculated in accordance with ACCA Manual J or other approved heating and cooling calculations methodologies.
8. Section 405.6.1(2) Minimum capabilities – Calculation of whole-building (as a single zone) sizing for the heating and cooling equipment in the standard reference design residence in accordance with ACCA Manual S based on building loads calculated in accordance with ACCA Manual J or other approved heating and cooling calculation methodologies

9. Section 505.5.1 Total connected interior lighting power. Amend exception 7 and add new exception as follows:
 7. Advertising signage or directional signage, including signage for business identification or promotion, location maps and directories and sports scoreboards.
 15. Theme elements in theme/amusement parks and casinos.
10. Section 505.6.2 Exterior building lighting power – Amend exception 2 & 8 as follows:
 2. Advertising signage or directional signage, including signage for business identification and promotion, location maps and directories and sports scoreboards;
 8. Theme elements in theme/amusement parks and casinos;
11. Chapter 6 Referenced Standards

ACCA Air Conditioning Contractors of America
 2800 Shirlington Road, Suite 300
 Arlington, VA 22206

Standard Reference Number	Title	Referenced in code section number
Manual D-95	Residential Duct Systems	
Manual J-02	Residential Load Calculations Eight Addition	403.6
Manual S	Residential Equipment Section	