SOUTHERN NEVADA AMENDMENTS

TO THE

2024 UNIFORM PLUMBING CODE

Preface

This document was developed by the Southern Nevada Building Officials' (SNBO) Plumbing and Mechanical Code Committee and presents amendments to the 2024 Uniform Plumbing Code (UPC) as published by the International Association of Plumbing and Mechanical Officials (IAPMO).

Participation in the 2024 Plumbing and Mechanical Code Committee was open to all interested parties. However, voting on amendment proposals was limited to one vote each for seven Southern Nevada municipalities (Clark County, Henderson, Las Vegas, North Las Vegas, Boulder City, Pahrump, and Mesquite), the Clark County School District, and three industry representatives. All committee proceedings were conducted in accordance with Robert's Rules of Order.

The recommended amendments contained herein are not code unless adopted and codified by governmental jurisdictions. These amendments are not intended to prevent the use of any material or method of construction not specifically prescribed herein, provided any alternates have been approved and their use authorized by the Building Official. This document may be copied and used in whole or in part without permission or approval from the organizations listed on the cover page.

ADOPTION BY CLARK COUNTY

Adopted by action of the Clark County Commission on July 15, 2025 for correlation with the 2024 Uniform Plumbing Code. This document and the 2024 Uniform Plumbing Code shall be effective on January 11, 2026.

Table of Contents

Chapter 1

Delete Chapter 1, with the exception of Sections 101.0, 101.1, 101.2, 101.3 and 101.4, replace Section 101.5, and add new Section 101.6 to read as follows:

101.0 General. *(remains unchanged)*

101.1 Title. *(remains unchanged)*

101.2 Scope. *(remains unchanged)*

101.3 Purpose. *(remains unchanged)*

101.4 Unconstitutional. *(remains unchanged)*

101.5 Plumbing Licensing Provision. Provision for licensing shall be determined by the Administration Provision of Authority Having Jurisdiction.

101.6 Appendices. The following appendices are specifically adopted: Appendix A; Appendix B; Appendix C; Appendix D; Appendix E; Appendix G; Appendix I; Appendix J; Appendix K; Appendix L; Appendix M; Appendix N; Appendix Q; and Appendix R.

Section 207.0

Revise the definition for Expansion Tank in Section 207.0 to read as follows:

Expansion Tank. A vessel used to protect closed systems from excessive pressure.

Section 310.4

Revise Section 310.4 to read as follows:

310.4 Use of Vent and Waste Pipes. Except as hereinafter provided in Sections 908.0 through 911.0, no vent pipe shall be used as a soil or waste pipe, nor shall a soil or waste pipe be used as a vent.

Exception: Single stack DWV systems may be used provided they are designed by a Nevada registered Mechanical Engineer and approved by the authority having jurisdiction.

Section 401.2

Add new Section 401.2.1 as follows:

401.2.1 Water Sense Program. Lavatory faucets, urinals, water closets and showerheads installed in every residential, commercial, or industrial structure on which construction begins on or after January 1, 2020 shall be certified to EPA Water Sense - 2007 High Efficiency Lavatory Faucet Specification, EPA Water Sense - 2009 Specification for Flushing Urinals, EPA Water Sense - 2014 Specification for Tank-Type Toilets, EPA Water Sense - 2015 Specification for Flushometer-Valve Water Closets, EPA Water Sense - 2018 Specification

for Showerheads, as applicable. All other plumbing fixtures shall have consumptions rates as required by other sections of this code, as applicable.

Exception: If the Water Sense program modifies the requirements for a plumbing fixture to be certified under the Water Sense program, a plumbing fixture that was certified under the previous requirements shall be deemed certified for use under the Water Sense program for period of 12 months following the modification of the requirements for certification.

Section 407.2.1

Revise Section 407.2.1 to read as follows:

407.2.1 Maximum Flow Rate. The maximum flow rate for public lavatory faucets shall not exceed 0.5 gpm at 60 psi (1.9 L/m at 414 kPa) and 1.5 gpm at 60 psi (5.7 L/m at 414 kPa) for private lavatory faucets.

Section 407.4

Revise Section 407.4 to read as follows:

407.4 Public Lavatories. Self-closing or metering faucets shall be installed on lavatories in public restrooms. Multiple faucets that are activated from a single point shall not be installed.

Section 408.3

Revise Section 408.3 to read as follows:

408.3 Water Consumption. Showerheads shall have a maximum flow rate of no more than 2.0 gpm at 80 psi. (7.5 L/m at 552 kPa). Body sprays shall have a flow rate of not more than 2.0 gpm at 80 psi (7.5 L/m at 552 kPa).

Section 411.2

Revise Section 411.2 to read as follows:

411.2 Water Consumption. Water closets shall have a maximum consumption not to exceed 1.28 gallons (4.8 liters) of water per flush. A timing device or other mechanism which will automatically flush a water closet periodically or continually is prohibited.

Section 411.2.2

Revise Section 411.2.2 to read as follows:

411.2.2 Flushometer Valve Activated Water Closets. Flushometer valve activated water closets shall have a maximum flush volume of 1.28 gallons (4.8 L) of water per flush. A timing device or other mechanism which will automatically flush a water closet periodically or continually is prohibited.

Section 412.1

Revise Section 412.1 to read as follows:

412.1 Application. Urinals shall comply with ASME A112.19.2/CSA B45.1, ASME A112.19.19., or CSA B45.5/IAPMO Z124. Urinals shall have an average water consumption not to exceed 0.5 gallon (1.9 L) of water per flush. A timing device or other mechanism which will automatically flush a urinal periodically or continually is prohibited.

Section 415.2

Revise section 415.2 to read as follows:

415.2 Drinking Fountain Alternatives. Drinking fountain alternatives shall be provided for the type of occupancy and in the minimum number as required by the currently adopted Building Code.

Section 418.3

Revise Section 418.3 as follows:

418.3 Location of Floor Drains. Floor drains shall be installed in the following areas:

(1) Toilet rooms containing two or more water closets or a combination of one water closet and one urinal, except in a dwelling unit.

(2) Commercial kitchens.

(3) Laundry rooms in commercial buildings and common laundry facilities in multi-family dwelling buildings.

(4) Boiler rooms.

(5) All Fire Pump rooms shall be provided with a (3) inch (76 mm) minimum floor drain which must be connected to an approved trap primer.

(6) Toilet facilities serving public pools or spas, regardless of the quantity and type of fixtures shall be provided with a floor drain with trap seal protection in accordance with UPC section 1007.0 as amended, to prevent the accumulation of standing water. At least one hose bib or potable water source capable of connecting a hose shall be required to facilitate cleaning of the toilet facility.

Section 422.0

Revise Section 422.0 to read as follows:

422.0 Minimum Number of Required Fixtures.

422.1 Fixture Count. Plumbing fixtures shall be provided for the type of occupancy and in the minimum number as required by the currently adopted Building Code.

422.2 Reserved.

422.3 Reserved.

422.4 Reserved.

422.5 Reserved.

422.6 Water Closet Compartment. *(remains unchanged)*

422.7 Urinal Partitions. *(remains unchanged)*

Table 422.1

Delete Table 422.1 in its entirety.

Section 507.5

Revise Section 507.5 to read as follows:

507.5 Drainage Pan. Where a water heater is installed in an attic, in or on an attic ceiling assembly, floor-ceiling assembly, floor-subfloor assembly or where damage results from a leaking water heater, a watertight pan of corrosion-resistant materials shall be installed beneath the water heater in accordance with the following:

(1) The drainage pan shall be provided with not less than ¾ of an inch (20 mm) diameter drain to an approved location. The terminating end of the drainpipe shall be readily visible.

(2) The drainage pan shall be not less than 1½ inches (38 mm) in depth.

(3) Where a drainage pan pipe is installed, the material of the piping shall be approved for use with the liquid being discharged.

(4) Discharge from a relief valve into a drainage pan shall be prohibited.

Exceptions:

(1) A drainage pan shall not be required for a tankless water heater installed in a readily accessible location.

(2) A drainage pan shall not be required for a point of use water heater.

Section 508.3.1

Revise Section 508.3.1 to read as follows:

508.3.1 Access. Buildings of more than 15 feet in height shall have an interior or exterior means of access to the roof, in accordance with Section 508.3.2 as applicable.

Section 508.3.2

Revise Section 508.3.2 to read as follows:

508.3.2 Access Type. Permanent ladders required by Section 508.3.1 or exterior ladders shall be constructed in accordance with the following:

(1) Side railings shall extend not less than 30 inches (762 mm) above the roof or parapet wall.

(2) Landings shall not exceed 18 feet (5486 mm) apart measured from the finished grade.

(3) Width shall be not less than 14 inches (356 mm) on center.

(4) Rungs spacing shall not exceed 12 inches (305 mm) on center, and each rung shall be capable of supporting a 300 pound (136.1 kg) load.

(5) Toe space shall be not less than 6 inches (152 mm).

Exceptions:

1. Permanent exterior ladders providing roof access need not extend closer than eight (8) feet (2438 mm) to the finish grade.

2. A portable ladder may be used for access for a Group R Division 3 and 4 and U occupancies.

3. Permanent ladders for equipment access need not be provided at parapets or walls less than thirty (30) inches (762mm) in height.

Section 509.6.1

Add an exception to Subsection 509.6.1, item #1, to read as follows:

509.6.1 Gas Vent Termination. The termination of gas vents shall comply with the following requirements:

(1) A gas vent shall terminate in accordance with one of the following:

Items (1)(a) through (1)(g) remain unchanged.

Exception: A single-family residence having gas vents twelve (12) inches (300 mm) in size or smaller with listed caps shall be permitted to be terminated in accordance with

Figure 509.6.1, provided they are at least four (4) feet (1.2 m) from a vertical wall or similar obstruction.

Items (2) through (7) remain unchanged.

Section 601.2.1

Add an exception to Section 601.2.1 as follows:

601.2.1 Hot and Cold Water Required. *(remains unchanged)*

Exception: Hot water shall not be required at public park lavatories.

Section 603.4.2

Revise Section 603.4.2 as follows:

603.4.2 Testing. 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 not less than on an annual schedule thereafter, or more often when required by the Authority Having Jurisdiction. The certified tester shall leave a copy of their backflow certification on site along with a copy of the certification of each device tested. The periodic testing shall be performed in accordance with the procedures referenced in ASSE/IAPMO/ANSI Series 5000 by a tester qualified in accordance with those standards. The field test kit used shall comply with ASSE 1064.

Section 608.5

Revise Section 608.5 to add Item (9) as follows:

608.5 Discharge Piping. The discharge piping serving a temperature relief valve, pressure relief valve, or combination of both shall have no valves, obstructions, or means of isolation and be provided with the following:

Items (1) through (8) remain unchanged.

(9) For relief valves located inside a building, provide a drain of galvanized steel, hard-drawn copper piping and fittings, CPVC, PP or flexible corrugated connectors complying with 604.0 or listed relief valve drain tube with fittings that will not reduce the internal bore of the pipe or tubing (straight lengths as opposed to coils) and shall extend from the valve to the outside of the building or to an approved location. Temperature and Pressure Relief (T&P) drains shall discharge to the exterior of the building unless the manufacturers listing prevents this termination. T&P drains may discharge through an air gap into a secondary clothes washer port, or through an air gap in a floor sink, floor mounted mop sink or a floor drain equipped with a listed funnel, provided they are installed in accordance with section 804.1.

Section 612.0

Delete Section 612.0 Residential Fire Sprinkler Systems in its entirety.

Section 704.3

Revise Section 704.3 to read as follows:

704.3 Commercial Sinks. Pot sinks, scullery sinks, dishwashing sinks, silverware sinks, commercial dishwashing machines, and other similar fixtures shall drain indirectly to the drainage systems by means of an air gap.

Section 707.1

Add a footnote to Table 707.1, as follows:

TABLE 707.1
CLEANOUTS[1]

SIZE OF PIPE (inches)	SIZE OF CLEANOUT (inches)	THREADS (per inches)
1½	1½	11½
2	1½	11½
2½	2 ½	8
3	2 ½	8
4 & larger	3 ½	8

For SI units: 1 inch = 25 mm

Notes:

[1] Where a 2½-inch cleanout is required, a 2-inch cleanout may be used for horizontal branch waste lines.

Section 710.1

Revise Section 710.1 to read as follows:

710.1 Backflow Protection. Fixtures installed on a floor level that is lower than the next upstream manhole cover of the public, or private sewer shall be protected from backflow of sewage by installing an approved type of backwater valve. Fixtures on such floor level that are not below the next upstream manhole cover shall not be required to be protected by a backwater valve. Other than a single dwelling unit served by an individual sewer, fixtures on floor levels above such elevation shall not discharge through the backwater valve. Cleanouts for drains that pass through the backwater valve shall be clearly identified with a permanent label stating “backwater valve downstream.”

Section 710.2

Revise 710.2 to read as follows:

710.2 Sewage Discharge. Drainage piping serving fixtures that are located below the crown level of the main sewer shall discharge into an approved watertight sump or receiving tank,

so located as to receive the sewage or liquid wastes by gravity. From such sump or receiving tank, the sewage or other liquid wastes shall be lifted and discharged into the building drain or building sewer by approved ejectors, pumps, or other equally efficient approved mechanical devices.

Section 710.2.1

Add new Section 710.2.1 as follows:

710.2.1 Prohibited Discharges. Non-sewage liquid wastes, including rain, surface, or subsurface water shall be a prohibited discharge to the building sewer or as determined by the Authority Having Jurisdiction and in accordance with Chapter 11 Storm Drainage.

Section 801.3.2

Revise Subsection 801.3.2, as follows:

801.3.2 Walk-in Coolers. For walk-in coolers, floor drains shall be permitted to be connected to a separate drainage line discharging into an outside receptor. The flood-level rim of the receptor shall be not less than 6 inches (152 mm) lower than the lowest floor drain. Such floor drains shall be trapped and individually vented. Cleanouts shall be provided at 90 degree (1.57 rad) turns and shall be accessibly located. Such waste shall discharge through an air gap into a trapped and vented receptor, except that full-size air gap is required where the indirect waste pipe is under vacuum.

Section 801.3.4

Add new Section 801.3.4 to read as follows:

801.3.4 Floor Sinks. Flood level rim of floor sinks shall be installed with the finished floor, sealed with no gaps, and shall be accessible for cleaning.

Section 804.1

Amend Section 804.1 by adding a new second paragraph to read as follows:

Indirect waste piping other than the discharge from the clothes washer may be terminated into a listed clothes washer box. The second port on a multiport box shall be permanently connected to the vertical receptor standpipe via a wye branch fitting.

Section 904.1

Revise Section 904.1 to read as follows:

904.1. Size. The size of vent piping shall be determined from its length and the total number of fixture units connected thereto, in accordance with Table 703.2. The diameter of an individual vent shall be not less than 1 ¼ inches (32mm) not less than one-half the diameter

of the drain to which it is connected. In addition, the drainage piping of each building and each connection to a public sewer or a private sewage disposal system shall be vented by means of one or more vent pipes, the aggregate cross-sectional area of which shall be not less than that of the largest required building sewer as determined from Table 703.2. Vent pipes from fixtures located upstream from pumps, ejectors, or other devices that obstruct the free flow of air and other gases between the building sewer and the outside atmosphere shall not be used for meeting the cross-sectional area venting requirements of this section.

Section 913

Add new Section 913.0 to read as follows:

913.0 Air Admittance Valves

913.1 General. Vent systems utilizing air admittance valves shall comply with this section. Stack-type air admittance valves shall conform to ASSE 1050. Individual and branch-type air admittance valves shall conform to ASSE 1051. Air admittance valves shall meet all performance standards of: ASSE 1050, ASSE 1051.

913.2 Installation. The valves shall be installed in accordance with the requirements of this section and the manufacturer's instructions. Air admittance valves shall be installed after the DWV testing required by Section 318.0 or 712.0 has been performed.

913.3 Where permitted. Individual, *branch* and circuit vents shall be permitted to terminate with a connection to an individual or branch-type air admittance valve in accordance with Section 913.3.1. Stack vents and vent stacks shall be permitted to terminate to stack-type air admittance valves in accordance with Section 913.3.2.

913.3.1 Horizontal branches. Individual and branch-type air admittance valves shall vent only fixtures that are on the same floor level and connect to a horizontal branch drain. Where the horizontal branch is located more than four branch intervals from the top of the stack, the horizontal branch shall be provided with a relief vent that shall connect to a vent stack or stack vent or extend outdoors to the open air. The relief vent shall connect to the horizontal branch drain between the stack and the most downstream fixture drain connected to the horizontal branch drain. The relief vent shall be sized in accordance with Table 703.2 and installed in accordance with Section 905. The relief vent shall be permitted to serve as the vent for other fixtures.

913.3.2 Stack. Stack-type air admittance valves shall be prohibited from serving as the vent terminal for vent stacks or stack vents that serve drainage stacks having more than six branch intervals.

913.4 Location. Individual and branch-type air admittance valves shall be located not less than 4 inches (102 mm) above the horizontal branch drain or fixture drain being vented. Stack-type air admittance valves shall be located not less than 6 inches (152 mm) above the flood level rim of the highest fixture being vented. The air admittance valve shall be located within the maximum developed length permitted for the vent. The air admittance valve shall be installed not less than 6 inches (152 mm) above insulation materials.

913.5 Access and ventilation. Access shall be provided to all air admittance valves. Such valves shall be installed in a location that allows air to enter the valve.

913.6 Size. The air admittance valve shall be rated in accordance with the standard for the size of the vent to which the valve is connected.

913.7 Vent required. Within each plumbing system, the drainage piping of each building and each connection to public sewer or a private sewage disposal system shall be vented by means of one or more vent pipes, the aggregate cross-sectional area of which shall be not less than that of the largest required building sewer and shall extend outdoors to the open air.

913.8 Prohibited installations. Air admittance valves shall not be installed in non-neutralized special waste systems. Air admittance valves shall not be located in spaces utilized as supply or return air plenums. Air admittance valves shall not be used to vent sumps or tanks except where the vent system for the sump or tank has been designed by an engineer. Air admittance valves shall not be installed on outdoor vent terminals for the sole purpose of reducing clearances to gravity air intakes or mechanical air intakes.

Section 1007.2

Add new Exception to Section 1007.2 to read as follows:

1007.2 Trap Seal Primers. Potable water supply trap seal primer valves shall comply with ASSE 1018. Drainage or electronic design type seal primer devices shall comply with ASSE 1044 or IAPMO PS 76.

Exception: Barrier trap seals that comply with ASSE 1072 may be used in floor drains and installed according to the manufacturer's instructions.

Section 1008.0

Revise Section 1008.1 to read as follows:

1008.1 General. Where building traps are to be installed, each building trap shall be provided with a cleanout and with a relieving vent or fresh-air intake on the inlet side of the trap, which shall be at least one-half the diameter of the drain to which it connects. Such relieving vent or fresh-air intake shall be carried above grade and terminate in a screened outlet located outside the building.

Section 1101.2

Revise Section 1101.2 and add new Exception to Section 1101.2 to read as follows:

1101.2 Where Required. Roofs, paved areas, yards, courts, courtyards, vent shafts, light wells, or similar areas having rainwater, shall be drained into a separate storm sewer system, or to some other place of disposal satisfactory to the Authority Having Jurisdiction. In the case of one-and two-family dwellings, storm water shall be permitted to be discharged on flat areas, such as streets or lawns, so long as the storm water shall flow away from the building and away from adjoining property, and shall not create a nuisance.

Exception: For townhouses and two-family dwellings, as defined in the International Residential Code, storm water may be discharged onto an adjoining property that is maintained by a common interest community as stipulated in the Covenants, Conditions and Restrictions (CC&Rs) approved by the Authority Having Jurisdiction.

Section 1101.6

Revise Section 1101.6 to read as follows:

1101.6 Subsoil Drains. Where required by the geotechnical engineer or the authority having jurisdiction, subsoil drains shall be provided around the perimeter of buildings having basements, cellars, or crawl spaces or floors below grade. Such subsoil drains shall be permitted to be positioned inside or outside of the footing, shall be of 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 not less than (4) inches (102 mm) surrounding the pipe. Filter media shall be provided for exterior subsoil piping.

Section 1101.10

Delete Section 1101.10 in its entirety to read as follows:

1101.10 Reserved.

Section 1101.11

Delete Section 1101.11 in its entirety to read as follows.

1101.11 Reserved.

Section 1101.15

Delete Section 1101.15 in its entirety to read as follows.

1101.15 Reserved.

Section 1101.16.2

Delete Section 1101.16.2 in its entirety.

Section 1201.0

Add new Section 1201.2 to read as follows:

1201.2 Dry Gas. Southern Nevada shall be considered a dry gas condition having a moisture and hydrocarbon dew point below any normal temperature to which the gas piping is in an exposed area, unless specified by the local gas purveyor.

Section 1210.1.6

Revise Section 1210.1.6 as follows:

1210.1.6 Piping Underground Beneath Buildings. All gas piping under a slab shall be capable of being removed and replaced without disturbing the slab. Where gas piping is installed underground beneath any building, structure or appurtenance including, but not limited to, porches and steps, whether covered or uncovered, breezeways, roofed porte-cocheres, roofed patios, carports, covered walks, and covered driveways, the piping shall be either of the following:

(1) Encased in an approved conduit that shall be not less than one-half (1/2) inch (15 mm) larger than the outside diameter of the gas piping, not less than Schedule 40 pipe, designed to withstand the imposed loads and installed in accordance with Section 1210.1.6.1 or Section 1210.1.6.2.

(2) A piping/encasement system listed for installation beneath buildings. [NFPA 54:7.1.6]

Section 1210.1.6.1

Revise Section 1210.1.6.1 as follows:

1210.1.6.1 Conduit with One End Terminating Outdoors. The conduit shall extend into an accessible portion of the building and, at the point where the conduit terminates in the building, the space between the conduit and the gas piping shall be sealed to prevent the possible entrance of any gas leakage. Where the end sealing is of a type that retains the full pressure of the pipe, the conduit shall be designed for the same pressure as the pipe. The conduit shall extend at least 12 inches (305 mm) outside the building, be vented outdoors above finished ground level, and be installed so as to prevent the entrance of water and insects. [NFPA 54:7.1.6.1]

Chapter 13

Delete Chapter 13 in its entirety except for Section 1303.8, which is to remain as follows:

1303.8 Water Supply for Hospitals. Hospitals shall be provided with not less than two approved potable water sources that are installed in such a manner as to prevent the interruption of water service.

Chapter 14

Delete Chapter 14 in its entirety.

Chapter 15

Revise Section 1501 to read as follows and delete the remainder of Section 1501 and Sections 1502 through 1505 in their entirety (Section 1506 remains unchanged):

1501.0 General

1501.1 Applicability. The provisions of Sections 1501.0 and 1506.0 of this chapter shall not be allowed in residential buildings and shall apply to the installation, construction, alteration, and repair of reclaimed water systems intended to supply uses such as water closets, urinals, trap primers for floor drains, floor sinks, irrigation, industrial processes, water features and other uses approved by the Authority Having Jurisdiction. Potable water supplied as makeup water in these systems shall be protected against back-pressure and back-siphonage in accordance with Sections 602.0 and 603.0. Reclaimed (recycled) water shall be prohibited for use in evaporative cooler systems.

1502 Reserved.

1503 Reserved.

1504 Reserved.

1505 Reserved.

1506 On-Site Treated Nonpotable Water Systems. *(Entire Section 1506 remains unchanged)*

Table 1701.1

Amend Table 1701.1 by adding the following:

ASSE 1050-2021 Performance Requirements for Stack Air Admittance Valves for Sanitary Drainage Systems.

ASSE 1051-2021 Performance Requirements for Individual and Branch Type Air Admittance Valves for Sanitary Drainage Systems.

ASSE 1072-2020 Performance Requirements for Trap Seal Protection for Floor Drains.