

Item # 18

**City of Carson City  
Agenda Report**

**Date Submitted:** September 8, 2009

**Agenda Date Requested:** September 17, 2009

**Time Requested:** 10 minutes

**To:** Mayor and Board of Supervisors

**From:** Public Works-Building Division

**Subject Title:** Action to adopt Bill No. 122 on second reading, an ordinance amending the Carson City Municipal Code Title 15, Buildings and Construction, Chapter 15.05, Building Code, Section 15.05.020, Adoption and administration of Building and Construction Codes, by repealing the adoption of Sections 1214.3, 1214.3.1, 1214.3.2 and 1214.3.3 of the 2007 Northern Nevada Amendments. (Kevin Gattis)

**Staff Summary:** The proposed language would eliminate current amendments in the 2007 Northern Nevada Amendments that pertain to "Test Pressure" requirements for gas piping and gas appliances. The current amendments conflict with the local gas suppliers requirements related to gas co. equipment and devices.

**Type of Action Requested:**

Resolution

Ordinance

Formal Action/Motion

Other (Specify)

**Does This Action Require A Business Impact Statement:**  Yes  No

**Recommended Board Action:** I move to adopt Bill No. 122 on second reading, an ordinance amending the Carson City Municipal Code Title 15, Buildings and Construction, Chapter 15.05, Building Code, Section 15.05.020, Adoption and administration of Building and Construction Codes, by repealing the adoption of Sections 1214.3, 1214.3.1, 1214.3.2 and 1214.3.3 of the 2007 Northern Nevada Amendments.

**Explanation for Recommended Board Action:** The Board of Supervisors, pursuant to Carson City Municipal Code, is required to take action on all code amendments.

**Applicable Statute, Code, Policy, Rule or Regulation:** CCMC Title 15

**Fiscal Impact:** N/A

**Explanation of Impact:** N/A

**Funding Source:** N/A

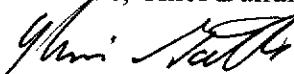
**Alternatives:** 1) Refer the matter back to the Building Division for further review, or  
2) Deny

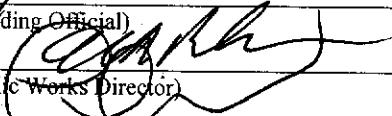
**Supporting Material:** 1) 2007 Northern Nevada Amendment Package, Sections 1214.3, 1214.3.1, 1214.3.2 and 1214.3.3.

2) CCMC 15.05.020

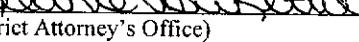
**Prepared By:** Kevin Gattis, Chief Building Official

**Reviewed By:**

  
(Building Official)

  
(Public Works Director)

  
(City Manager)

  
(District Attorney's Office)

Date: 9-4-09

Date: 9-8-09

Date: 9-8-09

Date: 9-8-09

**Board Action Taken:**

Motion: \_\_\_\_\_ 1) \_\_\_\_\_ Aye/Nay  
2) \_\_\_\_\_

\_\_\_\_\_  
(Vote Recorded By)

ORDINANCE NO. \_\_\_\_\_

BILL NO. 122

AN ORDINANCE AMENDING TITLE 15, BUILDINGS  
AND CONSTRUCTION, CHAPTER 15.05, BUILDING  
CODE, SECTION 15.05.020, ADOPTION AND  
ADMINISTRATION OF BUILDING AND CONSTRUCTION  
CODES, BY DECREASING CONNECTION CHARGES;  
AND OTHER MATTERS PROPERLY RELATED THERETO.

THE BOARD OF SUPERVISORS OF CARSON CITY DO ORDAIN:

SECTION I:

That Section 15.05.020 of the Carson City Municipal Code is hereby amended as follows:

**15.05.020 Adoption and administration of Building and Construction Codes.**

TABLE INSET:

100	Adopted Codes
101	General
102	Applicability
103	Department of Building Safety
104	Duties and Powers of Building Official
105	Permits
106	Construction Documents
107	Temporary Structures and Uses
108	Fees
109	Inspections
110	Certificate of Occupancy
111	Service Utilities
112	Board of Appeals
113	Violations
114	Stop Work Order
115	Unsafe Structures and Equipment

116	Workmanship and Fabrication
117	Moving and Demolition

Carson City hereby adopts the following codes and appendices and the amended administrative provision from the International Building Code which are applicable to all of the adopted codes as follows:

## SECTION 100 - ADOPTED CODES

100.10 Adopted codes. The following nationally recognized codes are hereby adopted by Carson City, together with the supplements, listed changes, additions and deletions as noted below:

1. 2006 Edition, International Building Code ("IBC"), chapters 2 through 34 and Appendices C, E, G, H, I and J as amended.
2. 2006 Edition, Uniform Plumbing Code ("UPC"), chapters 2 through 16 and IAPMO Installation Standards and Appendices A, B, D, E, G, H, I, J, K and L.
3. 2006 Edition, International Residential Code ("IRC"), chapters 2 through 42 and Appendices A, B, C, G, H, J, K, and L as amended.
4. 2006 Edition, Uniform Mechanical Code ("UMC"), chapters 2 through 17 and Appendices A, B and C as amended.
5. 2005 Edition, National Electrical Code ("NEC"), and Administrative Section, Article 80.
6. 2006 Edition, International Energy Conservation Code, ("IECC").
7. 2006 International Property Maintenance Code, ("IPMC").
8. 2006 International Existing Building Code, ("IEBC").
9. 2007 Northern Nevada Amendments – except Sections 1214.3, 1214.3.1, 1214.3.2, and 1214.3.3.

100.20 Definition of words and terms. As used in the adopted codes and sections 100.010 to 116.10, inclusive, of the Carson City Code.

1. "Jurisdiction" and other similar terms shall be construed to mean Carson City.

## SECTION 101 - GENERAL

101.1 Title. These regulations shall be known as the Building Code of Carson City, hereinafter referred to as "this code."

Any duty created by this code or based on this code runs to the public, and no private cause of action is created by a breach of such duty. No document, certificate, inspection or approval given pursuant to this code may be construed to be a representation or warranty of any kind, including without limitation a representation or warranty that a building or structure is complete, that it is in compliance with this code or any other law, that it was inspected, that it is safe or ready for occupancy or that it meets any particular degree of quality of workmanship. The amount and quality of inspection and other services provided is discretionary with the building official and may vary in response to the amount of staff, their work load, training and experience, funding

and other pertinent factors affecting whether and how inspection is made or whether any hazard, deficiency or similar matter is observed.

**101.2 Scope.** The provisions of this code shall apply to the construction, alteration, movement, enlargement, replacement, repair, equipment, use and occupancy, location, maintenance, removal and demolition of every building or structure or any appurtenances connected or attached to such buildings or structures.

**Exception:** Detached one- and two-family dwellings and multiple single-family dwellings (townhouses) not more than three stories above grade plane in height with a separate means of egress and their accessory structures shall comply with the International Residential Code.

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

**101.3 Intent.** The purpose of this code is to establish the minimum requirements to safeguard the public health, safety and general welfare through structural strength, means of egress facilities, stability, sanitation, adequate light and ventilation, energy conservation, and safety to life and property from fire and other hazards attributed to the built environment and to provide safety to fire fighters and emergency responders during emergency operations.

**101.4 Referenced codes.** The other codes listed in Sections 101.4.1 through 101.4.7 and referenced elsewhere in this code shall be considered part of the requirements of this code to the prescribed extent of each such reference.

**101.4.1 Electrical.** The provisions of the ICC Electrical Code shall apply to the installation of electrical systems, including alterations, repairs, replacement, equipment, appliances, fixtures, fittings and appurtenances thereto.

**101.4.5 Property maintenance.** The provisions of the International Property Maintenance Code shall apply to existing structures and premises; equipment and facilities; light, ventilation, space heating, sanitation, life and fire safety hazards; responsibilities of owners, operators and occupants; and occupancy of existing premises and structures.

**101.4.6 Fire prevention.** The provisions of the International Fire Code shall apply to matters affecting or relating to structures, processes and premises from the hazard of fire and explosion arising from the storage, handling or use of structures, materials or devices; from conditions hazardous to life, property or public welfare in the occupancy of structures or premises; and from the construction, extension, repair, alteration or removal of fire suppression and alarm systems or fire hazards in the structure or on the premises from occupancy or operation.

**101.4.7 Energy.** The provisions of the International Energy Conservation Code shall apply to all matters governing the design and construction of buildings for energy efficiency.

## **SECTION 102 - APPLICABILITY**

102.1 General. Where, in any specific case, different sections of this code specify different materials, methods of construction or other requirements, the most restrictive shall govern. Where there is a conflict between a general requirement and a specific requirement, the specific requirement shall be applicable.

102.2 Other laws. The provisions of this code shall not be deemed to nullify any provisions of local, state or federal law.

102.3 Application of references. References to chapter or section numbers, or to provisions not specifically identified by number, shall be construed to refer to such chapter, section or provision of this code.

102.4 Referenced codes and standards. The codes and standards referenced in this code shall be considered part of the requirements of this code to the prescribed extent of each such reference. Where differences occur between provisions of this code and referenced codes and standards, the provisions of this code shall apply.

102.5 Partial invalidity. In the event that any part or provision of this code is held to be illegal or void, this shall not have the effect of making void or illegal any of the other parts or provisions.

102.6 Existing structures. The legal occupancy of any structure existing on the date of adoption of this code shall be permitted to continue without change, except as is specifically covered in this code, the International Property Maintenance Code or the International Fire Code, or as is deemed necessary by the building official for the general safety and welfare of the occupants and the public.

## **SECTION 103 - BUILDING DIVISION**

103.1 Creation of enforcement agency. The Building Division is hereby created and the official in charge thereof shall be known as the building official.

103.2 Appointment. The building official shall be appointed by the chief appointing authority of the jurisdiction.

103.3 Deputies. In accordance with the prescribed procedures of this jurisdiction and with the concurrence of the appointing authority, the building official shall have the authority to appoint a deputy building official, the related technical officers, inspectors, plan examiners and other employees. Such employees shall have powers as delegated by the building official.

## **SECTION 104 - DUTIES AND POWERS OF BUILDING OFFICIAL**

104.1 General. The building official is hereby authorized and directed to enforce the provisions of this code. For such purposes, the building official shall have the power to issue citations. The building official shall have the authority to render interpretations of this code and to adopt policies and procedures in order to clarify the application of its provisions. Such interpretations, policies and procedures shall be in compliance with the intent and purpose of this code. Such

policies and procedures shall not have the effect of waiving requirements specifically provided for in this code.

104.2 Applications and permits. The building official shall receive applications, review construction documents and issue permits for the erection, and alteration, demolition and moving of buildings and structures, inspect the premises for which such permits have been issued and enforce compliance with the provisions of this code.

104.3 Notices and orders. The building official shall issue all necessary notices or orders to ensure compliance with this code.

104.4 Inspections. The building official shall make all of the required inspections, or the building official shall have the authority to accept reports of inspection by approved agencies or individuals. Reports of such inspections shall be in writing and be certified by a responsible officer of such approved agency or by the responsible individual. The building official is authorized to engage such expert opinion as deemed necessary to report upon unusual technical issues that arise, subject to the approval of the appointing authority.

104.5 Identification. The building official shall carry proper identification when inspecting structures or premises in the performance of duties under this code.

104.6 Right of entry. Where it is necessary to make an inspection to enforce the provisions of this code, or where the building official has reasonable cause to believe that there exists in a structure or upon a premises a condition which is contrary to or in violation of this code which makes the structure or premises unsafe, dangerous or hazardous, the building official is authorized to enter the structure or premises at reasonable times to inspect or to perform the duties imposed by this code, provided that if such structure or premises be occupied that credentials be presented to the occupant and entry requested. If such structure or premises is unoccupied, the building official shall first make a reasonable effort to locate the owner or other person having charge or control of the structure or premises and request entry. If entry is refused, the building official shall have recourse to the remedies provided by law to secure entry.

104.7 Department records. The building official shall keep official records of applications received, permits and certificates issued, fees collected, reports of inspections, and notices and orders issued. Such records shall be retained in the official records for the period required for retention of public records.

104.8 Liability. The building official, member of the board of appeals or employee charged with the enforcement of this code, while acting for the jurisdiction in good faith and without malice in the discharge of the duties required by this code or other pertinent law or ordinance, shall not thereby be rendered liable personally and is hereby relieved from personal liability for any damage accruing to persons or property as a result of any act or by reason of an act or omission in the discharge of official duties. Any suit instituted against an officer or employee because of an act performed by that officer or employee in the lawful discharge of duties and under the provisions of this code shall be defended by legal representative of the jurisdiction until the final termination of the proceedings. The building official or any subordinate shall not be liable for

cost in any action, suit, or proceeding that is instituted in pursuance of the provisions of this code.

104.9 Approved materials and equipment. Materials, equipment and devices approved by the building official shall be constructed and installed in accordance with such approval.

104.9.1 Used materials and equipment. The use of used materials which meet the requirements of this code for new materials is permitted. Used equipment and devices shall not be reused unless approved by the building official.

104.10 Modifications. Wherever there are practical difficulties involved in carrying out the provisions of this code, the building official shall have the authority to grant modifications for individual cases, upon application of the owner or owner(s) representative, provided the building official shall first find that special individual reason makes the strict letter of this code impractical and the modification is in compliance with the intent and purpose of this code and that such modification does not lessen health, accessibility, life and fire safety, or structural requirements. The details of action granting modifications shall be recorded and entered in the files of the department of building safety.

104.11 Alternative materials, design and methods of construction and equipment. The provisions of this code are not intended to prevent the installation of any material or to prohibit any design or method of construction not specifically prescribed by this code, provided that any such alternative has been approved. An alternative material, design or method of construction shall be approved where the building official 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, at least the equivalent of that prescribed in this code in quality, strength, effectiveness, fire resistance, durability and safety.

104.11.1 Research reports. Supporting data, where necessary to assist in the approval of materials or assemblies not specifically provided for in this code, shall consist of valid research reports from approved sources.

104.11.2 Tests. Whenever there is insufficient evidence of compliance with the provisions of this code, or evidence that a material or method does not conform to the requirements of this code, or in order to substantiate claims for alternative materials or methods, the building official shall have the authority to require tests as evidence of compliance to be made at no expense to the jurisdiction. Test methods shall be as specified in this code or by other recognized test standards. In the absence of recognized and accepted test methods, the building official shall approve the testing procedures. Tests shall be performed by an approved agency. Reports of such tests shall be retained by the building official for the period required for retention of public records.

## **SECTION 105 - PERMITS**

105.1 Required. Any owner or authorized agent who intends to construct, enlarge, alter, repair, move, demolish, or change the occupancy of a building or structure, or to erect, install, enlarge, alter, repair, remove, convert or replace any electrical, gas, mechanical or plumbing system, the

installation of which is regulated by this code, or to cause any such work to be done, shall first make application to the building official and obtain the required permit.

Permits for commercial buildings shall be issued only to persons in conformance with Nevada State Contractors law.

105.1.1 Annual permit. In lieu of an individual permit for each alteration to an already approved electrical, gas, mechanical or plumbing installation, the building official is authorized to issue an annual permit upon application therefore to any person, firm or corporation regularly employing one or more qualified trade persons in the building, structure or on the premises owned or operated by the applicant for the permit.

105.1.2 Annual permit records. The person to whom an annual permit is issued shall keep a detailed record of alterations made under such annual permit. The building official shall have access to such records at all times or such records shall be filed with the building official as designated.

105.2 Work exempt from permit. Exemptions from permit requirements of this code shall not be deemed to grant authorization for any work to be done in any manner in violation of the provisions of this code or any other laws or ordinances of this jurisdiction. Permits shall not be required for the following:

Building:

1. One-story detached accessory structures used as tool and storage sheds, playhouses and similar uses, provided the floor area does not exceed 120 square feet (11 m<sup>2</sup>).
2. Fences not over 6 feet (1829) high.
3. Oil derricks.
4. Retaining walls that are not over 4 feet (1219 mm) in height measured from the bottom of the footing to the top of the wall, unless supporting a surcharge or impounding Class I, II or IIIA liquids.
5. Water tanks supported directly on grade if the capacity does not exceed 5,000 gallons (18 925 L) and the ratio of height to diameter or width does not exceed 2:1.
6. Patios, decks, sidewalks and driveways not more than 30 inches (762 mm) above adjacent grade, and not over any basement or story below and are not part of an accessible route.
7. Painting, papering, tiling, carpeting, cabinets, counter tops and similar finish work.
8. Temporary motion picture, television and theater stage sets and scenery.
9. Prefabricated swimming pools accessory to a Group R-3 occupancy that are less than 24 inches (610 mm) deep, do not exceed 5,000 gallons (18 925 L) and are installed entirely above ground.
10. Shade cloth structures constructed for nursery or agricultural purposes, not including service systems.
11. Swings and other playground equipment accessory to detached one- and two-family dwellings.

12. Window awnings supported by an exterior wall that do not project more than 54 inches (1372 mm) from the exterior wall and do not require additional support of Group R-3 and U occupancies.
13. Nonfixed and movable fixtures, cases, racks, counters and partitions not over 5 feet 9 inches (1753 mm) in height.
14. Roofing repair if the roof is less than 100 square feet.
15. Door and window replacement when the opening size and location remain the same.

**Electrical:**

**Repairs and maintenance:** Minor repair work, including the replacement of lamps or the connection of approved portable electrical equipment to approved permanently installed receptacles.

**Radio and television transmitting stations:** The provisions of this code shall not apply to electrical equipment used for radio and television transmissions, but do apply to equipment and wiring for a power supply and the installations of towers and antennas.

**Temporary testing systems:** A permit shall not be required for the installation of any temporary system required for the testing or servicing of electrical equipment or apparatus.

**Gas:**

1. Portable heating appliance.
2. Replacement of any minor part that does not alter approval of equipment or make such equipment unsafe.

**Mechanical:**

1. Portable heating appliance.
2. Portable ventilation equipment.
3. Portable cooling unit.
4. Steam, hot or chilled water piping within any heating or cooling equipment regulated by this code.
5. Replacement of any part that does not alter its approval or make it unsafe.
6. Portable evaporative cooler.
7. Self-contained refrigeration system containing 10 pounds (5 kg) or less of refrigerant and actuated by motors of 1 horsepower (746 W) or less.

**Plumbing:**

1. The stopping of leaks in drains, water, soil, waste or vent pipe, provided, however, that if any concealed trap, drain pipe, water, soil, waste or vent pipe becomes defective and it becomes necessary to remove and replace the same with new material, such work shall be considered as new work and a permit shall be obtained and inspection made as provided in this code.

2. The clearing of stoppages or the repairing of leaks in pipes, valves or fixtures and the removal and reinstallation of water closets, provided such repairs do not involve or require the replacement or rearrangement of valves, pipes or fixtures.

105.2.1 Emergency repairs. Where equipment replacements and repairs must be performed in an emergency situation, the permit application shall be submitted within the next working business day to the building official.

105.2.2 Repairs. Application or notice to the building official is not required for ordinary repairs to structures, replacement of lamps or the connection of approved portable electrical equipment to approved permanently installed receptacles. Such repairs shall not include the cutting away of any wall, partition or portion thereof, the removal or cutting of any structural beam or load-bearing support, or the removal or change of any required means of egress, or rearrangement of parts of a structure affecting the egress requirements; nor shall ordinary repairs include addition to, alteration of, replacement or relocation of any standpipe, water supply, sewer, drainage, drain leader, gas, soil, waste, vent or similar piping, electric wiring or mechanical or other work affecting public health or general safety.

105.2.3 Public service agencies. A permit shall not be required for the installation, alteration or repair of generation, transmission, distribution or metering or other related equipment that is under the ownership and control of public service agencies by established right.

105.3 Application for permit. To obtain a permit, the applicant shall first file an application therefore in writing on a form furnished by the building division for that purpose. Such application shall:

1. Identify and describe the work to be covered by the permit for which application is made.
2. Describe the land on which the proposed work is to be done by legal description, street address or similar description that will readily identify and definitely locate the proposed building or work.
3. Indicate the use and occupancy for which the proposed work is intended.
4. Be accompanied by construction documents and other information as required in Section 106.
5. State the valuation of the proposed work.
6. Be signed by the applicant, or the applicant's authorized agent.
7. Give such other data and information as required by the building official.
8. Prior to issuance of a permit to move or demolish a building or structure, a minimum \$5,000.00 bond shall be posted to guarantee full compliance with all terms and conditions as specified on the application.
9. Exception: With approval of the building official, small structures that don't pose a hazard may be demolished without posting a bond.

105.3.1 Action on application. The building official shall examine or cause to be examined applications for permits and amendments thereto within a reasonable time after filing. If the application or the construction documents do not conform to the requirements of pertinent laws, the building official shall reject such application in writing, stating the reasons therefore. If the building official is satisfied that the proposed work conforms to the requirements of this code

and laws and ordinances applicable thereto, the building official shall issue a permit therefore as soon as practicable.

105.3.2 Time limitation of application. 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 frame for action by the applicant for a period not exceeding 180 days on request by the applicant showing that 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.

105.4 Validity of permit. The issuance or granting of a permit shall not be construed to be a permit for, or an approval of, any violation of any of the provisions of this code or of any other ordinance of the jurisdiction. Permits presuming to give authority to violate or cancel the provisions of this code or other ordinances of the jurisdiction shall not be valid. The issuance of a permit based on construction documents and other data shall not prevent the building official from requiring the correction of errors in the construction documents and other data. The building official is also authorized to prevent occupancy or use of a structure where in violation of this code or of any other ordinances of this jurisdiction.

105.5 Expiration. Every permit issued shall become invalid unless the work on the site authorized by such permit is commenced within 180 days after its issuance, or if the work authorized on the site by such permit is suspended or abandoned for a period of 180 days after the time the work is commenced. In order to renew action on a permit after expiration, the permittee shall pay a new full permit fee.

Any permittee holding an unexpired permit may apply for an extension of the time within which work may commence under that permit when the permittee is unable to commence work within the time required by this section for good and satisfactory reasons. The building official may extend the time for action by the permittee for a period not exceeding 180 days on written request by the permittee showing that circumstances beyond the control of the permittee have prevented action from being taken. No permit shall be extended more than once.

All permits issued by the building official under the provisions of this code expire by limitation and become null and void 18 months after the date of issuance. Any permittee holding an unexpired permit may apply for one 18-month extension when the permittee is unable to complete the permitted work within 18 months of permit issuance. No permit shall be extended more than once.

Exception: Permits of a minor nature (ex. Re-roofing, FAU change out, water heaters, electrical service changes, etc.) expire by limitation and become null and void 6 months after the date of issuance.

105.6 Suspension or revocation. The building official is authorized to suspend or revoke a permit issued under the provisions of this code wherever the permit is issued in error or on the basis of

incorrect, inaccurate or incomplete information, or in violation of any ordinance or regulation or any of the provisions of this code.

105.7 Placement of permit. The building permit or copy shall be kept on the site of the work until the completion of the project.

105.8 Essential Off-Site and On-Site Improvements--Add as new section:

Before a building permit shall be issued, provisions shall be made for the installation of essential off-site improvements in the public right-of-way immediately adjacent to the property on which the permit applied for is applicable if such provisions are required by Section 11.12.081 of the Carson City Municipal Code. The building official may require that the general contractor take out all permits required for essential on-site and off-site improvements and that such permits are to be issued at the same time that the building permit is issued.

Such installation of essential improvements shall be completed before the occupancy of the improvement for which the permit was issued.

## **SECTION 106 - CONSTRUCTION DOCUMENTS**

106.1 Submittal documents.

Construction documents, statement of special inspections and other data shall be submitted in one or more sets with each permit application. Revisions or additions to plans shall be made on the original drawings and new copies submitted. The construction documents shall be prepared by a registered design professional where required by the statutes of the jurisdiction in which the project is to be constructed. If the building official deems it necessary, plans, computations and specifications may be required to be prepared and designed by an engineer or architect licensed or registered by the state of Nevada to practice as such. Submittals shall include construction inspection requirements as defined in Sections 106.3.4.1 and 109.3.9. Where special conditions exist, the building official is authorized to require additional construction documents to be prepared by a registered design professional.

The roof snow load for sites above 5,000 feet elevation is considered as exceeding the tables of limitation for wood-frame construction, and shall be designed in accordance with accepted engineering practice.

Exception: The building official is authorized to waive the submission of construction documents and other data not required to be prepared by a registered design professional if it is found that the nature of the work applied for is such that review of construction documents is not necessary to obtain compliance with this code.

106.1.1 Information on construction documents. Construction documents shall be dimensioned and drawn upon suitable material. Electronic media documents are permitted to be submitted when approved by the building official. Construction documents shall be of sufficient clarity to indicate the location, nature and extent of the work proposed and show in detail that it will conform to the provisions of this code and relevant laws, ordinances, rules and regulations, as determined by the building official. All plans shall be black line or blue line. Minimum paper size shall be 11 x 17 unless approved by the building official.

106.1.1.1 Fire protection system shop drawings. Shop drawings for the fire protection system(s) shall be submitted to indicate conformance with this code and the construction documents and shall be approved prior to the start of system installation. Shop drawings shall contain all information as required by the referenced installation standards in Chapter 9.

106.1.2 Means of egress. The construction documents shall show in sufficient detail the location, construction, size and character of all portions of the means of egress in compliance with the provisions of this code. In other than occupancies in Groups R-2, R-3, and I-1, the construction documents shall designate the number of occupants to be accommodated on every floor, and in all rooms and spaces.

106.1.3 Exterior wall envelope. Construction documents for all buildings shall describe the exterior wall envelope in sufficient detail to determine compliance with this code. The construction documents shall provide details of the exterior wall envelope as required, including flashing, intersections with dissimilar materials, corners, end details, control joints, intersections at roof, eaves or parapets, means of drainage, water-resistive membrane and details around openings. The construction documents shall include manufacturer's installation instructions that provide supporting documentation that the proposed penetration and opening details described in the construction documents maintain the weather resistance of the exterior wall envelope. The supporting documentation shall fully describe the exterior wall system that was tested, where applicable, as well as the test procedure used.

106.2 Site plan. The construction documents submitted with the application for permit shall be accompanied by a site plan showing to scale the size and location of new construction and existing structures on the site, distances from lot lines, the established street grades and the proposed finished grades and, as applicable, flood hazard areas, floodways, and design flood elevations; and it shall be drawn in accordance with an accurate boundary line survey. In the case of demolition, the site plan shall show construction to be demolished and the location and size of existing structures and construction that are to remain on the site or plot. The building official is authorized to waive or modify the requirement for a site plan when the application for permit is for alteration or repair or when otherwise warranted.

106.3 Examination of documents. The building official shall examine or cause to be examined the accompanying construction documents and shall ascertain by such examinations whether the construction indicated and described is in accordance with the requirements of this code and other pertinent laws or ordinances.

106.3.1 Approval of construction documents. When the building official issues a permit, the construction documents shall be approved, in writing or by stamp, as "Reviewed for Code Compliance." One set of construction documents so reviewed shall be retained by the building official. The other set shall be returned to the applicant, shall be kept at the site of work and shall be open to inspection by the building official or a duly authorized representative.

106.3.2 Previous approvals. This code shall not require changes in the construction documents, construction or designated occupancy of a structure for which a lawful permit has been heretofore issued or otherwise lawfully authorized, and the construction of which has been

pursued in good faith within 180 days after the effective date of this code and has not been abandoned.

106.3.3 Phased approval. The building official is authorized to issue a permit for the construction of foundations or any other part of a building or structure before the construction documents for the whole building or structure have been submitted, provided that adequate information and detailed statements have been filed complying with pertinent requirements of this code. The holder of such permit for the foundation or other parts of a building or structure shall proceed at the holder's own risk with the building operation and without assurance that a permit for the entire structure will be granted.

106.3.4 Design professional in responsible charge.

106.3.4.1 General. When it is required that documents be prepared by a registered design professional, the building official shall be authorized to require the owner to engage and designate on the building permit application a registered design professional who shall act as the registered design professional in responsible charge. If the circumstances require, the owner shall designate a substitute registered design professional in responsible charge who shall perform the duties required of the original registered design professional in responsible charge. The building official shall be notified in writing by the owner if the registered design professional in responsible charge is changed or is unable to continue to perform the duties.

The registered design professional in responsible charge shall be responsible for reviewing and coordinating submittal documents prepared by others, including phased and deferred submittal items, for compatibility with the design of the building.

Where structural observation is required by Section 1709, the statement of special inspections shall name the individual or firms who are to perform structural observation and describe the stages of construction at which structural observation is to occur (see also duties specified in Section 1704).

106.3.4.2 Deferred submittals. For the purposes of this section, deferred submittals are defined as those portions of the design that are not submitted at the time of the application and that are to be submitted to the building official within a specified period.

Deferral of any submittal items shall have the prior approval of the building official. The registered design professional in responsible charge shall list the deferred submittals on the construction documents for review by the building official.

Documents for deferred submittal items shall be submitted to the registered design professional in responsible charge who shall review them and forward them to the building official with a notation indicating that the deferred submittal documents have been reviewed and been found to be in general conformance to the design of the building. The deferred submittal items shall not be installed until the design and submittal documents have been approved by the building official.

106.4 Amended construction documents. Work shall be installed in accordance with the approved construction documents, and any changes made during construction that are not in compliance with the approved construction documents shall be resubmitted for approval as an amended set of construction documents.

106.5 Retention of construction documents. One set of approved construction documents shall be retained by the building official for a period of not less than 180 days from date of completion of the permitted work, or as required by state or local laws.

## **SECTION 107 - TEMPORARY STRUCTURES AND USES**

107.1 General. The building official is authorized to issue a permit for temporary structures and temporary uses. Such permits shall be limited as to time of service, but shall not be permitted for more than 180 days. The building official is authorized to grant extensions for demonstrated cause.

107.2 Conformance. Temporary structures and uses shall conform to the structural strength, fire safety, means of egress, accessibility, light, ventilation and sanitary requirements of this code as necessary to ensure public health, safety and general welfare.

107.3 Temporary power. The building official is authorized to give permission to temporarily supply and use power in part of an electric installation before such installation has been fully completed and the final certificate of completion has been issued. The part covered by the temporary certificate shall comply with the requirements specified for temporary lighting, heat or power in the ICC Electrical Code.

107.4 Termination of approval. The building official is authorized to terminate such permit for a temporary structure or use and to order the temporary structure or use to be discontinued.

## **SECTION 108 – FEES**

108.1 Payment of fees. A permit shall not be valid until the fees prescribed by law have been paid, nor shall an amendment to a permit be released until the additional fee, if any, has been paid.

108.2 Determination of permit fees.

1. Except as otherwise provided in this section the amount of the fee for the issuance of a permit shall be determined as follows:

- a. Except as otherwise provided in section 108.3, the Building Official shall estimate the total value of the project for which the permit is to be issued pursuant to the most recently published February version of the Building Valuation Data table, as published by the International Code Council in the publication "Building Safety Journal";
- b. The Building Official shall multiply the estimated total value of the project by:
  - a. For a residential project, .015; or
  - b. For a non-residential project; .01.

2. The amount of the fee for the issuance of a permit for residential construction project in which a standard plan will be used for more than one project in the same subdivision shall be determined as follows:

- a. For the first project to be constructed pursuant to the plan, pursuant to the method for determining the fee set forth in subsection 1; and
- b. For the second and each subsequent project to be constructed pursuant to the plan, multiplying the amount of fee determined pursuant to subsection 1 by eighty percent (80%).

3. Forty percent (40%) of the fee determined pursuant to this section shall be due upon the submission of the plan to the Building Official for plan review and processing. The remaining sixty percent (60%) of the fee determined pursuant to this section shall be due prior to the issuance of a permit.

4. The minimum permit fee shall be \$65.00.

5. If a project requires inspection outside the time of ordinary business hours, reinspection pursuant to the provisions of Section 109.7, an inspection for which no fee is otherwise specified, additional plan review required by changes, additions or revisions to plans or the use of outside consultations for plan review or inspection, the fee for such services shall be determined pursuant to the following schedule:

TABLE INSET:

OTHER INSPECTIONS	FEES
<b>1. Inspection outside of normal business hours (Minimum charge--two hours)</b>	<b>\$65.00 per hour*</b>
<b>2. Reinspection fees assessed under provisions of Section 109.7</b>	<b>\$65.00 per hour*</b>
<b>3. Inspections for which no fee is specifically indicated (Minimum charge--one-half hour)</b>	<b>\$65.00 per hour*</b>
<b>4. Additional plan review required by changes, additions or revisions to plans (Minimum charge--one-half hour)</b>	<b>\$65.00 per hour*</b>
<b>5. For use of outside consultants for plan checking and inspections, or both actual costs**</b>	

\* Or the total hourly cost to the jurisdiction, whichever is the greatest. This cost shall include supervision, overhead, equipment, hourly wages and fringe benefits of the employees involved.

\*\* Actual costs include administrative and overhead costs.

6. The fee for the review of a grading plan and the fee for the issuance of a grading permit shall be determined pursuant to the following schedule:

## GRADING PLAN REVIEW FEES 1

TABLE INSET:

50 cubic yards (38.2 m <sup>3</sup> ) or less	No fee
51 to 100 cubic yards (40 to 76.5 m <sup>3</sup> )	\$23.50
101 to 1,000 cubic yards (77.2 to 764.6 m <sup>3</sup> )	\$37.00
1,001 to 10,000 cubic yards (765.3 to 7,645.5 m <sup>3</sup> )	\$49.25
10,001 to 100,000 cubic yards (7,646.3 to 76,455 m <sup>3</sup> )	\$49.25 for the first 10,000 cubic yards (7,645.5 m <sup>3</sup> ), plus \$24.50 for each additional 10,000 cubic yards (7,645.5 m <sup>3</sup> ) or fraction thereof
100,001 to 200,000 cubic yards (76,456 to 152,911 m <sup>3</sup> )	\$269.75 for the first 100,000 cubic yards (76,455 m <sup>3</sup> ), plus \$13.25 for each additional 10,000 cubic yards (7,645.5 m <sup>3</sup> ) or fraction thereof
200,001 cubic yards (152,912 m <sup>3</sup> ) or more	\$402.25 for the first 200,000 cubic yards (152,911 m <sup>3</sup> ), plus \$7.25 for each additional 10,000 cubic yards (7,645.5 m <sup>3</sup> ) or fraction thereof
<b>OTHER FEES</b>	
Additional plan review required by changes, additions or revisions to plans or to plans for which an initial review has been completed, per hour	\$65.00

1. For excavation and fill on the same site, the fee shall be based on the volume of excavation or fill, whichever is greater.

## GRADING PERMIT FEES 1

TABLE INSET:

50 cubic yards (38.2 m <sup>3</sup> ) or less	\$23.50
51 to 100 cubic yards (40 to 76.5 m <sup>3</sup> )	\$37.00
101 to 1,000 cubic yards (77.2 to 764.6 m <sup>3</sup> )	\$37.00 for the first 100 cubic yards (76.5 m <sup>3</sup> ), plus \$17.50 for each additional 100 cubic yards (76.5 m <sup>3</sup> ) or fraction thereof

1,001 to 10,000 cubic yards (765.3 to 7,645.5 m <sup>3</sup> )	\$194.50 for the first 1,000 cubic yards (764.6 m <sup>3</sup> ), plus \$14.50 for each additional 1,000 cubic yards (764.6 m <sup>3</sup> ) or fraction thereof
10,001 to 100,000 cubic yards (7,646.3 to 76,455 m <sup>3</sup> )	\$325.00 for the first 10,000 cubic yards (7,645.5 m <sup>3</sup> ), plus \$66.00 for each additional 10,000 cubic yards (7,645.5 m <sup>3</sup> ) or fraction thereof
100,001 yards (76,456 m <sup>3</sup> ) or more	\$919.00 for the first 100,000 cubic yards (76,455 m <sup>3</sup> ), plus \$36.50 for each additional 10,000 cubic yards (7,645.5 m <sup>3</sup> ) or fraction thereof
<b>OTHER INSPECTIONS</b>	<b>FEES</b>
1. Inspections outside of normal business hours, per hour (minimum charge--two hours)	\$85.00
2. Reinspection per hour (minimum charge--one-half hour)	\$65.00
3. Inspections for which no fee is specifically indicated, per hour (minimum charge--one-half hour)	\$65.00

1. For excavation and fill on the same site, the fee shall be based on the volume of excavation or fill, whichever is greater.

108.3 Building permit valuations. The applicant for a permit shall provide an estimated permit value at time of application. Permit valuations shall include 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 building 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 building official. Final building permit valuation shall be set by the building official.

108.4 Work commencing before permit issuance. Any person who commences any work on a building, structure, electrical, gas, mechanical or plumbing system before obtaining the necessary permits shall be subject to a fee established by the building official that shall be in addition to the required permit fees. An investigation fee, in addition to the permit fee, shall be collected whether or not a permit is then or subsequently issued. The investigation fee shall be equal to the amount of the permit fee. 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 law.

108.5 Related fees. The payment of the fee for the construction, alteration, removal or demolition for work done in connection to or concurrently with the work authorized by a building permit

shall not relieve the applicant or holder of the permit from the payment of other fees that are prescribed by law.

**108.6 Refunds.** 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 eighty percent (80%) of the permit fee paid when no work has been done under a permit issued in accordance with this code.

The building official may authorize refunding of not more than eighty percent (80%) of the plan review fee paid when an application for a permit for which a plan review fee has been paid is withdrawn or cancelled before any plan review is done. The building official shall not authorize refunding of any fee paid except on written application filed by the original permittee not later than one hundred eighty (180) days after the date of fee payment.

**108.7 Disaster Relief.** After the occurrence of a natural disaster which results in the declaration of a major disaster by the Carson City board of supervisors, the building official may waive, reduce or rebate fees which would be due or which have been paid for permits, reviews or inspections, if the application or plans being submitted or the work being done results directly from the natural disaster.

## **SECTION 109 - INSPECTIONS**

**109.1 General.** Construction or work for which a permit is required shall be subject to inspection by the building official and such construction or work shall remain accessible and exposed for inspection purposes until approved. Approval as a result of an inspection shall not be construed to be an approval of a violation of the provisions of this code or of other ordinances of the jurisdiction. Inspections presuming to give authority to violate or cancel the provisions of this code or of other ordinances of the jurisdiction shall not be valid. It shall be the duty of the permit applicant to cause the work to remain accessible and exposed for inspection purposes. Neither the building official nor the jurisdiction shall be liable for expense entailed in the removal or replacement of any material required to allow inspection. The address of the building shall be posted by the contractor in the location designated by the building official.

**109.2 Preliminary inspection.** Before issuing a permit, the building official is authorized to examine or cause to be examined buildings, structures and sites for which an application has been filed.

**109.3 Required inspections.** The building official, upon notification, shall make the inspections set forth in Sections 109.3.1 through 109.3.12.

**109.3.1 Footing and foundation inspection.** Footing and foundation inspections shall be made after excavations for footings are complete and any required reinforcing steel is in place. For concrete foundations, any required forms shall be in place prior to inspection. Materials for the foundation shall be on the job, except where concrete is ready mixed in accordance with ASTM C 94, the concrete need not be on the job. Approved property corners shall be in place at time of foundation inspection unless otherwise approved by the building official.

109.3.2 Concrete slab and under-floor inspection. Concrete slab and under-floor inspections shall be made after in-slab or under-floor reinforcing steel and building service equipment, conduit, piping accessories and other ancillary equipment items are in place, but before any concrete is placed or floor sheathing installed, including the subfloor.

109.3.3 Lowest floor elevation. In flood hazard areas, upon placement of the lowest floor, including the basement, and prior to further vertical construction, the elevation certification required in Section 1612.5 shall be submitted to the building official.

109.3.4 Exterior shearwall inspection. To be made prior to the application of exterior siding or cover.

109.3.5 Roof Nail Inspection. Roof nail inspection to be made after the roof sheathing is fastened to the roof structural framing components and before the underlay and roof covering is installed.

109.3.6 Frame inspection. Framing inspections shall be made after the roof deck or sheathing, all framing, fire blocking and bracing are in place and pipes, chimneys and vents to be concealed are complete and the rough electrical, plumbing, heating wires, pipes and ducts are approved. The roof and walls shall be made weather tight prior to frame inspection.

109.3.7 Insulation inspection. Insulation inspection to be made after rough frame, plumbing, mechanical and electrical inspections have been approved.

109.3.8 Lath and gypsum board inspection. Lath and gypsum board inspections shall be made after lathing and gypsum board, interior and exterior, is in place, but before any plastering is applied or gypsum board joints and fasteners are taped and finished.

109.3.9 Fire-resistant penetrations. Protection of joints and penetrations in fire-resistance-rated assemblies shall not be concealed from view until inspected and approved.

109.3.10 Energy efficiency inspections. Inspections shall be made to determine compliance with Chapter 13 and shall include, but not be limited to, inspections for: envelope insulation R and U values, fenestration U-value, duct system R-value, and HVAC and water-heating equipment efficiency.

109.3.11 Other inspections. In addition to the inspections specified above, the building official is authorized to make or require other inspections of any construction work to ascertain compliance with the provisions of this code and other laws that are enforced by the building division.

109.3.12 Special inspections. For special inspections, see Section 1704.

109.3.13 Final inspection. The final inspection shall be made after all work required by the building permit is completed.

109.4 Inspection agencies. The building official is authorized to accept reports of approved inspection agencies, provided such agencies satisfy the requirements as to qualifications and reliability.

109.5 Inspection requests. It shall be the duty of the holder of the building permit or their duly authorized agent to notify the building official when work is ready for inspection. It shall be the duty of the permit holder to provide access to and means for inspections of such work that are required by this code.

109.6 Approval required. Work shall not be done beyond the point indicated in each successive inspection without first obtaining the approval of the building official. The building official, upon notification, shall make the requested inspections and shall either indicate the portion of the construction that is satisfactory as completed, or notify the permit holder or his or her agent wherein the same fails to comply with this code. Any portions that do not comply shall be corrected and such portion shall not be covered or concealed until authorized by the building official.

109.7 Reinspections. A reinspection fee may be assessed for each inspection or reinspection when such portion of work for which inspection is called is not complete or when corrections called for are not made. This section is not to be interpreted as requiring reinspection fees for the first time a job is rejected for failure to comply with the requirements of the technical codes, but as controlling the practice of calling for inspections before the job is ready for such inspection or reinspection. Reinspection fees may be assessed when the inspection record card is not posted or otherwise available on the work site, the approved plans are not readily available to the inspector, for failure to provide access on the date for which inspection is requested, or for deviating from plans requiring the approval of the building official.

To obtain a reinspection, the applicant shall pay the reinspection fee as set forth in the fee schedules in Section 108.2. In instances where reinspection fees have been assessed, additional inspection of the work will not be performed until the required fees have been paid.

## **SECTION 110 - CERTIFICATE OF OCCUPANCY**

110.1 Use and occupancy. No building or structure shall be used or occupied, and no change in the existing occupancy classification of a building or structure or portion thereof shall be made until the building official has issued a certificate of occupancy therefore as provided herein. Issuance of a certificate of occupancy shall not be construed as an approval of a violation of the provisions of this code or of other ordinances of the jurisdiction. No final inspection or approvals by the building division, for use or occupancy of any structure permitted by this chapter, shall be granted until final inspections and approvals are obtained from all other city departments which have imposed requirements for the project.

110.2 Certificate issued. After the building official inspects the building or structure and finds no violations of the provisions of this code or other laws that are enforced by the department of building safety, the building official shall issue a certificate of occupancy that contains the following:

1. The building permit number.
2. The address of the structure.
3. The name and address of the owner.
4. A description of that portion of the structure for which the certificate is issued.
5. A statement that the described portion of the structure has been inspected for compliance with the requirements of this code for the occupancy and division of occupancy and the use for which the proposed occupancy is classified.
6. The name of the building official.
7. The edition of the code under which the permit was issued.
8. The use and occupancy, in accordance with the provisions of Chapter 3.
9. The type of construction as defined in Chapter 6.
10. The design occupant load.
11. If an automatic sprinkler system is provided, whether the sprinkler system is required.
12. Any special stipulations and conditions of the building permit.

110.3 Temporary occupancy. The building official is authorized to issue a temporary certificate of occupancy before the completion of the entire work covered by the permit, provided that such portion or portions shall be occupied safely. The building official shall set a time period during which the temporary certificate of occupancy is valid.

110.4 Revocation. The building official is authorized to, in writing, suspend or revoke a certificate of occupancy or completion issued under the provisions of this code wherever the certificate is issued in error, or on the basis of incorrect information supplied, or where it is determined that the building or structure or portion thereof is in violation of any ordinance or regulation or any of the provisions of this code.

## **SECTION 111 - SERVICE UTILITIES**

111.1 Connection of service utilities. No person shall make connections from a utility, source of energy, fuel or power to any building or system that is regulated by this code for which a permit is required, until released by the building official.

111.2 Temporary connection. The building official shall have the authority to authorize the temporary connection of the building or system to the utility source of energy, fuel or power.

111.3 Authority to disconnect service utilities. The building official shall have the authority to authorize disconnection of utility service to the building, structure or system regulated by this code and the codes referenced in case of emergency where necessary to eliminate an immediate hazard to life or property. The building official shall notify the serving utility, and wherever possible the owner and occupant of the building, structure or service system of the decision to disconnect prior to taking such action. If not notified prior to disconnecting, the owner or occupant of the building, structure or service system shall be notified in writing, as soon as practical thereafter.

## **SECTION 112 - BOARD OF APPEALS**

112.1 General. In order to hear and decide appeals of orders, decisions or determinations made by the building official relative to the application and interpretation of this code, there shall be and is hereby created a board of appeals. The board of appeals shall be appointed by the governing body and shall hold office at its pleasure. The board shall adopt rules of procedure for conducting its business. The board consists of five (5) members who are appointed by the board of supervisors as follows:

- a) One (1) architect registered by the state of Nevada;
- b) One (1) general building contractor licensed by the state of Nevada;
- c) One (1) mechanical engineer licensed by the state of Nevada;
- d) One (1) structural/civil engineer licensed by the state of Nevada; and
- e) One (1) electrical engineer licensed by the state of Nevada.

112.2 Limitations on authority. An application for appeal shall be based on a claim that the true intent of this code or the rules legally adopted there under have been incorrectly interpreted, the provisions of this code do not fully apply or an equally good or better form of construction is proposed. The board shall have no authority to waive requirements of this code.

112.3 Qualifications. The board of appeals shall consist of members who are qualified by experience and training to pass on matters pertaining to building construction and are not employees of the jurisdiction.

112.4 Terms. The terms of the members of the Board of Appeals shall be:

- a) For the member appointed as an architect registered by the state of Nevada, a term of 2 years. The initial term for this member shall begin January 1, 2008 and end January 1, 2010.
- b) For the member appointed as a general building contractor licensed by the state of Nevada, a term of 2 years. The initial term for this member shall begin January 1, 2008 and end January 1, 2010.
- c) Except as otherwise provided in this paragraph, for the member appointed as a mechanical engineer licensed by the state of Nevada, a term of 2 years. The initial term for this member shall begin January 1, 2008 and end January 1, 2011.
- d) Except as otherwise provided in this paragraph, for the member appointed as a structural/civil engineer licensed by the state of Nevada, a term of 2 years. The initial term for this member shall be a term of 3 years and shall begin January 1, 2008 and end January 1, 2011.
- e) Except as otherwise provided in this paragraph, for the member appointed as a electrical engineer licensed by the state of Nevada, a term of 2 years. The initial term for this member shall be a term of 3 years and shall begin January 1, 2008 and end January 1, 2011.

## **SECTION 113 – VIOLATIONS**

113.1 Unlawful acts. It shall be unlawful for any person, firm or corporation to erect, construct, alter, extend, repair, move, remove, demolish or occupy any building, structure or equipment regulated by this code, or cause same to be done, in conflict with or in violation of any of the provisions of this code.

113.2 Notice of violation. The building official is authorized to serve a notice of violation or order on the person responsible for the erection, construction, alteration, extension, repair, moving, removal, demolition or occupancy of a building or structure in violation of the provisions of this code, or in violation of a permit or certificate issued under the provisions of this code. Such order shall direct the discontinuance of the illegal action or condition and the abatement of the violation.

113.3 Prosecution of violation. If the notice of violation is not complied with promptly, the building official is authorized to request the legal counsel of the jurisdiction to institute the appropriate proceeding at law or in equity to restrain, correct or abate such violation, or to require the removal or termination of the unlawful occupancy of the building or structure in violation of the provisions of this code or of the order or direction made pursuant thereto.

113.4 Violation penalties. Any person who violates a provision of this code or fails to comply with any of the requirements thereof or who erects, constructs, alters or repairs a building or structure in violation of the approved construction documents or directive of the building official, or of a permit or certificate issued under the provisions of this code, shall be subject to penalties as prescribed by law. Any person, firm or corporation violating any of the provisions of this code is deemed guilty of a misdemeanor, and each person is guilty of a separate offense for each and every day or portion thereof during which any violation of the provisions of this code is committed, continued or permitted. Upon conviction of any such violation such person shall be punished by a fine of not more than one thousand dollars (\$1,000.00), or by imprisonment for not more than six (6) months, or by both such fine and imprisonment.

The building official or his authorized inspectors or employees may issue misdemeanor citations for the violations.

## **SECTION 114 - STOP WORK ORDER**

114.1 Authority. Whenever the building official finds any work regulated by this code being performed in a manner either contrary to the provisions of this code or dangerous or unsafe, the building official is authorized to issue a stop work order.

114.2 Issuance. The stop work order shall be in writing and shall be given to the owner of the property involved, or to the owner's agent, or to the person doing the work. Upon issuance of a stop work order, the cited work shall immediately cease. The stop work order shall state the reason for the order, and the conditions under which the cited work will be permitted to resume.

114.3 Unlawful continuance. Any person who shall continue any work after having been served with a stop work order, except such work as that person is directed to perform to remove a violation or unsafe condition, shall be subject to penalties as prescribed by law.

## **SECTION 115 - UNSAFE STRUCTURES AND EQUIPMENT**

115.1 Conditions. Structures or existing equipment that are or hereafter become unsafe, unsanitary or deficient because of inadequate means of egress facilities, inadequate light and ventilation, or which constitute a fire hazard, or are otherwise dangerous to human life or the

public welfare, or that involve illegal or improper occupancy or inadequate maintenance, shall be deemed an unsafe condition. Unsafe structures shall be taken down and removed or made safe, as the building official deems necessary and as provided for in this section. A vacant structure that is not secured against entry shall be deemed unsafe.

**115.2 Record.** The building official shall cause a report to be filed on an unsafe condition. The report shall state the occupancy of the structure and the nature of the unsafe condition.

**115.3 Notice.** If an unsafe condition is found, the building official shall serve on the owner, agent or person in control of the structure, a written notice that describes the condition deemed unsafe and specifies the required repairs or improvements to be made to abate the unsafe condition, or that requires the unsafe structure to be demolished within a stipulated time. Such notice shall require the person thus notified to declare immediately to the building official acceptance or rejection of the terms of the order.

**115.4 Method of service.** Such notice shall be deemed properly served if a copy thereof is (a) delivered to the owner personally; (b) sent by certified or registered mail addressed to the owner at the last known address with the return receipt requested; or (c) delivered in any other manner as prescribed by local law. If the certified or registered letter is returned showing that the letter was not delivered, a copy thereof shall be posted in a conspicuous place in or about the structure affected by such notice. Service of such notice in the foregoing manner upon the owner's agent or upon the person responsible for the structure shall constitute service of notice upon the owner.

**115.5 Restoration.** The structure or equipment determined to be unsafe by the building official is permitted to be restored to a safe condition. To the extent that repairs, alterations or additions are made or a change of occupancy occurs during the restoration of the structure, such repairs, alterations, additions or change of occupancy shall comply with the requirements of Section 105.2.2 and Chapter 34.

## **SECTION 116 - WORKMANSHIP AND FABRICATION**

**116.1 Workmanship and Fabrication.** All design, construction and workmanship shall be in conformity with accepted engineering and good trade practice and be of such character as to secure the results sought to be obtained by this code.

## **SECTION 117 - MOVING AND DEMOLITION**

**117.1 Moving and Demolition.** Except as otherwise provided, it shall be unlawful for any person to move any existing building or structure of any kind or description into or within Carson City, or demolish a building or structure without a permit to move or demolish a building or structure as hereinafter provided. This section does not apply to mobile homes, trailers or other structures permanently affixed on wheels. Application for a permit to move or demolish a building or structure shall be filed as provided for in Section 105.3.

SECTION II:

That no other provisions of the Carson City Municipal Code are affected by this ordinance.

PROPOSED September 3, 2009

PROPOSED BY \_\_\_\_\_

PASSED \_\_\_\_\_ (Month) \_\_\_\_\_ (Day), 2009.

# **2007 NORTHERN NEVADA**

## **AMENDMENTS**

**2006 INTERNATIONAL BUILDING CODE**

**2006 INTERNATIONAL RESIDENTIAL CODE**

**2006 UNIFORM MECHANICAL CODE**

**2006 UNIFORM PLUMBING CODE**

**2006 INTERNATIONAL ENERGY CONSERVATION CODE**

**2005 NATIONAL ELECTRICAL CODE**

**Published by the Northern Nevada Chapter of the International Code Council:  
October 8th, 2007**

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Carson City, NV 89702

## PREFACE

This document comprises the Northern Nevada Amendments to the following codes:

2006 International Building Code as published by the International Code Council.

2006 International Residential Code as published by the International Code Council.

2006 Uniform Plumbing Code as published by the International Association of Plumbing and Mechanical Officials.

2006 Uniform Mechanical Code as published by the International Association of Plumbing and Mechanical Officials.

2005 National Electrical Code as published by the National Fire Protection Association.

2006 International Energy Conservation Code as published by the International Code Council.

It was created by the organizations listed on the cover page with the support of the Northern Nevada Chapter of the International Code Council as a document to be adopted by reference. These provisions are not code unless adopted and codified by governmental jurisdictions. This document is available to be adopted as code by any jurisdiction without permission or approval from the organizations listed.

To obtain copies of this document, please contact the Northern Nevada Chapter of the International Code Council at PO Box 2481 Reno, NV 89505 or visit [nnicc.org](http://nnicc.org).

**Note:** ~~Deleted language has been striken through.~~  
Added language has been underlined.

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## **2006 International Building Code**

### **Section 202 Definitions.**

*Amend Section 202 to include the following definitions:*

**International Electrical Code.** The Electrical Code, whether the National Electrical Code or the International Electrical Code, as amended and adopted by the local jurisdiction.

**International Mechanical Code.** The Mechanical Code, whether the Uniform Mechanical Code or the International Mechanical Code as amended and adopted by the local jurisdiction.

**International Plumbing Code.** The Plumbing Code, whether the Uniform Plumbing Code or the International Plumbing Code, as amended and adopted by the local jurisdiction.

**International Fire Code.** The Fire Code, whether the Uniform Fire Code or the International Fire Code as amended and adopted by the local jurisdiction.

**International Fuel Gas Code.** The Fuel Gas Code, whether NFPA 54 or the International Fuel Gas Code, as amended and adopted by the local jurisdiction.

### **Section 303.1 Assembly Group A.**

*Amend section 303.1 Subsection A-2 to read as follows:*

**A-2** Assembly uses intended for food and/or drink consumption including, but not limited to:

Banquet halls  
Casinos  
Night clubs  
Restaurants  
Taverns and bars

### **Section 305.2 Day care.**

*Amend section 305.2 Subsection A-2 to read as follows:*

Day care. The use of a building or structure, or portion thereof, for educational, supervision or personal care services for more than ~~five~~ six children older than 2  $\frac{1}{2}$  years of age, shall be classified as a Group E occupancy.

**Section 311.2 Moderate-hazard storage.**

*Amend section 311.2 to read as follows:*

**311.2 Moderate-hazard storage, Group S-1.** Buildings occupied for storage uses that are not classified as Group S-2, including, but not limited to, storage of the following:

Aerosols, Levels 2 and 3  
Aircraft repair hangar  
Bags: cloth, burlap and paper  
Bamboos and rattan  
Baskets  
Belting: canvas and leather  
Books and paper in rolls or packs  
Boots and shoes  
Buttons, including cloth covered, pearl or bone  
Cardboard and cardboard boxes  
Clothing, woolen wearing apparel  
Cordage  
Dry boat storage (indoor)  
Furniture  
Furs  
Glues, mucilage, pastes and size  
Grains  
Horns and combs, other than celluloid  
Leather  
Linoleum  
Lumber  
Motor vehicle repair garages complying with the maximum allowable quantities of hazardous materials listed in Table 307.1(1) (see Section 406.6)  
Photo engravings  
Resilient flooring  
Self-serve storage (mini-storage)  
Silks  
Soaps  
Sugar  
Tires, bulk storage of  
Tobacco, cigars, cigarettes and snuff  
Upholstery and mattresses  
Wax candles

### **Section 403.1 Applicability.**

*Amend section 403.1 to read as follows:*

**403.1 Applicability.** The provisions of this section shall apply to buildings with an occupied floor located more than 75 55 feet (22 860 16 764 mm) above the lowest level of fire department vehicle access.

### **Section 907.2.12 High-rise buildings.**

*Amend section 907.2.12 to read as follows:*

**907.2.12 High-rise buildings.** Buildings with a floor used for human occupancy located more than 75 55 feet (22 860 16 764 mm) above the lowest level of fire department vehicle access shall be provided with an automatic fire alarm system and an emergency voice/alarm communication system in accordance with Section 907.2.12.2.

#### **Exceptions:**

1. Airport traffic control towers in accordance with Sections 412 and 907.2.22.
2. Open parking garages in accordance with Section 406.3.
3. Buildings with an occupancy in Group A-5.
4. Low-hazard special occupancies in accordance with Section 503.1.1.
5. Buildings with an occupancy in Group H-1, H-2 or H-3 in accordance with Section 415.

### **Section 907.8.2 High-rise buildings.**

*Amend section 907.8.2 to read as follows:*

**907.8.2 High-rise buildings.** In buildings with a floor used for human occupancy that is located more than 75 55 feet (22 860 16 764 mm) above the lowest level of fire department vehicle access, a separate zone by floor shall be provided for all of the following types of alarm-initiating devices where provided:

1. Smoke detectors.
2. Sprinkler water-flow devices.
3. Manual fire alarm boxes.
4. Other approved types of automatic fire detection devices or suppression systems.

### **Section 1017.4 Air movement in corridors.**

*Amend section 1017.4 to read as follows, deleting exceptions 1,2 and 3:*

**1017.4 Air movement in corridors.** ~~Corridors shall not serve as supply, return, exhaust, relief or ventilation air ducts. Corridors shall not be used to convey air to or from rooms if the corridor is required to be of fire-resistive construction.~~

**Exceptions:**

- ~~1. Use of a corridor as a source of makeup air for exhaust systems in rooms that open directly onto such corridors, including toilet rooms, bathrooms, dressing rooms, smoking lounges and janitor closets, shall be permitted, provided that each such corridor is directly supplied with outdoor air at a rate greater than the rate of makeup air taken from the corridor.~~
- ~~2. Where located within a dwelling unit, the use of corridors for conveying return air shall not be prohibited.~~
- ~~3. Where located within tenant spaces of 1,000 square feet (93 m<sup>2</sup>) or less in area, utilization of corridors for conveying return air is permitted.~~

**Table 1607.1**

*Amend Table 1607.1 subsection 28 to read as follows:*

28. Residential One- and two-family dwellings Uninhabitable attics without storage(i) Uninhabitable attics with limited Storage(i, j, k) Habitable attics and sleeping areas All other areas except balconies and decks Hotels and multiple-family dwellings Private rooms and corridors serving them Public rooms and corridors serving them	10 20 30 40 40 100	—
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**Section 1608.2 Ground snow loads.**

*Amend section 1608.2 to read as follows:*

**1608.2 Ground snow loads.** The ground snow loads to be used in determining the design snow loads for roofs shall be determined in accordance with ~~Table 1608.2.1 ASCE 7 or Figure 1608.2 for the contiguous United States and Table 1608.2 for Alaska. Site specific ease studies shall be made in areas designated "CS" in Figure 1608.2. Ground snow loads for sites at elevations above the limits indicated in Figure 1608.2 and for all sites within the CS areas shall be approved. Ground snow load determination for such sites shall be based on an extreme value statistical analysis of data available in the vicinity of the site using a value with a 2 percent annual probability of being exceeded (50 year mean recurrence interval). Snow loads are zero for Hawaii, except in mountainous regions as approved by the building official.~~

**Table 1608.2.1 Ground Snow Loads  $p_g$ , For Northern Nevada Locations.**

*Add Table 1608.2.1 to section 1608.2.*

**Table 1608.2.1**

**GROUND SNOW LOADS  $p_g$ , FOR NORTHERN NEVADA LOCATIONS.**

<b>Elevation In Feet</b>	WEST of U.S. Hwy 395 Sierra slope	EAST of U.S. Hwy 395 Carson, Douglas, Washoe, Reno	Lyon & Storey Counties	All Nevada Counties LakeTahoe Basin
	$p_g$ (Pounds Per Square Foot)	$p_g$ (Pounds Per Square foot)	$p_g$ (Pounds Per Square foot)	$p_g$ (Pounds Per Square foot)
4500	30	30	10	
5000	30	30	30	
5100	41	31	31	
5200	52	33	33	
5300	64	34	34	
5400	75	35	35	
5500	86	37	37	
6000	142	43	43	220
6500	171	43	43	235
7000	200	57	57	250
7500	215	57	57	265
8000	229	86	86	280
8500	243	86	86	295
9000	271	114	114	330
9500	300	142	142	390
10000	357	142	142	420

1. Drift load design in the 30-psf zones may utilize ASCE 7 -05 table C7-1 ground snow values.

2. The final roof design loads shall not be less than 20 psf after all reductions are factored, except for Lyon & Storey Counties.

3. Intermediate values may be interpolated by proportion.

**Section 1609.3 Basic wind speed.**

*Amend section 1609.3 to read as follows:*

~~1609.3 Basic wind speed. The basic wind speed, in mph, for the determination of the wind loads shall be determined by Figure 1609. Basic wind speed for the special wind regions indicated, near mountainous terrain and near gorges shall be in accordance with local jurisdiction requirements. Basic wind speeds determined by the local jurisdiction shall be in accordance with Section 6.5.4 of ASCE 7.~~

~~In nonhurricane prone regions, when the basic wind speed is estimated from regional climatic data, the basic wind speed shall be not less than the wind speed associated with an annual probability of 0.02 (50 year mean recurrence interval), and the estimate shall be adjusted for equivalence to a 3 second gust wind speed at 33 feet (10 m) above ground in Exposure Category C. The data analysis shall be performed in accordance with Section 6.5.4.2 of ASCE 7.~~

Minimum basic wind speed shall be 100 mph (3-sec gust) for the Cities of Reno and Sparks and for the Counties of Carson, Douglas and Washoe. Minimum basic wind speed shall be 90 mph (3-sec gust) for Lyon and Storey Counties. No altitude density reduction shall be taken.

### Section 1805.2.1 Frost protection Note 1

*Amend section 1805.2.1 Note 1 to read as follows:*

1. Extending below the frost line of the locality; Frost depth for Carson, Douglas & Washoe Counties and The Cities of Reno and Sparks shall be twenty-four inch (24") deep. Frost depth for Lyon and Storey Counties shall be eighteen inch (18") deep.

### Section 1805.8.1 Foundations.

*Amend section 1805.2.1 to read as follows:*

**1805.8.1 Foundations.** Footings or foundations placed on or within the active zone of expansive soils shall be designed to resist differential volume changes and to prevent structural damage to the supported structure. Deflection and racking of the supported structure shall be limited to that which will not interfere with the usability and serviceability of the structure.

Post-tensioned slabs shall not be utilized in place of frost depth footing design unless super structure deflection and differential movement calculations are provided. The deflection calculations shall demonstrate that the maximum combined frost and expansive soil heaving, as localized at slab edges, with resultant non-uniformly distributed deflections, as well as whole slab deflections would not result in super structure distress or excessive truss, roof or wall frame movement.

Foundations placed below where volume change occurs or below expansive soil shall comply with the following provisions:

1. Foundations extending into or penetrating expansive soils shall be designed to prevent uplift of the supported structure.
2. Foundations penetrating expansive soils shall be designed to resist forces exerted on the foundation due to soil volume changes or shall be isolated from the expansive soil.

### **Section 1806.1 General.**

*Amend section 1806.1 to read as follows:*

**1806.1 General.** Retaining walls shall be designed to ensure stability against overturning, sliding, excessive foundation pressure and water uplift. Retaining walls shall be designed for a safety factor of 1.5 against lateral sliding and overturning. Rockery walls shall be designed for soil stabilization, excluding seismic considerations.

Rockery retaining walls or rockery soil stabilization walls shall not be subject to surcharges, such as building foundations, adjacent retaining structures, slopes or vehicle surcharge (except parking lots and private driveways). Rockery walls over four (4) feet in (exposed) height shall be engineered and shall have structural observation. Wall height is determined by differential height of adjacent grades. Structures adjacent to rockery wall shall be set back a minimum distance equal to the (total of the exposed) height of the wall (and the embedded depth of the wall). Gravel drainage shall be provided behind all engineered rockery walls. Structures adjacent to the low side of the rockery wall shall be set back a minimum distance equal to the exposed height of the wall. On the high side, structures shall be set back a distance equal to the exposed height plus the embedded depth of the wall (see attached diagram). A global (slope) stability analysis (review) shall be performed for all rockery walls that are terraced, or greater than eight feet in height. Construction documents shall specify the following special inspection requirements.

1. Type of rock and competency (minimum specifications:  
Absorption - ASTM C-127 (or AASHTO T-85) not more than 2.0% for igneous and metamorphic rock types and 3.0% for sedimentary rock types  
Soundness - ASTM C-88 (or CRD-C-137) not greater than 5% loss  
Bulk Specific Gravity - ASTM C-127 (or AASHTO-85) greater than 2.48)
2. Unit weight if design exceeds (shall be at least) 155 pcf
3. Rock size in approximate diameter
4. Rock placement
5. Voids greater than 3" shall be filled (chinked) with similar rock).
6. Gravel blanket drainage swale and system
7. Embedment
8. Wall face slope (batter (6V: 1H maximum)
9. Mechanically stabilized earth, if specified

10. Where rockery walls are required by the civil engineering plans, the rockery wall plans, details, and specifications shall be prepared and stamped by a qualified engineer and submitted as part of the project civil engineering plans.

**Section 2902.1 Minimum number of plumbing fixtures.**

*Amend section 2902.1 to read as follows:*

**2902.1 Minimum number of fixtures.** Plumbing fixtures shall be provided for the type of occupancy and in the minimum number shown in Table 2902.1. Types of occupancies not shown in Table 2902.1 shall be considered individually by the building official. The number of occupants shall be determined by this code. Occupancy classification shall be determined in accordance with Chapter 3. Suitable toilet facilities shall be provided and maintained in a sanitary condition for the use of workers during construction.

**Table 2902.1**

*Amend Table 2902.1 Minimum Number of Required Plumbing Fixtures to read as follows:*

**[P] TABLE 2902.1**  
**MINIMUM NUMBER OF REQUIRED PLUMBING FIXTURES (a)**  
**(See Sections 2902.2 and 2902.3)**

No.	CLASSIFICATION	OCCUPANCY	DESCRIPTION	WATER CLOSETS (e) (URINALS SEE SECTION 410.2 OF THE INTERNATIONAL PLUMBING CODE)		LAVATORIES		BATHTUBS/ SHOWERS	DRINKING FOUNTAINS (SEE SECTION 410.4 OF THE INTERNATIONAL PLUMBING CODE) (f) (g) (h)	OTHER
				MALE	FEMALE	MALE	FEMALE			
1	Assembly (see Sections 2902.2, 2902.4 and 2902.4.1)	A-1 (d)	Theaters and other buildings for the performing arts and motion pictures	1 per 125	1 per 65	1 per 200	—	—	1 per 500	1 service sink
			Nightclubs, bars, taverns, dance halls and buildings for similar purposes	1 per 40	1 per 40	1 per 75	—	—	1 per 500	1 service sink
		A-2 (d)	Restaurants, banquet halls and food courts	1 per 75	1 per 75	1 per 200	—	—	1 per 500	1 service sink
			Auditoriums without permanent seating, art galleries, exhibition halls, museums, lecture halls, libraries, arcades and gymnasiums	1 per 125	1 per 65	1 per 200	—	—	1 per 500	1 service sink
		A-3 (d)	Passenger terminals and transportation facilities	1 per 500	1 per 500	1 per 750	—	—	1 per 1,000	1 service sink

1	Assembly (see Sections 2902.2, 2902.4 and 2902.4.1)	Places of worship and other religious services	1 per 150	1 per 75	1 per 200		—	1 per 1,000	+ service sink
		A-4	Coliseums, arenas, skating rinks, pools and tennis courts for indoor sporting events and activities	1 per 75 for the first 1,500 and 1 per 120 for the remainder exceeding 1,500	1 per 40 for the first 1,500 and 1 per 60 for the remainder exceeding 1,500	1 per 200	1 per 150	—	1 per 1,000
		A-5	Stadiums, amusement parks, bleachers and grandstands for outdoor sporting events and activities	1 per 75 for the first 1,500 and 1 per 120 for the remainder exceeding 1,500	1 per 40 for the first 1,500 and 1 per 60 for the remainder exceeding 1,500	1 per 200	1 per 150	—	1 per 1,000

(continued)

[P] TABLE 2902.1—continued  
MINIMUM NUMBER OF REQUIRED PLUMBING FIXTURES (a)

No.	CLASSIFICATION	OCCUPANCY	DESCRIPTION	WATER CLOSETS (e) (URINALS SEE SECTION 410.2 OF THE INTERNATIONAL PLUMBING CODE)		LAVATORIES		BATHTUBS/ SHOWERS	DRINKING FOUNTAINS (SEE SECTION 410.4 OF THE INTERNATIONAL PLUMBING CODE) (f) (g) (h)	OTHER
				MALE	FEMALE	MALE	FEMALE			
2	Business (see Sections 2902.2, 2902.4 and 2902.4.1)	B	Buildings for the transaction of business, professional services, other services involving merchandise, office buildings, banks, light industrial and similar uses	1 per 25 for the first 50 and 1 per 50 for the remainder exceeding 50		1 per 40 for the first 80 and 1 per 80 for the remainder exceeding 80		—	1 per 100	+ service sink
3	Educational	E	Educational facilities	1 per 50		1 per 50		—	1 per 100	+ service sink
4	Factory and industrial	F-1 and F-2	Structures in which occupants are engaged in work fabricating, assembly or processing of products or materials	1 per 100		1 per 100		See Section 411 of the International Plumbing Code	1 per 400	+ service sink
5	Institutional	I-1	Residential care	1 per 10		1 per 10		1 per 8	1 per 100	+ service sink
		I-2	Hospitals, ambulatory nursing home patients (b)	1 per room(c)		1 per room(c)		1 per 15	1 per 100	+ service sink
			Employees, other than residential care (b)	1 per 25		1 per 35		—	1 per 100	—
			Visitors, other than residential care	1 per 75		1 per 100		—	1 per 500	—
		I-3	Prisons (b)	1 per cell		1 per cell		1 per 15	1 per 100	+ service sink

		I-3	Reformatories, detention centers and correctional centers (b)	1 per 15	1 per 15	1 per 15	1 per 100	1-service sink
		I-4	Adult day care and child care	1 per 15	1 per 15	—	1 per 100	1-service sink
6	Mercantile (see Section 2902.2, 2902.4, 2902.4.1 and 2902.4.2)	M	Retail stores, service stations, shops, salesrooms, markets and shopping centers	1 per 500	1 per 750	—	1 per 1,000	1-service sink
7	Residential	R-1	Hotels, motels, boarding houses (transient)	1 per sleeping unit	1 per sleeping unit	1 per sleeping unit	—	1-service sink
		R-2	Dormitories, fraternities, sororities and boarding house (not transient)	1 per 10	1 per 10	1 per 8	1 per 100	1-service sink
		R-2	Apartment house	1 per dwelling unit	1 per dwelling unit	1 per dwelling unit	—	1 kitchen sink per dwelling unit; 1 automatic clothes washer connection per 20 dwelling units

(continued)

[P] TABLE 2902.1—continued  
MINIMUM NUMBER OF REQUIRED PLUMBING FIXTURES (a)

No.	CLASSIFICATION	OCCUPANCY	DESCRIPTION	WATER CLOSETS (e) (URINALS SEE SECTION 418.2 OF THE INTERNATIONAL PLUMBING CODE)		LAVATORIES		DRINKING FOUNTAINS (SEE SECTION 410.4 OF THE INTERNATIONAL PLUMBING CODE) (f) (g) (h)	OTHER
				MALE	FEMALE	MALE	FEMALE		
7	Residential	R-3	One- and two-family dwellings	1 per dwelling unit	1 per dwelling unit	1 per dwelling unit	1 per 500	1-service sink	
		R-4	Residential care/assisted living facilities	1 per 10	1 per 10	—	1 per 500	1-service sink	
8	Storage (see Sections 2902.2, 2902.4 and 2902.4.1)	S-1 S-2	Structures for the storage of goods, warehouses, storehouses and freight depots, low and moderate hazard	1 per 100	1 per 100	See Section 411 of the International Plumbing Code	1 per 1,000	1-service sink	

- a. The fixtures shown are based on one fixture being the minimum required for the number of persons indicated or any fraction of the number of persons indicated. The number of occupants shall be determined by this code.
- b. Toilet facilities for employees shall be separate from facilities for inmates or patients.
- c. A single-occupant toilet room with one water closet and one lavatory serving not more than two adjacent patient rooms shall be permitted where such room is provided with direct access from each patient room and with provisions for privacy.
- d. The occupant load for seasonal outdoor seating and entertainment areas shall be included when determining the minimum number of facilities required.
- e. In each bathroom or toilet room, urinals shall not be substituted for more than 67 percent of the required water closets in assembly and educational occupancies. Urinals shall not be substituted for more than 50 percent of the required water closets in all other occupancies.
- f. Drinking fountains shall not be installed in toilet rooms.
- g. Where food is consumed indoors, water stations may be substituted for drinking fountains. Offices, or public building for use by more than six (6) persons shall have one (1) drinking fountain for the first one hundred fifty (150) persons and one (1) additional fountain for each three hundred (300) persons thereafter.
- h. A drinking fountain shall not be required in occupancies of thirty (30) or less. When a drinking fountain is not required, then footnotes f and g are not applicable.

## Section I104.2

*Amend section I104.2 Footings to read as follows:*

**I104.2 Footings.** ~~In areas with a frost depth of zero, a~~ 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 1/2 inches (89 mm) thick and further provided that the columns do not support loads in excess of 750 pounds (3.36 kN) per column.

# International Residential Code

## Section R202 Definitions.

*Amend Section R202 to include the following definitions:*

**International Electrical Code.** The Electrical Code, whether the National Electrical Code or the International Electrical Code, as amended and adopted by the local jurisdiction.

**International Mechanical Code.** The Mechanical Code, whether the Uniform Mechanical Code or the International Mechanical Code as amended and adopted by the local jurisdiction.

**International Plumbing Code.** The Plumbing Code, whether the Uniform Plumbing Code or the International Plumbing Code, as amended and adopted by the local jurisdiction.

**International Fire Code.** The Fire Code, whether the Uniform Fire Code or the International Fire Code as amended and adopted by the local jurisdiction.

**International Fuel Gas Code.** The Fuel Gas Code, whether NFPA 54 or the International Fuel Gas Code, as amended and adopted by the local jurisdiction.

## Section 405.1 Concrete or masonry foundations.

*Amend Section R405.1 to read as follows:*

**R405.1 Concrete or masonry foundations.** Drains shall be provided around all concrete or masonry foundations that retain earth and enclose habitable or usable spaces located below grade. Drainage tiles, gravel or crushed stone drains, perforated pipe or other approved systems or materials shall be installed at or below the area to be protected and shall discharge by gravity or mechanical means into an approved drainage system. Gravel or crushed stone drains shall extend at least 1 foot (305 mm) beyond the outside edge of the footing and 6 inches (152 mm) above the top of the footing and be covered with an approved filter membrane material. The top of open joints of drain tiles shall be protected with strips of building paper, and the drainage tiles or perforated pipe shall be placed on a minimum of 2 inches (51 mm) of washed gravel or crushed rock at least one sieve size larger than the tile joint opening or perforation and covered with not less than 6 inches (152 mm) of the same material. When required by the soils engineer or Building Official subsoil drains shall be provided around the perimeter of buildings having basements, cellars, crawl spaces or floors below grade. Subsoil drains shall be installed in accordance with the soils engineer's design or in the absence of such design, such sub soil drains may be positioned inside or outside of the footing, shall be perforated or open-jointed

approved drain tile or pipe not less than 3 inches (80 mm) in diameter and shall be laid in gravel, slag, crushed rock, approved ¼ inch (19.1 mm) crushed recycle glass or other approved porous material with a minimum of 4 inches (102 mm) surrounding the pipe on all sides. Filter media shall be provided for subsoil piping.

~~**Exception:** A drainage system is not required when the foundation is installed on well-drained ground or sand-gravel mixture soils according to the Unified Soil Classification System, Group I Soils, as detailed in Table R405.1.~~

## Section 408.1 Ventilation

*Add the following exceptions to Section R408.1:*

**R408.1 Ventilation.** The under-floor space between the bottom of the floor joists and the earth under any building (except space occupied by a basement) shall have ventilation openings through foundation walls or exterior walls. The minimum net area of ventilation openings shall not be less than 1 square foot ( $0.0929 m^2$ ) for each 150 square feet ( $14 m^2$ ) of under-floor space area. One such ventilating opening shall be within 3 feet (914 mm) of each corner of the building.

### **Exceptions:**

1. The gross area of ventilation openings may be reduced to 84 square inches of vent for each 25 lineal feet of exterior wall where the ground surface is treated with a compliant vapor retarder material and the required openings are so placed as to provide cross- ventilation of the crawl space. Vents may be either fixed open or operable.
2. The ventilation openings to the outdoors are not required if ventilation openings to the interior are provided in accordance with section R408.3.

## Section R408.2 Openings for under-floor ventilation.

*Add the following exception to Section R408.2:*

**R408.2 Openings for under-floor ventilation.** The minimum net area of ventilation openings shall not be less than 1 square floor ( $0.0929 m^2$ ) for each 150 square feet ( $14 m^2$ ) of under-floor area. One ventilating opening shall be within 3 feet (914 mm) of each corner of the building. Ventilation openings shall be covered for their height and width with any of the following materials provided that the least dimension of the covering shall not exceed ¼ inch (6.4 mm):

1. Perforated sheet metal plates not less than 0.070 inch (1.8 mm) thick.
2. Expanded sheet metal plates not less than 0.047 inch (1.2 mm) thick.
3. Cast-iron grill or grating.
4. Extruded load-bearing brick vents.

5. Hardware cloth of 0.035 inch (0.89 mm) wire or heavier.
6. Corrosion-resistant wire mesh, with the least dimension being  $\frac{1}{8}$  inch (3.2 mm).

**Exception:** The gross area of ventilation openings may be reduced to 84 square inches of vent for each 25 lineal feet of exterior wall where the ground surface is treated with a compliant vapor retarder material and the required openings are so placed as to provide cross ventilation of the crawl space. Vents may be either fixed open or operable.

### Section R408.3 Unvented crawl space.

*Add the following subsection to Section R408.3:*

**R408.3 Unvented crawl space.** Ventilation openings in under-floor spaces specified in Sections R408.1 and R408.2 shall not be required where:

1. Exposed earth is covered with a continuous vapor retarder. Joints of the vapor retarder shall overlap by 6 inches (152 mm) and shall be sealed or taped. The edges of the vapor retarder shall extend at least 6 inches (152 mm) up the stem wall and shall be attached and sealed to the stem wall; and
2. One of the following is provided for the under-floor space:
  - 2.1. Continuously operated mechanical exhaust ventilation at a rate equal to 1 cfm (0.47 L/s) for each 50 ft<sup>2</sup> (4.7 m<sup>2</sup>) of crawlspace floor area, including an air pathway to the common area (such as a duct or transfer grille), and perimeter walls insulated in accordance with Section N1102.2.8;
  - 2.2. Conditioned air supply sized to deliver at a rate equal to 1 cfm (0.47 L/s) for each 50 ft<sup>2</sup> (4.7 m<sup>2</sup>) of under-floor area, including a return air pathway to the common area (such as a duct or transfer grille), and perimeter walls insulated in accordance with Section N1102.2.8;
  - 2.3. Plenum complying with Section M1601.4, if under-floor space is used as a plenum.
  - 2.4. Thermostatically operated vents which close completely at a temperature no lower than 38 degrees Fahrenheit and open completely at a temperature no lower than 65 degrees Fahrenheit. The ventilation openings shall be a minimum of 84 square inches of gross area for each 25 lineal feet of exterior wall and so placed as to provide cross ventilation of the crawl space.

### **Section N1102.2.8 Crawl space walls.**

*Amend Section N1102.2.8 to read as follows:*

**N1102.2.8 Crawl space walls.** As an alternative to insulating floors over crawl spaces, insulation of crawl space walls when the crawl space is not vented to the outside is permitted. The crawl space shall be considered unvented during the heated season when thermostatically operated vents have been installed in accordance with R408.2 Crawl space wall insulation shall be permanently fastened to the wall and extend downward from the floor to the finished grade level and then vertically and/or horizontally for at least an additional 24 inches (610 mm). Exposed earth in unvented crawl space foundations shall be covered with a continuous vapor retarder. All joints of the vapor retarder shall overlap by 6 inches (152 mm) and be sealed or taped. The edges of the vapor retarder shall extend at least 6 inches (152 mm) up the stem wall and shall be attached to the stem wall.

### **Section N1103.2.1 Insulation.**

*Amend Section N1103.2.1 to read as follows:*

**N1103.2.1 Insulation.** Supply and return ducts shall be insulated to a minimum of R-8 R-6. Ducts in floor trusses shall be insulated to a minimum of R-6.

**Exception:** Ducts or portions thereof located completely inside the building thermal envelope.

### **Section G2417.4.1 Test pressure.**

*Amend Section G2417.4.1 to read as follows:*

**G2417.4.1 (406.4.1) Test pressure.** The test pressure to be used shall be not less than one and one half times the proposed maximum working pressure, but not less than 3 psig (20 kPa gauge), irrespective of design pressure. Where the test pressure exceeds 125 psig (862 kPa gauge), the test pressure shall not exceed a value that produces a hoop stress in the piping greater than 50 percent of the specified minimum yield strength of the pipe. High pressure gas test. This test shall be made before any fixtures, appliances or shut-off valves have been attached and before being concealed. This test shall include an air, CO<sub>2</sub> or nitrogen pressure test at which time the gas piping shall stand at a pressure of not less than twenty-five (25) PSI (68.9kPa) gauge pressure for no less than thirty (30) minutes.

### **Section G2417.4.2 Test duration.**

*Amend Section G2417.4.2 to read as follows:*

**G2417.4.2 (406.4.2) Test duration.** The test duration shall be not less than ~~10~~ 30 minutes.

**Section G2417.6. Piping system, appliance and equipment leakage check.**

*Amend Section G2417.6 to read as follows:*

**G2417.6 (406.6) Piping system, appliance and equipment leakage check.** Leakage checking of systems and equipment shall be in accordance with Sections G2417.6.1 through G2417.6.4.

**G2417.6.1 (406.6.1) Test gases.** Fuel gas shall be permitted to be used for leak checks in piping systems that have been tested in accordance with Section G2417.

**G2417.6.2 1 (406.6.2) Before turning gas on.** Before gas is introduced into a system of new gas piping, the entire system shall be inspected to determine that there are no open fittings or ends and that all valves at unused outlets are closed and plugged or capped. A pressure test shall be made with the use of a manometer gauge measuring inches of water column. With all valves including gas cock and gas control valves in the open position a pressure of at least eleven (11) to fifteen (15) inches of water column shall be measured for at least fifteen (15) minutes, with no perceptible drop in pressure.

Manometer testing shall be performed by a person holding a valid Washoe County or City of Fernley manometer tester card for which the number is to be provided at the time of request for inspection. A visual manometer test to be witnessed by the authority having jurisdiction may be allowed by the Building Official. A manometer test does not need to be reported when the serving gas utility performs a manometer test prior to providing service.

**G2417.6.3 2 (406.6.3) Leak check.** Immediately after the gas is turned on into a new system or into a system that has been initially restored after an interruption of service, the piping system shall be checked for leakage. Where leakage is indicated, the gas supply shall be shut off until the necessary repairs have been made.

**G2417.6.4-3 (406.6.4) Placing appliances and equipment in operation.** Appliances and equipment shall be permitted to be placed in operation after the piping system has been checked for leakage and determined to be free of leakage and purged in accordance with Section G2417.7.2.

**Section P2601 General.**

*Add the following subsection to Section P2601:*

**P2601.4 Alternate Standards.** In addition to the standards listed in Chapter 26, the following standards listed below shall be labeled as recognized Plumbing Code Standards.

1. The California-Nevada American Water Works Association (CA-NV Section) standards governing the certification of backflow prevention testers and cross-connection control program.
2. The University of Southern California's Foundation for Cross-Connection Control and Hydraulic Research Current edition Manual of Cross-Connection Control.

### **Section 2902.3 Backflow protection**

*Add the following subsection to Section P2902.3:*

#### P2902.3.7 Testing of backflow

The premise owner or responsible person shall have the backflow prevention assembly tested by a certified backflow assembly tester at the time of installation, repair, or relocation and at least on an annual schedule thereafter or more often when required by the water purveyor, utility, or the Health Department District. The periodic testing shall be performed in accordance with the procedures referenced in the University of Southern California Manual Cross-Connection Control current edition by a tester qualified in accordance with those standards and the CA-NV Section of AWWA backflow prevention assembly testers and cross-connection control program specialist.

### **Section P3004.1 DWV system load.**

*Amend Section P3004.1 to read as follows:*

**P3004.1 DWV system load.** The load on DWV-system piping shall be computed in terms of drainage fixture unit (d.f.u.) values in accordance with Table P3004.1. Minimum sewer size shall be four (4) inches in diameter.

### **Section E3501.6.2 Service disconnect location.**

*Amend Section E3501.6.2 to read as follows:*

**E3501.6.2 Service disconnect location.** The service disconnecting means shall be installed at a readily accessible location ~~either outside of a building or structure inside~~ nearest the point of entrance of the service conductors. ~~Service disconnecting means shall not be installed in bathrooms. Each occupant shall have access to the disconnect serving the dwelling unit in which they reside. 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 a twelve inch (12") equilateral triangle, red in color.

### **Section E3604 Feeder requirements.**

*Add new Section E3604.6 to read as follows:*

**3604.6 Location of disconnecting means.** The service disconnecting means shall be installed outside of the building or other structure at a readily accessible location either outside of a building or inside nearest the point of entrance of the service conductors. Service disconnecting means shall not be installed in bathrooms. Each occupant shall have access to the disconnect serving the dwelling unit in which they reside 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 a twelve inch (12") equilateral triangle, red in color.

### **Section E3605.6 Fuses and fixed trip circuit breakers.**

*Add new subsection E3605.6.1 to 3605.6:*

**E3605.6 Fuses and fixed trip circuit breakers.** The standard ampere ratings for fuses and inverse time circuit breakers shall be considered 15, 20, 25, 30, 35, 40, 45, 50, 60, 70, 80, 90, 100, 110, 125, 150, 175, 200, 225, 250, 300, 350 and 400 amperes.

Plug fuses of the Edison-based type shall be used only for replacement 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 be made to comply with the requirements for a Type S fuse holder through the installation of a tamper proof (rejection type) base.

### **Section E3808.18 Bonding other enclosures.**

*Amend Section E3808.18 to read as follows:*

**E3808.18 Bonding other enclosures.** Metal raceways, cable armor, cable sheath, enclosures, frames, fittings and other metal noncurrent-carrying parts that serve as grounding conductors, with or without the use of supplementary equipment grounding conductors, shall be effectively bonded where necessary to ensure electrical continuity and the capacity to conduct safely any fault current likely to be imposed on them. Any nonconductive paint, enamel and similar coating shall be removed at threads, contact points and contact surfaces, or connections shall be made by means of fittings designed so as to make such removal unnecessary. The Authority Having Jurisdiction shall require a supplementary grounding conductor where a metallic raceway is subject to damage or is likely to be disturbed.

FPN: An example of 'subject to damage' might be a surface mounted conduit along a traffic path in a warehouse. An example of 'likely to be disturbed' might be conduit across a rooftop, where re-roofing operations will require the conduit to be removed.

### **Section AH106.1 General.**

*Amend Section AH106.1 to read as follows:*

**AH106.1 General.** ~~In areas with a frostline depth of zero as specified in Table R301.2 (1),~~ a An unenclosed patio cover that projects 14 feet or less from the main structure shall be permitted to be supported on a slab on grade without footings, provided the slab conforms to the provisions of Section R506 of this code, is not less than 3.5 inches (89 mm) thick and the columns do not support live and dead loads in excess of 750 pounds (3.34 kN) per column.

## 2006 Uniform Mechanical Code

### Section 405.0 Evaporative Cooling Systems.

*Amend Section 405.0 to read as follows:*

#### **405.0 Evaporative Cooling Systems.**

Evaporative cooling systems will comply with this chapter. Evaporative coolers shall not be used for make-up air units on commercial kitchen hoods and kitchen ventilation systems

Exception: Evaporative cooling systems that are a listed assembly with tempered air for kitchen make-up air systems.

### Section 504.3.2.2 Length Limitation.

*Amend Section 504.3.2.2 to read as follows:*

**504.3.2.2 Length Limitation.** Unless otherwise permitted or required by the dryer manufacturer's installation instructions and approved by the Authority Having Jurisdiction, domestic dryer moisture exhaust ducts shall not exceed a total combined horizontal and vertical length of fourteen (14) feet (4,263 mm) including two (2) 90 degree (1.57 rad) elbows. Two (2) feet (610 mm) shall be deducted for each 90 degree (1.57 rad) elbow in excess of two. The maximum length of a clothes dryer exhaust duct shall not exceed 25 feet (7620 mm) from the dryer location to the wall or roof termination. The maximum length of the duct shall be reduced 2.5 feet (762 mm) for each 45-degree (0.8 rad) bend and 5 feet (1524 mm) for each 90-degree (1.6 rad) bend. The maximum length of the exhaust duct does not include the transition duct.

#### **Exceptions:**

1. Where the make and model of the clothes dryer to be installed is known and the manufacturer's installation instructions for the dryer are provided to the building official, the maximum length of the exhaust duct, including any transition duct, shall be permitted to be in accordance with the dryer manufacturer's installation instructions.
2. Where large-radius 45-degree (0.8 rad) and 90-degree (1.6 rad) bends are installed, determination of the equivalent length of clothes dryer exhaust duct for each bend by engineering calculation in accordance with the ASHRAE Fundamentals Handbook shall be permitted.

## **Section 508.5 Exhaust Hood Assemblies with Integrated Supply-Air Plenums.**

*Add the following subsection to 508.5.*

**508.5.3 Any non-listed hood shall not be of a “Short Circuit” design where a hood supply air plenum discharges replacement or make-up air directly into the hood exhaust chamber.**

## **Section 511.3 Replacement Air.**

*Amend Section 5011.3 to read as follows:*

**511.3 Replacement Air.** Replacement air quantity shall be adequate to prevent negative pressures in the commercial cooking area(s) from exceeding 0.02 in. water column (4.98 kPa).

### **Exceptions:**

- (1) When its fire-extinguishing system discharges, makeup air supplied internally to a hood shall be shut off.
- (2) Compensating hoods shall meet the airflow requirements specified in Sections 508.4.1.3 through 508.4.1.5. Compensating hoods shall extract at least twenty percent (20%) of their required exhaust airflow from the kitchen area.

## **Section 605.0 Insulation of Ducts**

*Amend Section 605.0 to read as follows:*

### **605.0 Insulation of Ducts.**

Supply- and return-air ducts and plenums of a heating or cooling system shall be insulated to achieve the minimum thermal (R) value as set forth in ~~Tables 6-6 A and B~~ the 2006 IECC sections 403.2 for residential construction and 503.2.7 for commercial applications.

### **Exceptions:**

- (A) ~~Factory installed plenums, casings, or ductwork furnished as a part of HVAC equipment tested and rated in accordance with approved energy efficiency standards.~~
- (B) ~~Ducts or plenums located in conditioned spaces.~~
- (C) ~~For runouts less than 10 feet (3 m) in length to air terminals or air outlets, the rated R value of insulation need not exceed R-3.5 (R-0.6).~~
- (D) ~~Backs of air outlets and outlet plenums exposed to unconditioned or indirectly conditioned spaces with face areas exceeding 5 sq. ft. (0.5 m<sup>2</sup>) need not exceed R-2 (R-0.4); those 5 sq. ft. (0.5 m<sup>2</sup>) or smaller need not be insulated.~~
- (E) ~~Ducts and plenums used exclusively for evaporative cooling systems.~~

Approved materials shall be installed within ducts and plenums for insulating, sound deadening or other purposes. Materials shall have a mold, humidity, and erosion-resistant surface that meets the requirements of the referenced standard for air ducts in Chapter 17, Part II. Duct liners in systems operating with air velocities exceeding 2000 feet per minute (10.16 m/s) shall be fastened with both adhesive and mechanical fasteners, and exposed edges shall have adequate treatment to withstand the operating velocity.

Insulation applied to the surface of ducts, including duct coverings and linings, tapes and adhesives located in buildings shall have flame-spread index of 25 and a maximum smoke-developed index of 50, when tested in accordance with NFPA 255-2000, Standard Method of Test of Surface Burning Characteristics of Building Materials, or in accordance with ASTM E 84-2000a, Standard Test Method for Surface Burning Characteristics of Building Materials, or in accordance with the provisions of UL 723-96, Standard for Test of Surface Burning Characteristics of Building Materials. The specimen preparation and mounting procedures of ASTM E 2231, Specimen Preparation and Mounting of Pipe and Duct Insulation Materials to Assess surface Burning Characteristics shall be used. Air duct coverings and linings shall not flame, glow, smolder, or smoke when tested in accordance with ASTM C 411-97, Standard Test Method for Hot-Surface Performance of High-Temperature Thermal Insulation, at the temperature to which they are exposed in service. In no case shall the test temperature be below 250°F (121°C). Factory-made air ducts and faced insulations intended for installation on the exterior of ducts shall be legibly printed with the name of the manufacturer, the thermal resistance (R) value at installed thickness, and the flame-spread index and smoke-developed index of the composite material.

**Table 6-6 A**

*Delete entire table and footnotes.*

**Table 6-6-B**

*Delete entire table and footnotes.*

**Section 1019.0 Fuel piping, Tanks and Valves.**

*Amend Section 1019.0 to read as follows:*

**1019.0 Fuel Piping, Tanks, and Valves.** Tanks, piping and valves for oil-burning appliances shall be installed in accordance with NFPA 31, Standard for the Installation of Oil-Burning Equipment, and the International Fire Code. Where a requirement may differ between documents, the more restrictive requirements shall apply. That portion of the oil-burning system supplied on boilers and covered within the scope of NFPA 85 shall be installed in accordance with NFPA 85.

## **Section 1123.2 Field Tests.**

*Amend section 1123.2 to read as follows:*

**1123.2 Field Tests.** Refrigerant-containing parts of a system that is field erected shall be tested and proved tight to the satisfaction of the Authority Having Jurisdiction after complete installation and before operation. The high and low sides of each system shall be tested and proved tight at not less than the lower of the pressure in Table 11-4 or the setting of the pressure-relief device.

### **Exceptions:**

- (1) Compressors, condensers, evaporators, coded pressure vessels, safety devices, pressure gauges, control mechanisms, and systems that are factory tested.
- (2) Refrigeration systems containing Group R-22 and R410a, not exceeding five (5) tons of refrigeration capacity (17.58 kW), and field piped using approved, factory-charged line sets may be proved tight by observing retention of pressure on a set of charging gauges and soaping connections while the system is operating.

## **2006 Uniform Plumbing Code**

### **Section 301.1.3 Standards.**

*Add sub section 301.1.3.1 to section 301.1.3:*

**301.3.1 In addition to the standards listed in Chapter 14, the following standards listed below shall be labeled as recognized Plumbing Code Standard:**

1. **The California-Nevada American Water Works Association (CA-NV Section) standards governing the certification of backflow prevention testers and cross-connection control program.**
2. **The University of Southern California's Foundation for Cross-Connection Control and Hydraulic Research current edition Manual of Cross-Connection Control.**

**The primary product and performance standard for the design, installation, and testing of the backflow assembly shall be the University of Southern California's Manual of Cross-Connection Control and Hydraulic Research current edition. When conflicts arise between the provisions of the Uniform Plumbing Code and the U. S. C. Manual of Cross-Connection Control, the most restrictive shall govern.**

### **Section 412.0 Minimum Plumbing Facilities.**

*Delete entire section.*

### **Table 4.1 Minimum Plumbing Facilities.**

*Delete entire table and footnotes.*

### **Table A Occupant Load Factor.**

*Delete entire table and footnotes.*

### **Section 411.2 Location of Floor Drains.**

*Add subsection 411.2.4*

411.2.4 Floor drains shall be provided in public boiler rooms, in commercial boiler rooms, boiler room areas of multi-family buildings and adjacent to areas where meat or poultry processing is conducted.

### **Section 603.3.3 General requirements.**

*Amend Section 603.3.3 to read as follows:*

#### **603.3 General Requirements.**

**603.3.3** The premise owner or responsible person shall have the backflow prevention assembly tested by a certified backflow assembly tester at the time of installation, repair, or relocation and at least on an annual schedule thereafter or more often when required by the Authority Having Jurisdiction, water purveyor, utility, or the District Health Department. The periodic testing shall be performed in accordance with procedures referenced in Table 14-1 by a tester qualified in accordance with those standards, the University of Southern California Manual of Cross-Connection Control current edition by a tester qualified in accordance with those standards and the CA-NV section of AWWA backflow prevention assembly testers and cross-connection control program specialist.

### **Section 604.0 Materials**

*Add the following subsection to 604.8.*

**604.8.1 Plastic materials shall not be used in Type I or Type II construction.**

**Exception: Type II-B construction three stories or less.**

### **Section 701.0 Materials.**

*Add the following subsection to 701.0.*

**701.1.6 Plastic materials shall not be used in Type I, Type II-A or structures more than three stories in height of Type II-B construction.**

*Add the following subsection to 701.2*

**701.2.3 Plastic materials shall not be used in Type I, Type II-A or structures more than three stories in height of Type II-B construction.**

## **Section 717.0 Size of Building Sewers.**

*Amend Section 717.0 to read as follows:*

### **717.0 Size of Building Sewers.**

The minimum size of any building sewer shall be determined on the basis of the total number of fixture units drained by such sewer, in accordance with Table 7-8, but in no event less than four (4) inches in diameter. No building sewer shall be smaller than the building drain.

## **Section 1101.5 Subsoil Drains**

*Amend Section 1101.5 to read as follows:*

### **1101.5 Subsoil Drains.**

**1101.5.1** Subsoil drains shall be provided around the perimeter of buildings having basements, cellars, or crawl spaces or floors below grade. Such subsoil drains may be positioned inside or outside the footing, shall be perforated or open-jointed approved drain tile or pipe not less than three (3) inches (80 mm) in diameter, and shall be laid in gravel, slag, crushed rock, approved three-quarter (3/4) inch (19.1 mm) crushed recycled glass aggregate, or other approved porous material with a minimum of four (4) inches surrounding the pipe on all sides. Filter media shall be provided for exterior subsoil piping.

When required by the soils engineer or Building Official subsoil drains shall be provided around the perimeter of buildings having basements, cellars, crawl spaces or floors below grade. Subsoil drains shall be installed in accordance with the soils engineer's design or in the absence of such design, such sub soil drains may be positioned inside or outside of the footing, shall be perforated or open-jointed approved drain tile or pipe not less than 3 inches (80 mm) in diameter and shall be laid in gravel, slag, crushed rock, approved  $\frac{3}{4}$  inch (19.1 mm) crushed recycle glass or other approved porous material with a minimum of 4 inches (102 mm) surrounding the pipe on all sides. Filter media shall be provided for subsoil piping.

## **Section 1214.3 Test Pressure.**

*Amend Section 1214.3 to read as follows:*

### **1214.3 Test Pressure.**

**1214.3.1** Test pressure shall be measured with a manometer or with a pressure measuring device designed and calibrated to read, record, or indicate a pressure loss due to leakage

~~during the pressure test period. The source of pressure shall be isolated before the pressure tests are made. Mechanical gauges used to measure test pressures shall have a range such that the highest end of the scale is not greater than five times the test pressure. High pressure gas test. This test shall be made before any fixtures, appliances or shut-off valves have been attached and before being concealed. This test shall include an air, CO<sub>2</sub> or nitrogen pressure test at which time the gas piping shall stand at a pressure of not less than twenty-five (25) PSI (68.9kPa) gauge pressure for no less than thirty (30) minutes.~~

~~1214.3.2 The test pressure to be used shall be no less than 1-1/2 times the proposed maximum working pressure, but not less than 3 psi (20 kPa), irrespective of design pressure. A manometer test shall be made after all valves, unions, connectors and piping to the appliances are complete. A pressure test shall be made with the use of a manometer gauge measuring inches of water column. With all valves including gas cock and gas control valves in the open position a pressure of at least eleven (11) to fifteen (15) inches of water column shall be measured for at least fifteen (15) minutes, with no perceptible drop in pressure.~~

Manometer testing shall be performed by a person holding a valid Washoe County or City of Fernley manometer tester card for which the number is to be provided at the time of request for inspection. A visual manometer test to be witnessed by the authority having jurisdiction may be allowed by the Building Official. A manometer test does not need to be reported when the serving gas utility performs a manometer test prior to providing service.

~~1214.3.3 Test duration shall be not less than  $\frac{1}{2}$  h for each 500 cu. ft. (14 m<sup>3</sup>) of pipe volume or fraction thereof. When testing a system having a volume less than 10 cu. ft. (0.28 m<sup>3</sup>) or a system in a single family dwelling, the test duration shall be a minimum of 10 minutes. The duration of the test shall be a minimum of 10 minutes. The duration of the test shall not be required to exceed 24 hours. Where gas piping is to be welded, a pressure test shall be conducted. The test pressure shall not be less than sixty (60) PSI (413.4kPa) gauge pressure and shall be continued for one (1) hour with no perceptible drop in pressure.~~

# 2005 National Electrical Code

## **Article 225.32 Location.**

*Amend Article 225.32 to read as follows:*

### **225.32 Location.**

The disconnection shall be installed ~~either inside or attached to the~~ outside of the building or structure served or where the conductors pass through the building or structure. The disconnecting means shall be at a readily accessible location nearest the point of entrance of the conductors. For the purpose of this section, the requirements in 230.6 shall be permitted to be utilized.

Exception No. 1: For installations under single management, where documented safe switching procedures are established and maintained for disconnection and where the installation is monitored by qualified individuals, the disconnected means shall be permitted to be located elsewhere on the premises.

Exception No. 2: For buildings or other structures qualified under the provisions of Article 685, the disconnecting means shall be permitted to be located elsewhere on the premises.

Exception No. 3: For towers or poles used as lighting standards, the disconnecting means shall be permitted to be located elsewhere on the premises.

Exception No. 4: For poles or similar structure used only for support of signs installed in accordance with Article 600, the disconnecting means shall be permitted to be located elsewhere on the premises.

Exception No. 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').

Exception No. 6: 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 a twelve inch (12") equilateral triangle, red in color.

## **Article 230.70(A)(1).**

*Amend Article 230.70(A)(1) to read as follows:*

### **230.70(A)(1) Readily Accessible Location**

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'). at a readily accessible location either outside of a building or structure or inside nearest the point of entrance of the service conductors.

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 a twelve inch (12") equilateral triangle, red in color.

#### **Article 240.51(B).**

*Amend Article 240. (B) to read as follows:*

#### **240.51(B) Replacement Only.**

Plug fuses of the Edison-based shall be used only for replacement 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 Section 240.54.

#### **Article 250.96(A) General.**

*Amend Article 250. (A) to read as follows:*

#### **250.96(A) General**

Metal raceways, cable trays, cable armor, cable sheath, enclosures, frames, fittings, and other metal non-current-carrying parts that are to serve as ground conductors, with or without the use of supplementary equipment grounding conductors, shall be effectively bonded where necessary to ensure electrical continuity and the capacity to conduct safely any fault current likely to be imposed on them. Any nonconductive paint, enamel, or similar coating shall be removed at threads, contact points, and contact surfaces or be connected by means of fittings designed so as to make such removal unnecessary. The Authority Having Jurisdiction shall require a supplementary grounding conductor where a metallic raceway is subject to damage or likely to be disturbed.

FPN: An example of 'subject to damage' might be a surface mounted conduit along a traffic path in a warehouse. An example of 'likely to be disturbed' might be conduit across a rooftop, where re-roofing operations will require the conduit to be removed.

### **Article 314.17(C) Non Metallic Boxes and Conduit Bodies.**

*Amend Article 314.17(C) to read as follows:*

#### **314.17(C) Nonmetallic Boxes and Conduit Bodies.**

Nonmetallic boxes and conduit bodies shall be suitable for the lowest temperature-rated conductor entering the box. Where nonmetallic boxes and conduit bodies are used with messenger support wiring, open wiring on insulators, or concealed knob-and-tube wiring, the conductors shall enter the boxes through individual holes. Where flexible tubing is used to enclose the conductors, the tubing shall extend from the last insulated support to not less than 6 mm (1/4 in.) inside the box and beyond any cable clamp. Where nonmetallic-sheathed cable or multiconductor Type UF cable is used, the sheath shall extend not less than 6 mm (1/4 in.) inside the box and beyond any cable clamp. In all instances, all permitted wiring methods shall be secure to the boxes.

**EXCEPTION:** Where nonmetallic-sheathed cable or multiconductor Type UF cable is used with ~~single-gang boxes not larger than a nominal size 57 mm x 100 mm (2 1/4 in. x 4 in.)~~ mounted in walls or ceilings, and where the cable is fastened within 200 mm (8 in.) of the box measured along the sheath and the sheath extends through a cable knockout not less than 6 mm. (1/4 in.) securing the cable to the box shall not be required. Multiple cables entries shall be permitted in a single cable knockout opening.

## 2006 International Energy Conservation Code

### **Section 101.4.3 additions, alterations, renovations or repairs.**

*Amend Section 101.4.3 to read as follows:*

**101.4.3 Additions, alterations, renovations or repairs.** Additions, alterations, renovations or repairs to an existing building, building system or portion thereof shall conform to the provisions of this code as they relate to new construction without requiring the unaltered portion(s) of the existing building or building system to comply with this code. Additions, alterations, renovations, or repairs shall not create an unsafe or hazardous condition or overload existing building systems.

**Exception:** The following need not comply provided the energy use of the building is not increased:

1. Storm windows installed over existing fenestration.
2. Glass only replacements in an existing sash and frame.
3. Existing ceiling, wall or floor cavities exposed during construction provided that these cavities are filled with insulation.
4. Construction where the existing roof, wall or floor cavity is not exposed.
5. Relocations of existing luminaires within an existing space.

### **Section 202 General Definitions.**

*Amend Section 202 to include the following definitions:*

**Casino-Front of House.** Areas of the casino that are physically accessible or visible to the general public and guests, such as the exterior facades, landscaping, entries, lobbies, guestroom corridors, porte cochères, retail shops restaurants, theaters, gaming areas, guest conference rooms and meeting rooms and other areas of entertainment as determined by the code official.

**International Electrical Code.** The Electrical Code, whether the National Electrical Code or the International Electrical Code, as amended and adopted by the local jurisdiction.

**International Mechanical Code.** The Mechanical Code, whether the Uniform Mechanical Code or the International Mechanical Code as amended and adopted by the local jurisdiction.

**International Plumbing Code. The Plumbing Code, whether the Uniform Plumbing Code or the International Plumbing Code, as amended and adopted by the local jurisdiction.**

**International Fire Code. The Fire Code, whether the Uniform Fire Code or the International Fire Code as amended and adopted by the local jurisdiction.**

**International Fuel Gas Code. The Fuel Gas Code, whether NFPA 54 or the International Fuel Gas Code, as amended and adopted by the local jurisdiction.**

### **Section 401.3 Certificate.**

*Amend Section 401.3 to read as follows:*

401.3 Certificate. A permanent certificate shall be posted ~~on or in the electrical distribution panel, under the kitchen sink.~~ The certificate shall be completed by the builder or registered design professional. The certificate shall list the predominant  $R$ -values of insulation installed in or on ceiling/roof, walls, foundation (slab, basement wall, crawlspace wall and /or floor) and ducts outside conditioned spaces;  $U$ -factors for fenestration; and the solar heat gain coefficient (SHGC) of fenestration. Where there is more than one value for each component, the certificate shall list the value covering the largest area. The certificate shall list the type and efficiency of heating, cooling and service water heating equipment.

### **Section 403.2.1 Insulation.**

*Amend Section 403.2.1 to read as follows:*

**403.2.1 Insulation.** Supply and return ducts shall be insulated to a minimum of R-8 R-6. Ducts in floor trusses shall be insulated to a minimum of R-6.

**Exception:** Ducts or portions thereof located completely inside the building thermal envelope.

### **Section 502.4.6 Vestibules.**

*Add the following subsection to Section 502.4.6:*

**502.4.6 Vestibules.** A door that separates conditioned space from the exterior shall be protected with an enclosed vestibule, with all doors opening into and out of the vestibule equipped with self-closing devices. Vestibules shall be designed so that in passing through the vestibule it is not necessary for the interior and exterior doors to open at the same time.

**Exceptions:**

1. Buildings in Climate Zones 1 and 2 as indicated in Figure 301.1 and Table 301.1.
2. Doors not intended to be used as a building entrance door, such as doors to mechanical or electrical equipment rooms.
3. Doors opening directly from a sleeping unit or dwelling unit.
4. Doors that open directly from a space less than 3,000 square feet ( $298\text{m}^2$ ) in area.
5. Revolving doors.
6. Doors used primarily to facilitate vehicular movement or material handling and adjacent personnel doors.
7. Buildings four stories or less.

**Section 503.2.6 Energy recovery ventilation systems.**

*Add the following exception to Section 503.2.6:*

**503.2.6 Energy recovery ventilation systems.**

Individual fan systems that have both a design supply air capacity of 5,000 cfm (2.36  $\text{m}^3/\text{s}$ ) or greater and a minimum outside air supply of 70 percent or greater of the design supply air quantity shall have an energy recovery system that provides a change in the enthalpy of the outdoor air supply of 50 percent or more of the difference between the outdoor air and return air at design conditions. Provision shall be made to bypass or control the energy recovery system to permit cooling with outdoor air where cooling with outdoor air is required.

**Exception:** An energy recovery ventilation system shall not be required in any of the following conditions:

1. Where energy recovery systems are prohibited by the *International Mechanical Code*.
2. Laboratory fume hood systems with a total exhaust rate of 15,000 cfm (7.08  $\text{m}^3/\text{s}$ ) or less.
3. Laboratory fume hood systems with a total exhaust rate greater than 15,000 cfm (7.08  $\text{m}^3/\text{s}$ ) that include at least one of the following features:
  - 3.1. Variable-air-volume hood exhaust and room supply systems capable of reducing exhaust and makeup air volume to 50 percent or less of design values.
  - 3.2. Direct makeup (auxiliary) air supply equal to at least 75 percent of the exhaust rate, heated no warmer than  $2^\circ\text{ F}$  ( $1.1^\circ\text{C}$ ) below room set point, cooled to no cooler than  $3^\circ\text{ F}$  ( $1.7^\circ\text{ C}$ ) above room set point, no humidification added, and no simultaneous heating and cooling used for dehumidification control.
4. Systems serving spaces that are not cooled and are heated to less than  $60^\circ\text{ F}$  ( $15.5^\circ\text{ C}$ ).

1. Specialized medical, dental and research lighting.
2. Professional sports arena playing field lighting.
3. Display lighting for exhibits in galleries, museums and monuments.
4. Sleeting unit lighting in hotels, motels, boarding houses or similar buildings.
5. Emergency lighting automatically off during normal building operation.
6. Casino-Front of House areas on properties classified by local jurisdictions as a qualified casino.