

ORDINANCE NO. \_\_\_\_\_ NEW SERIES

AN ORDINANCE OF THE COUNCIL OF THE CITY OF GLENDALE, MARICOPA COUNTY, ARIZONA, AMENDING GLENDALE CITY CODE, CHAPTER 9, ARTICLES II AND III, REGARDING THE ADOPTION OF AND AMENDMENTS TO THE TECHNICAL CODES RELATING TO BUILDINGS, BUILDING REGULATIONS AND WATER CONSERVATION; AND SETTING FORTH AN EFFECTIVE DATE.

BE IT ORDAINED BY THE COUNCIL OF THE CITY OF GLENDALE as follows:

SECTION 1. That the Glendale City Code Chapter 9, Article II is deleted in its entirety and a new Article II is adopted and shall read as follows:

**ARTICLE II. TECHNICAL CODES**

**Sec. 9-16. Adopted by reference; violation.**

- (a) The following publications, one (1) copy each of which is on file in the office of the city clerk, are adopted by reference as if set out at length in this Code.
- (1) 2024 *International Building Code*, as published by the International Code Council, Inc., including Appendix Chapters C and I;
  - (2) 2024 *International Residential Code*, as published by the International Code Council, Inc., including Appendix Chapters BB, BC, BF, BO and CF;
  - (3) 2024 *International Existing Building Code*, as published by the International Code Council, Inc.;
  - (4) 2024 *International Mechanical Code*, as published by the International Code Council, Inc.;
  - (5) 2024 *International Plumbing Code*, as published by the International Code Council, Inc., including Appendix Chapters B, C and E;
  - (6) 2024 *International Fuel Gas Code*, as published by the International Code Council, Inc., including Appendix Chapters A and B;
  - (7) 2023 *National Electrical Code*, as published by the National Fire Protection Association;
  - (8) 2024 *International Property Maintenance Code*, as published by the International Code Council, Inc.;
  - (9) 2024 *International Energy Conservation Code* , as published by the International Code Council, Inc.;
  - (10) 2024 *International Swimming Pool and Spa Code*, as published by the International Code Council, Inc.;

- (11) 2024 *International Green Construction Code*, as published by the International Code Council, Inc. (voluntary compliance);
  - (12) *Arizonans with Disabilities Act*, (A.R.S. § 41-1492.03) and the Act's implementing rules (28 CFR Part 35, and 28 CFR 36);
  - (13) 2010 *Americans with Disabilities Act Standards for Accessible Design*;
  - (14) *Maricopa Association of Governments Fireplace Standard*;
  - (15) *Fair Housing Accessibility Guidelines* as published by the U.S. Department of Housing and Urban Development on March 6, 1991.
- (b) Any person violating any of the provisions of the publications adopted in subsection (a) shall be guilty of a misdemeanor.

#### **Sec. 9-17. - Amendments to the 2024 International Building Code.**

The 2024 *International Building Code* is amended in the following respects:

*Section 101.1* is amended to read as follows:

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

*Section 103.1* is amended to read as follows:

*103.1 Creation of Enforcement Agency.* The Building Safety Division is hereby created and the official in charge thereof shall be known as the building official. The function of the agency shall be the implementation, administration and enforcement of the provisions of this code.

*Section 104.2.3, Alternative materials, design and methods of construction and equipment*, delete the Exception.

*Section 104.2.4.1, Flood Hazard Areas* is amended as follows:

Replace the words "building official" with "city engineer or functional equivalent"

*Section 104.7 Official records* is amended to read as follows:

The building official shall keep official records as required as required by Sections 104.7.1 through 104.7.5. Such official records shall be retained in accordance with the regulations of the State of Arizona and City Clerk's Office.

*Section 104.8, Liability* is amended by replacing "member of the board of appeals" with "hearing officer" in the first sentence.

*Section 105.2, Work Exempt from Permit, item 2*, is amended to read as follows:

2. Fences, other than swimming pool barriers and perimeter subdivision fences, not over 7 feet (2134 mm) high.

*Section 105.2, Work exempt from permit, Building*, add the following item:

14. Hoophouses and polyhouses used exclusively for producing and storing live plants, constructed in accordance with A.R.S. 9-469. Mechanical, plumbing and electrical systems constructed in these structures shall require the appropriate permits in accordance with this code.

*Section 105.6, Suspension or Revocation* is amended by adding the following:

It shall be unlawful to proceed with any work for which a permit was issued after notice of permit suspension or revocation is served on the permit holder, the owner, or the person having responsible charge of the work. Reinstatement of a suspended permit shall be by written notice from the building official authorizing work to resume, with or without conditions. Revoked permits shall be canceled and the permit fee shall not be refunded.

*Section 109* is deleted and replaced by the following:

#### *Section 109 Fees*

*109.1 Fee Schedule.* Fees shall be assessed in accordance with the provisions of this section and shall be as established by council resolution.

*109.2 Permit Fees.* Fees shall be as established by council resolution.

*109.3 Plan Review Fees.* When submittal documents are required by Section 107 of this code, a plan review fee shall be paid at the time of submitting the documents for plan review. The plan review fees specified in this section and as by council resolution are separate fees from, and in addition to, the permit fees specified in Section 109.2 of this code.

*109.4 Building Permit Valuations.* The determination of valuation under any provisions of the code shall be made by the building official. The valuation to be used in computing the building permit and building plan review fees shall be the total value of all construction work including all materials, labor, overhead and profit for which the permit is issued including all finish work, painting, roofing, electrical, plumbing, heating, air-conditioning, elevators, fire-extinguishing systems, and other permanent equipment.

*109.5 Work Commencing Before Permit Issuance.* Whenever work for which a permit is required by this code has been commenced without first obtaining a permit, a special investigation shall be made before a permit may be issued for such work.

An investigation fee, in addition to the permit fee, shall be collected whether or not a permit is then or subsequently issued. The investigation fee shall be as adopted by council resolution. The payment of such investigation fee shall not exempt an applicant from compliance with all other provisions of either this code or other adopted laws and ordinances of this city.

*109.6 Reinspection fees.* Permit fees provide for customary inspections only. A reinspection fee may be assessed for each inspection or reinspection when such portion of the work for which inspection is called is not complete or when corrections called for are not made. Reinspection fees may be assessed when the inspection record card is not posted or otherwise

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. 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 110.1, Inspections, General* is amended by adding the following paragraph:

Property owners shall obtain and display on the residence, business, or otherwise, the correct building number or numbers as assigned to such property(ies) by the Planning Department or functional equivalent in accordance with established street assignment policy, prior to final inspection and /or issuance of a certificate of occupancy. The building numbers shall be of a durable material, permanently attached to the building and must be readily distinguished and readable from the nearest paved public/common roadway fronting that property. The size of the building numbers shall comply with the city's adopted fire code and its amendments.

*Section 110.3.3, Lowest Floor Elevation* is amended as follows:

Replace "building official" with "City Engineer or functional equivalent."

*Section 110.3.4, Frame Inspection* is amended by adding the following sentence:

The building shall be weather-tight at the time of the frame inspection.

*Section 110.3.11* is deleted and amended by the following text:

*110.3.11 Special Inspections.*

In addition to the inspections required by Section 110, the engineer or architect of record acting as the owner's agent shall employ one or more special inspectors who shall provide inspections during construction for types of work outlined in Chapter 17 and as outlined below:

*110.3.11.1 Electrical Special Inspections.*

1. Ground-fault protection performance tests for equipment are required to be provided with ground-fault protection.
2. Switchboards, panelboards, motor control centers, and other equipment rated 1,000 amps or more; or over 600 volts.
3. Emergency and standby power systems, including switchboards, panel boards, distribution boards, transfer equipment, power source, conductors, fire pumps, and exhaust and ventilation fans.

*110.3.11.2 Electrical Observation.* Electrical observation shall be provided for the following installations:

1. Installation or alteration of that portion of health care facility electrical systems which fall within the scope of Article 517, Chapter III of the adopted National Electric Code where critical care areas are present.
2. Installations or alterations of high-voltage electrical systems, which exceed 600 volts. Installations or alterations of electrical systems within locations classified as

hazardous by the provisions of adopted the National Electric Code, or the International Fire Code, except for gasoline dispensing installations and systems located within storage garages, repair garages or lubritoriums.

3. When such observation is specifically required by the building official.

The owner shall employ the engineer responsible for the electrical design, or another engineer designated by the engineer responsible for the electrical design to perform visual observation of complex electrical equipment and systems for general conformance to the interconnection of equipment. Electrical observation shall be performed at significant stages of the construction and when the installation is complete and ready to be inspected by the building official.

*Section 110.3.13 is added as follows:*

*110.3.13 Building Service Equipment Inspections.* All building service equipment inspections for which a permit is required by this code shall be inspected by the building official. No portion of any building service equipment intended to be concealed by any permanent portion of the building shall be concealed until inspected and approved. When the installation of any building service equipment is complete, an additional and final inspection shall be made. Building service equipment regulated by the technical codes shall not be connected to the water, fuel or power supply or sewer system until authorized by the building official.

1. Electrical inspections. A rough-in inspection is required for all conduit, semi-rigid piping or wiring after installation but prior to being concealed. Final inspection is required when all conduit, wires, fixtures and equipment including covers, have been installed and connected.
2. Mechanical inspections. All mechanical equipment and systems for which a permit is required by the code, including all associated ductwork, flues, condensate and refrigeration lines, shall be subject to inspection and shall remain accessible and exposed for inspection purposes until approved.
3. Plumbing inspections. A rough-in or underground inspection is required for all sewer, drainage and vent piping, and for all water and gas distribution systems prior to their being buried or concealed. A final inspection is required when all fixtures are set and operating or ready to operate. Tests shall be performed as required by the currently adopted plumbing code.

*Section 111.5 is added as follows:*

111.5 Certificate of Completion for Shell Buildings. The building official is authorized to issue a Certificate of Completion for all commercial shell/ non-occupied buildings and/ or structures. This document will be utilized to indicate the building official's approval and completion of non-occupied buildings and/or structures also defined or labeled as "Shell Buildings, Vanilla Shell, Grey Shell, Equipment Installation and Spec Suites."

The Certificate of Completion document must specify the following:

1. Specify "No occupancy" or "Occupancy of one (1) person allowed only for maintenance, security or fire watch"
2. Certificate/ permit number

3. Date
4. Premises, address, suite number
5. Legal description, Assessor's Parcel Number (APN)
6. Type of construction
7. Occupancy group: UNOCCUPIED
8. Owner
9. General contractor
10. Date of permit
11. Valuation
12. Comments (building area, AFES, occupant load)
13. Other conditions (specified by the building official)

*Section 113* is deleted and replaced by the following:

#### *113 MEANS OF APPEALS*

*113.1 General.* Decisions of the building official shall be appealed to Glendale City Court. An application for an appeal of any order, decision or interpretation made by the building official shall be filed in writing, along with the appropriate fee established by resolution or pursuant to Glendale City Code Sec. 2-3, and shall be delivered to the Court and to the building official within thirty (30) calendar days of the date of the order, decisions or interpretation. The fee shall not be refundable. The decision of the building official may be reversed or modified by the Court upon finding that:

- a. The decision of the building official is not supported by a reasonable interpretation and application of the city code to the specific facts presented, or the city code does not apply to the facts presented.
- b. The reversal or modification of the building official's decision will not create or manifest injustice or affect the intent of the city code.
- c. The reversal of the building official's decision will not be detrimental to the public health, safety and welfare.

*113.2 Limitations of Authority.* The Court shall have no authority relative to interpretation of the administrative provisions of the codes set forth in Sec. 9-16, nor shall the Court be empowered to waive the requirements of the codes set forth in Sec. 9-16.

*Section 116, Unsafe Structures and Equipment* is amended as follows:

Section 116.1, Unsafe conditions. The requirements for the abatement of unsafe buildings, structures and equipment shall be governed by the 2024 International Property Maintenance Code and its related amendments.

The balance of the text of IBC Section 116 is deleted.

*Section 201.4, Terms Not Defined* is amended by adding to the end of this subsection:

*Mirriam-Webster's Unabridged Dictionary of the English Language* shall be considered as providing ordinarily accepted meanings.

*Section 202, Definitions* is amended by revising the following definition:

**ELECTRIC VEHICLE CHARGING STATION.** One or more vehicle spaces served by an electric vehicle charging system, including the vehicle charging system.

*Section 202, Definitions* is amended by revising the following definitions:

**EXISTING BUILDING.** A building erected prior to the date of adoption of the appropriate code, or one for which a legal building permit has been issued and all required inspections have been approved.

**EXISTING STRUCTURE.** A structure erected prior to the date of adoption of the appropriate code, or one for which a legal building permit has been issued and all required inspections have been approved.

*Section 406.3* is amended by adding the following subsection:

**406.3.4 Open Carports.** Carports for other than single family residential use which are open on all sides and constructed entirely of noncombustible materials, except for an approved fascia, shall not exceed 5,000 square feet and shall be located no closer than 3 feet to an adjacent lot line, nor closer than 6 feet to any projecting element of an adjacent building or structure. The edge of the carport roof shall be used to measure the separation distance to adjacent lot lines, buildings or structures.

*Section 406.3, Private Garages and Carports* is amended by adding the following subsection:

**406.3.5 Electric vehicle (EV) receptacle outlets in private garages.** In a minimum of 10% of the attached private, enclosed garages and in a minimum of 10% of the detached private, enclosed garages, associated with Group R-2 occupancy dwelling units, provide a minimum of one EV-ready receptacle outlet in each garage, not more than 48 inches above and not less than 18 inches above the floor. EV receptacle outlets serving accessible parking spaces shall be installed in accordance with Section 1107 and ANSI A117.1. Each EV-ready receptacle outlet installation shall include a junction box, conductors, raceway and a dedicated minimum 50-ampere, 240-volt circuit breaker. All components shall be installed in compliance with the *National Electrical Code*.

*Section 420.4 Automatic sprinkler system.* Revise the first sentence to read:

Other than where preempted by Arizona State Law, Group R occupancies shall be equipped throughout with an automatic sprinkler system in accordance Section 903.2.8 and Glendale City Code Section 16-52.

*Section 707.3.12 Electrical Rooms with Service Entrance Equipment* is added and shall read as follows:

Fire barrier walls and/ or fire-resistance-rated horizontal assemblies with a fire-resistance rating of one hour shall be provided to separate an electrical room containing service entrance equipment from adjacent rooms and spaces.

*Section 708.3, Fire-resistance rating*; the first paragraph is amended as follows:

*Fire partitions* shall have a *fire-resistance rating* of not less than 1 hour except when required by Section 420.2 in a building that does not have an *automatic sprinkler system* in accordance with Section 903.2.8. Where *fire partitions* are required by Section 420.2 and the building does not have an *automatic sprinkler system* the *fire-resistance rating* shall be not less than 2 hours. Where the *fire partitions* have a required *fire-resistance rating* of more than 1 hour, opening protectives shall be provided in accordance with Table 716.1(2) for *fire barriers* having a *fire-resistance rating* greater than 1 hour.

(The Exceptions shall remain unchanged.)

*Section 903.2, Automatic Sprinkler Systems* is amended by replacing the first sentence with the following:

Approved automatic sprinkler systems in new buildings and structures, and in existing buildings and structures, that are modified, expanded, remodeled, renovated or change occupancy classifications, shall be provided in accordance with the Glendale City Code, Chapter 16, Article III. Where preempted by Arizona State Law, automatic fire sprinkler systems shall not be required in newly constructed three-family dwellings (triplexes) and in newly constructed four-family dwellings (fourplexes).

*Section 1010.2.8.2, Rooms with Electrical Equipment* is amended to read as follows:

Exit or exit access doors serving transformer vault, rooms designated for batteries or energy storage systems, or modular data centers shall be equipped with panic hardware or fire exit hardware. Exit or exit access doors serving rooms containing electrical equipment rated 800 amperes or more that contain overcurrent devices, switching devices or control devices shall be equipped with panic hardware or fire exit hardware. The doors shall swing in the direction of exit travel.

*Section 1028.3 Exit discharge width or capacity*, add the following sentence:

The minimum width of an exterior sidewalk serving as a component of the exit discharge shall be 60 inches (effective sidewalk width) or as determined by Section 1005.3, whichever is greater. Effective sidewalk width is defined as the usable sidewalk area for pedestrian travel, excluding obstructions such as building walls, trees, poles, or other elements that might restrict pedestrian movement. Typically, 1 foot is subtracted from each side in which one of these listed obstructions is present. Sidewalks adjacent to parking stalls shall be a minimum of 72 inches wide or can be 60 inches wide if a landscape buffer is present.

*Section 1101.1 Scope*, revise to read as follows:

The provisions of this chapter and the Arizona Revised Statutes Section ARS 41-1492 shall control the design and construction of *facilities* for accessibility for individuals with disabilities.

*Section 1102.1 Design*, revise to read as follows:

*Buildings* and *facilities* shall be designed and constructed to be *accessible* in accordance with this code and ICC A117.1-17 and in accordance with provisions State of Arizona Attorney General Administrative Rules R10-3-401 through R-10-3-404 (2010 ADA Standards for Accessible Design, referred to as “2010 Standards”, adopted by the U.S. Department of Justice), whichever standard provides the greatest degree of accessibility.

*Section 1104.1 Site arrival points*, revise the first paragraph to read as follows:

All pedestrian routes within the site provided from public transportation stops, accessible parking, accessible passenger loading zones, and public streets or public sidewalks to all building entrances shall be accessible. The minimum width of sidewalks serving as accessible routes shall be 60 inches (effective sidewalk width). Effective sidewalk width is defined as the usable sidewalk area for pedestrian travel, excluding obstructions such as building walls, trees, poles, or other elements that might restrict pedestrian movement. Typically, 1 foot is subtracted from each side in which one of these listed obstructions is present. Sidewalks adjacent to parking stalls shall be a minimum of 72 inches wide or can be 60 inches wide if a landscape buffer is present.

*Section 1109.2 Assembly area seating*, revise the last sentence to read:

Dining areas shall comply with Section 1109.2.9 and Section 1110.14.

*Section 1110.2 Toilet and bathing facilities*. Amend Exception #3 by deleting the words “or bathing rooms.” Revise to read as follows:

3. Where multiple single-user toilet rooms are clustered at a single location, at least 50 percent but not less than one room at each cluster shall be *accessible*.

*Section 1607.1, Table 1607.1*. Amend this table by revising item #27, Residential habitable attics and sleeping areas uniform live load value to 40 psf.

*Section 1609.4.3 Exposure Categories* is amended by adding the following:

The City of Glendale is predominantly categorized as exposure category C. Deviating from this shall require additional proof and verification from the registered design professional in responsible charge. The engineer shall provide a surface roughness analysis, provide aerials, etc. proving that the proposed site meets exposure category B as defined in ASCE 7-22, Section 26.7.3.

Exception: Single story one- and two-family dwellings are permitted to use exposure category

B for wind design.

*Section 1705.4 Masonry Construction* is amended by deleting Exception 2.

*Section 1806.1 Load Combinations* is amended by adding the following:

In lieu of the presumptive load-bearing values of Table 1806.2, a geotechnical investigation report is required for all new construction.

*Section 1806.2 Presumptive Load- Bearing Values* is amended by adding the following:

In lieu of the presumptive load-bearing values of Table 1806.2, a geotechnical investigation report is required for all new construction.

*Section 1809.4 Depth and width of footings* is amended by revising the first sentence to read as follows:

The minimum depth of footings below the undisturbed ground surface shall be 18 inches (458 mm), unless otherwise recommended by a geotechnical investigation report.

*Table 2902.1 Minimum Number of Required Plumbing Fixtures* is amended as follows. These amendments also apply to Table 403.1 of the 2024 International Plumbing Code.

Revise footnote “e” to “50 or fewer.”

Add new footnote “g” to read as follows:

- g. 24 inches (610 mm) of wash sink or 18 inches (457 mm) of a circular wash basin shall be considered equivalent to one lavatory.

*Section 2902.6, Small Occupancies (Minimum Plumbing Facilities)* is amended by revising “15” to “50.”

## **Sec. 9-18. - Amendments to the 2024 International Residential Code.**

The *International Residential Code, 2024 Edition* is amended in the following respects:

*Section R101.1 Title* is amended to read as follows:

These provisions shall be known as the *Residential Code for One-and Two-family Dwellings of Glendale, Arizona*, and shall be cited as such and will be referred to herein as “this code.”

*Chapter 1. Administration* is amended by the deletion of Sections R102 through R114.

For the administration of this code, see the *2024 International Building Code* and related amendments.

*Section R201.4, Terms Not Defined* is amended by adding to the end of this subsection:

*Mirriam-Webster's Unabridged Dictionary of the English Language* shall be considered as providing ordinarily accepted meanings.

*Section R202, Definitions, FIRE SEPARATION DISTANCE*, revise the last sentence to read as follows:

The distance shall be measured at a right angle from the exterior face of the foundation.

*Section R202, Definitions, GRAYWATER*. Revise this definition to read as follows:

Wastewater that has been collected separately from a sewage flow and that originates from a clothes washer or a bathroom tub, shower or sink, but that does not include wastewater from a kitchen sink, dishwasher or toilet.

*Section R301, Design Criteria* is amended by adding this subsection:

R301.1.5 Lot Corner Identification. In construction applications where legally surveyed lot corner identification markers are not readily verifiable or are missing, the building official, when deemed necessary, shall require lot boundary markers to be surveyed and permanently identified in accordance with State law at the owner's or applicant's expense. The survey shall be executed by a registrant licensed to do such work by the Arizona State Board of Technical Registration.

*Table R301.2(1)* is amended to read as follows:

| GROUND<br>SNOW<br>LOAD | WIND DESIGN                             |                        | SEISMIC<br>DESIGN<br>CATEGORY | SUBJECT TO DAMAGE FROM |                        |                      | WINTER<br>DESIGN<br>TEMP | ICE BARRIER<br>UNDERLAYM'T<br>REQUIRED | FLOOD<br>HAZARDS | AIR<br>FREEZ'G<br>INDEX | MEAN<br>ANNUAL<br>TEMP |
|------------------------|-----------------------------------------|------------------------|-------------------------------|------------------------|------------------------|----------------------|--------------------------|----------------------------------------|------------------|-------------------------|------------------------|
|                        | Speed<br>(mph)                          | Topographic<br>effects |                               | Weather'g              | Frost<br>line<br>depth | Termite              |                          |                                        |                  |                         |                        |
| N/A                    | 115<br>mph<br>ultimate<br>89 mph<br>ASD | None                   | B                             | Negligible             | N/A                    | Moderate<br>to Heavy | 32°F                     | No                                     | FEMA             | N/A                     | 72.6°F                 |

*Table R301.5 Minimum Uniformly Distributed Live Loads* is amended with the following values:

|                                                      |        |
|------------------------------------------------------|--------|
| Habitable attics and attics served with fixed stairs | 40 psf |
| Sleeping areas                                       | 40 psf |

*Section R302.2, Townhouses* is amended by adding this sentence:

No plumbing, mechanical, electrical, piping, or other services in any form are allowed to traverse from one side to the other side of the wall or walls separating *townhouse units*.

*Section R302.2.6, Townhouses, Structural independence* is amended by deleting Exceptions 5 and 6.

*Section R308.1* is deleted in its entirety and replaced with the following:

*R308.1 Address Numbers.* Property owners shall obtain and display on the residence, the correct building number or numbers as assigned to such property(ies) by the Planning Department or functional equivalent in accordance with established street assignment policy, prior to final inspection and /or issuance of a certificate of occupancy. The address numbers shall be of a durable material, permanently attached to the building and must be readily distinguished and readable from the nearest paved public/common roadway fronting that property. The size of the address numbers shall comply with the city's adopted fire code and its amendments.

*Section R309.1 Townhouses automatic sprinkler systems.* Revise this section to read as follows:

Other than where preempted by Arizona State Law, an automatic sprinkler system shall be installed in *townhouses*.

Exception: An automatic sprinkler system shall not be required where *additions* or *alterations* are made to existing *townhouses* that do not have an automatic sprinkler system installed.

R309.1.1 Design and installation. Automatic sprinkler systems shall be designed and installed in accordance with NFPA 13D.

*Section R309.2 One- and two-family dwellings automatic sprinkler systems.* In accordance with A.R.S. § 9-807, delete this section in its entirety. In accordance with A.R.S. § 9-461, accessory dwelling units shall not be required to have automatic sprinkler systems.

*Section R310.2.2 Smoke Alarms. Alterations, repairs and additions;* add the following to the list of Exceptions:

3. Swimming pools.
4. Electrical panel replacements.
5. Covered patios and shade structures (porches or decks)
6. Detached garages or other detached accessory structures. This does not exempt Accessory Dwelling Units.
7. Photovoltaic solar systems

*Section R317.6, Electric vehicle (EV) charging receptacle outlets and systems.* Amend this section to read as follows:

In attached garages, provide a minimum of one EV-ready receptacle outlet, not more than 48 inches above and not less than 18 inches above the floor. This installation shall include a junction box, conductors, raceway and a minimum 50-ampere, 240-volt circuit breaker installed in the electrical service panel. Electric vehicle charging branch circuits shall be installed in accordance with Section E3702.14. The EV-ready receptacle outlet shall be provided in addition to the general use receptacle outlets required by Section 3901.9.

Exception. Garage additions and garage remodels.

Electric vehicle charging systems shall be installed in accordance with the *National Electrical Code*. Electric vehicle charging equipment shall be listed and labeled in accordance with UL 2202. Electric vehicle supply equipment shall be listed and labeled in accordance with UL 2594.

*Section R318.1, Means of Egress* is amended by adding the following sentences:

The means of egress from dwelling units or sleeping rooms shall not lead through other sleeping rooms, toilet rooms or bathrooms.

*Section R319.4, Area Wells* is amended by adding the following:

An area well shall not be located beneath an emergency escape and rescue opening. A protective grate shall be provided over all area wells. The grate shall comply with Section R319.4.4 and shall be designed for a minimum uniformly distributed live load of 40 pounds per square foot.

*Section R319.4.4 Bars, grilles, covers and screens* is amended by adding the following sentence:

The dwelling shall be equipped with smoke alarms installed in accordance with Section R310.

*Section R325.8 Required heating* is amended to read as follows:

R325.8 Required heating and cooling. Every dwelling unit shall be provided with a heating system capable of maintaining a temperature of not less than 70°F; and a cooling system capable of maintaining a temperature no greater than 82°F (if cooled by air conditioning) or 86°F (if cooled by evaporative cooling); at a point 3 feet (914 mm) above the floor and 2 feet (610 mm) from exterior walls in habitable rooms. The installation of one or more portable space heaters or portable space coolers shall not be used to achieve compliance with this code section.

*Section R401.4, Soil Tests* is amended by adding the following sentence:

A soils test and geotechnical evaluation report shall be required for all new buildings governed by this code.

*Section R403.1.3, Footing and Stem Wall Reinforcing* is amended by adding Seismic Design Categories B and C to all seismic design requirements listed in this section.

*Section R403.1.3* is amended by adding the following subsection:

*Section R403.1.3.7 Foundation Ties.* When an addition is constructed, the new foundation shall be tied to the existing foundation by installing two (2) No. 4 dowel bars, minimum 12 inches long. These shall be embedded a minimum of 6 inches into the existing footing.

*Section R403.1.4 Minimum Depth* is amended by revising 12 inches to 18 inches, unless otherwise recommended by a geotechnical evaluation report.

*Section R403.4.1 Crushed Stone Footings* is deleted in its entirety.

*Section R403.5 Crushed Stone Footings for Cast-In-Place Foundations* is deleted in its entirety.

*Section R502.9* is amended by adding the following subsection:

*R502.9.1 Framing Connections.* Framing details for bearing walls and posts shall be such that all components are tied together with positive connections to transmit wind uplift forces from the roof to the foundation. Nails loaded in withdrawal by such forces shall not be considered as positive connections.

Approved metal framing anchors shall be provided at the top and bottom of every other stud of a wood-frame bearing wall, except where structural panel sheathing is nailed directly to the studs, top plate and bottom plate in accordance with Table R602.3(1).

Floor-to-floor connections shall have approved metal strap ties at a maximum of 48 inches on center, except where justified by an engineered analysis that bears the seal of a registered design professional.

Each truss, joist and rafter shall be connected to the top plate of the supporting wall with an approved metal framing anchor. The framing anchor shall be of the type which connects to both members of the double top plate. Beams shall be anchored to supporting walls and posts with approved metal framing connectors.

*Section R502.3.1 Sleeping areas and attic joists* is amended to read as follows. Table R502.3.1(1) is deleted:

Table R502.3.1(2) shall be used to determine the maximum allowable span of floor joists that support sleeping areas and attics that are accessed by means of a fixed stairway in accordance with Section R318.7 provided that the design live load does not exceed 40 pounds per square foot and the design dead load does not exceed 20 pounds per square foot. The allowable span of ceiling joists that support attics used for limited storage or no storage shall be determined in accordance with Section R802.5.

*Section R602.10 Wall Bracing* is amended by adding the following:

For buildings that are two or more stories in height, the empirical design provisions for wall bracing in this section shall not be used. An engineered design shall be provided to include both gravity and lateral load calculations. The project drawings and engineering calculations shall bear the seal of a registered design professional.

*Section R606.1.1, Professional Registration Not Required* is revised to read as follows:

Masonry shall be designed in accordance with the requirements of this section and shall be reinforced in accordance with Figure R606.11.3. Such masonry shall support only a roof and shall be limited to 10 feet in height and shall not require an engineered design. Masonry construction not meeting these limits shall require drawings and engineering calculations bearing the seal of a registered design professional.

*Section R606.12 Seismic requirements* is revised to read as follows:

All new masonry elements shall meet the minimum reinforcing requirements of Sections R606.12.2.2.3, R606.12.2.3.2 and R606.12.2.3.3. These requirements shall not apply to glass unit masonry conforming to Section R607, anchored masonry veneer conforming to Section R703.8 or adhered masonry veneer conforming to Section R703.12.

*Section R608.1 General* is amended by revising the last sentence to read:

Project drawings, details, calculations and specifications are required to bear the seal of a registered design professional.

*Section R610.1 General* is amended by revising the last sentence to read:

Project drawings, details, calculations and specifications are required to bear the seal of a registered design professional.

*Section R802.8 Lateral Support* is amended to read as follows:

Floor joists, rafters and ceiling joists shall be provided with lateral support at points of bearing to prevent rotation. Where lateral support is provided by solid wood blocking, 1X nominal lumber shall not be allowed.

*Section R802.8.1 Bridging*. The first sentence is revised to read as follows:

Floor joists, rafters and ceiling joists shall be supported by nominal 2 x solid blocking, diagonal bridging (wood or metal) or a continuous 1-inch by 3-inch wood strip nailed across the rafters or ceiling joists at intervals not exceeding 8 feet.

*Section N1101.4, Above Code Programs*, add the following subsection:

N1101.4.1 RESNET Testing & Inspection Protocol. The Residential Energy Services Network (RESNET) Mortgage Industry National Home Energy Rating System Standards (MINHERS) for third party testing and inspections shall be deemed to meet the requirements of sections N1102.5.1, N1102.5.1.2 and N1103.3.7 and shall meet the following conditions:

1. Third Party Testing & Inspections shall be completed by RESNET certified Raters or Rating Field Inspectors and shall be subject to RESNET Quality Assurance Field Review Procedures.
2. Sampling in accordance with Chapter 6 of the MINHERS Standards shall be performed by Raters or Rating Field Inspectors Working under a RESNET Accredited Sampling Provider.
3. Third Party Testing is required for the following items:
  - a. N1102.5.1– Building Envelope – Thermal Air Barrier Checklist
  - b. N1102.5.1.2 – Testing – Air Leakage Rate
  - c. N1103.3.7 – Sealing – Duct Tightness
  - d. Any other testing and inspections required under the code.

4. Alternate testing and inspection programs and protocols shall be allowed when approved by the Building Official.

*IRC Table N1102.5.1.1, Air Barrier, Air Sealing and Insulation Installation*, revise the criteria for “rim joists” as follows:

Delete the statement, “The junctions of the rim board to the sill plate and the rim board and the subfloor shall be air sealed.”

*Section N1104.2, Interior lighting controls*. Delete this section in its entirety.

*Section N1104.3, Exterior lighting controls*. Delete this section in its entirety.

*Section M1411.9, Condensate disposal*, add the following:

Condensate drain piping shall not terminate over sidewalks, asphalt, concrete, walking surfaces or similar surfaces. All condensate drain piping shall terminate in an approved location as determined by the building official or his representative.

*Section M1413 Evaporative Cooling Equipment*, add the following subsection:

Section M1413.2 Water conservation. Evaporative cooling systems shall be provided with a recirculating water system. Any bleed off rate used by the system shall be limited to that recommended by the manufacturer. Once-through evaporative cooling systems using potable water shall not be permitted.

*Section P2903.2*, delete and replace with the following text and table:

Section P2903.2 Maximum flow and water consumption. The maximum water consumption flow rates and quantities for all plumbing fixtures and fixture fittings shall be in accordance with Table P2903.2. Exception: Replacement of existing fixtures that do not require a permit.

**TABLE P2903.2 MAXIMUM FLOW RATES AND CONSUMPTION FOR PLUMBING FIXTURES AND FITTINGS<sup>b</sup>**

| Plumbing fixture or fixture fitting | Maximum flow rate or quantity <sup>b</sup>    |
|-------------------------------------|-----------------------------------------------|
| Lavatory faucet                     | 1.5 gpm at 60 psi                             |
| Shower head <sup>a,c</sup>          | 2.0 gpm at 80 psi                             |
| Sink faucet                         | 1.8 gpm at 60 psi                             |
| Water closet                        | 1.28 gallon per flushing cycle <sup>d,e</sup> |

For SI: 1 gallon per minute = 3.785 L/m, 1 pound per square inch = 6.895 kPa

- a. A hand-held shower spray shall be considered a shower head.
- b. Consumption tolerances shall be determined from referenced standards.
- c. Shower heads shall comply with all requirements for high-efficiency shower heads in ASME A112.18.1-2020/CSA B125.1
- d. For a dual-flush water closet, the full-flush volume shall not exceed 1.28 gallons.
- e. A 1.6 gallon per flushing cycle is permitted where a water closet is connected to an existing building's sanitary drainage piping.

*Section P2904.1, Dwelling Unit Automatic Sprinkler Systems, General* is revised to read as follows; delete all remaining sections of P2904.

The design and installation of automatic sprinkler systems shall be in accordance with NFPA 13D and the *Glendale Municipal Code, Chapter 16, Article III*. Partial automatic sprinkler systems shall be permitted to be installed only in buildings not required to be equipped with an automatic sprinkler system.

*Section P2906.2, Lead Content* is amended to read as follows: (Water Services)

The lead content in pipe and fittings used in the water supply system shall comply with 40 CFR 143.12(a) as "lead free" as follows:

1. Not contain more than 0.2 percent lead when used with respect to solder and flux; and,
2. Not have more than a weighted average of 0.25 percent lead when used with respect to the wetted surfaces of pipes, pipe fittings, plumbing fittings and fixtures.

*Section E3404.1 Applicability* is amended by adding the following sentence:

"For electrical systems not covered by this Code, see the *2023 National Electrical Code*."

*Section E3703.5, Garage branch circuits*. This section is amended by adding the following sentence:

In addition to the other branch circuits required by this section, provide a dedicated, minimum 50-ampere, 240-volt branch circuit to supply EV receptacle outlets required by Sections R317.6 and E3901.9 in attached garages.

*Section E3704, Feeder Requirements* is amended by adding the following section:

E3704.7 Townhouses. Feeders supplying townhouse units shall not pass through or above other townhouse units.

*Sections E3901.4.2 and E3901.4.3 are amended; delete the text and replace with the following:*

E3901.4.2 Island and peninsular countertops and work surfaces. At least one receptacle shall be installed at each island and peninsular countertop space with a long dimension of 600 mm (24 in.) or greater and a short dimension of 300 mm (12 in.) or greater. A peninsular countertop is measured from the connected perpendicular wall.

E3901.4.3 Receptacle outlet location. Receptacle outlets rendered not readily accessible by appliances fastened in place, appliance garages, sinks, or range tops as covered in the exception to Section E3901.4.1, or appliances occupying assigned spaces shall not be considered as these required outlets. Required receptacle outlets shall be located in one or more of the following:

1. On or above, but not more than 20 inches (508 mm) above, the countertop or work surface.
2. In a countertop using receptacle outlet assemblies listed for the use in countertops.
3. In a work surface using receptacle outlet assemblies listed for use in work surfaces or listed for use in countertops. [210.52(C)(3)]

3901.4.2

Exception: To comply with the following conditions (1) and (2), receptacle outlets shall be permitted to be mounted not more than 12 inches (300 mm) below the countertop or work surface. Receptacles mounted below a countertop or work surface in accordance with this exception shall not be located where the countertop or work surface extends more than 6 inches (150 mm) beyond its support base.

1. Construction for the physically impaired
2. On island and peninsular countertops or work surfaces where the surface is flat across its entire surface (no backsplashes, dividers, etc.) and there are no means to mount a receptacle within 20 inches (500 mm) above the countertop or work surface, such as an overhead cabinet

*Section E3901.9, Basements, garages and accessory buildings.* This section is amended by adding the following sentence:

In attached garages, provide a minimum of one EV-ready receptacle outlet in accordance with Section R317.6. All components shall be installed in compliance with the *National Electrical Code*.

*Section E3901.9, Basements, garages and accessory buildings* is amended to read as follows:

Not less than one receptacle outlet, in addition to any provided for specific equipment, shall be installed in each separate unfinished portion of a basement; in each vehicle bay at not less than (18) inches (457 mm) and not more than 5.5 feet (1676 mm) above the floor in attached garages; in each vehicle bay at not less than (18) inches (457 mm) and not more than 5.5 feet (1676 mm) above the floor in detached garages that are provided with electric power and in accessory buildings that are provided with electric power. [210.52(G)(1), (2), and (3)]

*Section E3908.9, Types of equipment grounding conductors.* Amend item #4 as follows:

4. Electrical metallic tubing with an additional equipment grounding conductor.

*IRC Appendix BC: Accessory Dwelling Units* is adopted and amended as follows:

## APPENDIX BC: ACCESSORY DWELLING UNITS (ADU)

### SECTION BC101 GENERAL

#### BC101.1 Scope.

Accessory dwelling units (ADUs) proposed for existing residential construction shall be in accordance with this appendix and other applicable requirements in this code, and the existing building together with the ADUs shall not exceed the scoping limitations of Section R101.2.

##### BC101.1.1 Prohibited conditions.

An ADU shall not be permitted:

1. On the same lot or parcel as a two-family dwelling (duplex) or other multiple-family dwellings.

#### BC101.2 Conditions.

ADUs shall be permitted without requiring a change of occupancy where in compliance with all of the following:

1. An ADU shall be permitted within an existing single-family detached dwelling, attached to a single-family dwelling, or in a detached structure that is within the scope of the International Residential Code and in accordance with Arizona Statute 9-461.18.
2. No more than one attached ADU and one detached ADU shall be permitted per single-family dwelling lot or parcel.
3. No more than one attached ADU and two detached ADUs shall be permitted if the single-family dwelling lot is one acre or more, and only if at least one of the ADUs is recorded as a restricted-affordable dwelling unit in accordance with the Glendale *Unified Development Code*.
4. An ADU shall not have a separate address from the principal dwelling.
5. ADUs shall be ancillary or secondary to the primary dwelling and may be constructed to equal the square footage of the primary single-family dwelling; but in no case shall the ADU exceed 1,000 square feet.

6. An ADU shall be provided with a separate entrance from that serving the primary dwelling unit from the exterior of the building.
7. The location of a detached ADU shall comply with Section R302.
8. An ADU shall be provided with adequate provisions for electricity, water supply and sewage disposal.

## SECTION BC102 DEFINITIONS

### BC102.1 Definitions.

The following words and terms shall, for the purposes of this appendix, have the meanings shown herein:

**ACCESSORY DWELLING UNIT (ADU).** An ancillary or secondary living unit to a single-family detached dwelling unit. The ADU shall have a kitchenette or kitchen, bathroom, and sleeping area, and is independently accessed from and located on the same lot as a single-family detached unit, either within the same building as the single-family dwelling or in a detached building.

## SECTION BC103 ADU PLANNING

### BC103.1 Design.

Except as modified by this section, building planning shall be in accordance with Chapter 3 and building structure shall comply with the *International Residential Code*.

### BC103.2 Means of egress.

The path of egress travel from an ADU to a public way or to a yard or court that opens to a public way shall be independent of, and not pass through, the primary dwelling unit.

### BC103.3 Fire separation.

For ADUs adjoining the primary dwelling unit, the 1-hour fire-resistance-rated wall and floor assembly provisions of Section R302.3 shall be required.

### BC103.4 Fire sprinklers.

ADUs shall not be required to be provided with automatic fire sprinklers in accordance with Arizona Statute 9-461.18.

## SECTION BC104 UTILITIES

BC104.1 Heating, ventilation and air-conditioning systems.

An ADU shall be provided with:

1. A separate, dedicated heating and cooling system.
2. A separate HVAC thermostat.

BC104.2 Electrical systems.

An ADU shall be provided with:

1. A separate electric meter and a separate electric service and disconnecting means.
2. Ready access for the occupants to all overcurrent devices protecting the conductors supplying the ADU.

BC104.3 Gas piping.

An ADU shall be provided with:

1. A separate gas meter and service.
2. Ready access for the occupants to shutoff valves serving the ADU.

BC104.4 Water service.

An ADU shall be provided with a separate city water meter and water service line.

BC104.5 Sewage disposal.

An ADU may share a sewer connection with the primary dwelling provided that the sewer line is adequately sized. This shall be proven by calculations submitted with the construction documents. Alternatively, an ADU may be provided with a separate building sewer line and tap.

### **Sec. 9-19. – Amendments to the 2024 International Existing Building Code.**

The *2024 International Existing Building Code* is amended in the following respects:

*Section 101.1 Title.* Revise to read as follows:

These regulations shall be known as the *Existing Building Code of the City of Glendale, Arizona*, hereinafter referred to as “this code.”

*Chapter 1* is amended by the deletion of Sections R102 through R117.

For the administration of this code, see the *2024 International Building Code* and related amendments.

*Section 306.7.12, Toilet Rooms* is amended by adding the following:

As an alternative, in existing toilet rooms and bathing rooms, one fixture (water closet or urinal) may be removed (where two or more fixtures exist) to create the required space for an accessible water closet.

*Section 1203.3* is amended by revising the title and the text to read as follows:

*1203.3 Means of Egress and Emergency Escape and Rescue.* Where, in the opinion of the building official, there is sufficient width and height for a person to pass through the opening or traverse the means of egress, existing window openings, door openings and corridor and stairway widths are not required to meet the widths required by the International Building Code or this code. Where approved by the building official, the front or main exit doors need not swing in the direction of the path of exit travel, provided that other approved means of egress having sufficient capacity to serve the total occupant load are provided.

*Section 1204.6* is amended by revising the title and the text to read as follows:

*1204.6 Means of Egress and Emergency Escape and Rescue.* Existing window openings, door openings, and corridor and stairway widths less than those that would be acceptable for nonhistoric buildings under these provisions shall be approved, provided that, in the opinion of the building official, there is sufficient width and height for a person to pass through the opening or traverse the exit and that the capacity of the exit system is adequate for the occupant load, or where other operational controls to limit occupancy are approved by the building official.

*Section 1201* is amended by adding the following subsection:

1201.6 Energy efficiency. Exterior alterations to a *historic building* shall be exempt from the provisions of the International Energy Conservation Code.

## **Sec. 9-20. Amendments to the International Mechanical Code**

*Section 101.1 Title.* Revise to read as follows:

These regulations shall be known as the *Mechanical Code of the City of Glendale, Arizona*, hereinafter referred to as “this code.”

*Chapter 1* is amended by the deletion of Sections R102 through R115.

For the administration of this code, see the *2024 International Building Code* and related amendments.

*Section 307.2.1 Condensate disposal* is amended by adding the following:

Condensate drain piping shall not terminate over sidewalks, asphalt, concrete, walking surfaces or similar surfaces. All condensate drain piping shall terminate in an approved location as determined by the building official or his representative.

*Section 408, Marijuana Related Occupancies, add this section:*

#### 408 Marijuana Related Occupancies

408.1 General. Any building used to cultivate, produce, infuse or dispense marijuana shall be designed such that there shall be no emission of dust, fumes, vapors, or odors into the environment from the premise. A ventilation system shall be designed to prevent the distribution of odors to other occupied parts of the building or adjacent properties. Design of the odor control system shall be based on accepted engineering practices. All equipment and filter media shall be listed and labeled for the application. Exhaust systems used in odor control systems shall meet the requirements of Section 501.

408.1.1 Exhaust outlets. The termination point for exhaust outlets shall be in accordance with Section 501.3. Exhaust from cultivation and production facilities shall be in accordance with Section 501.3.1(2) and for dispensaries in accordance with Section 501.3.1(3).

*Section 607.2 Installation is amended to read as follows:*

*Fire dampers, smoke dampers, combination fire/smoke dampers and ceiling radiation dampers* located within air distribution and smoke control systems shall be installed in accordance with the manufacturer's instructions, the dampers' listing and Sections 607.2.1 through 607.2.3. Dampers shall be tested by an approved testing agency or a qualified third-party special inspector. The special Inspector/testing agency shall be an independent third-party individual or firm and shall not be the installing contractor. Special inspections shall be as specified in Chapter 17 of the *International Building Code*.

*Section 928, Evaporative Cooling Equipment, add the following subsection:*

Section 928.2 Water conservation. Evaporative cooling systems shall be provided with a recirculating water system. Any bleed off rate used by the system shall be limited to that recommended by the manufacturer. Once-through evaporative cooling systems using potable water shall not be permitted.

*Section 932, add this new section to read as follows:*

Section 932 Water-cooled refrigeration/ heat removal systems.

932.1 Water conservation. A water-cooled refrigeration system or heat removal system, (defined as refrigeration or heat removal system using water, all, or in part, for condensing a refrigerant), shall not discharge more than three gallons of water per nominal ton per hour into an approved sanitary disposal system. Condenser wastewater discharge shall be accomplished by the use of an air gap, as described in the International Plumbing Code. Each water-cooled system shall be provided with one or more of the following water-saving devices: (a) a cooling tower; or (b) an evaporative condenser; or (c) an approved water circulating device.

## **Sec. 9-21. Amendments to the International Plumbing Code**

*Section 101.1 Title* is amended to read as follows:

These regulations shall be known as the Plumbing Code of the City of Glendale, Arizona hereinafter referred to as “this code.”

*Chapter 1* is amended by the deletion of Sections R102 through R115.

For the administration of this code, see the *2024 International Building Code* and related amendments.

*Section 301.6 Prohibited Locations, Exception* is amended to read as follows:

Exception: Floor drains, sumps and sump pumps shall be permitted at the base of the elevator shaft, provided they are daylighted to landscape or indirectly connected to the plumbing system and comply with Section 1003.4.

*Section 305.4.1 Sewer Depth* is amended as follows:

Building sewers that connect to private sewage disposal systems shall be installed not less than 12 inches below finished grade at the point of septic tank connection. Building sewers shall be installed not less than 12 inches below grade.

*Section 410.4 Substitution* is amended by revising the last sentence to read:

In other occupancies where drinking fountains are required, *water dispensers* shall be permitted to be substituted for drinking fountains.

*Section 412, Faucets and Fixture Fittings*, add the following subsection:

412.13 Automatic faucets. New or replacement faucets serving lavatories in all buildings other than R3 occupancies, individual units in R2 occupancies, or *International Residential Code* structures shall be provided with automatic faucets in accordance with Table 604.4.

*Section 604.4*, delete and replace with the following:

Section 604.4 Maximum flow and water consumption. The maximum water consumption flow rates and quantities for all plumbing fixtures and fixture fittings shall be in accordance with Table 604.4. Exception: Replacement of existing fixtures that do not require a permit.

**TABLE 604.4 MAXIMUM FLOW RATES AND CONSUMPTION FOR PLUMBING FIXTURES AND FITTINGS**

| <b>Plumbing Fixture or Fixture Fitting</b> | <b>Maximum Flow Rate or Quantity<sup>b</sup></b> |
|--------------------------------------------|--------------------------------------------------|
| Lavatory, private                          | 1.5 gpm at 60 psi                                |
| Lavatory, public                           | 0.25 gallon per metering cycle                   |
| Lavatory, public (other than metering)     | 0.5 gpm at 60 psi                                |
| Shower heads <sup>a,c</sup>                | 2.0 gpm at 80 psi                                |
| Sink faucet                                | 1.8 gpm at 60 psi                                |
| Flushing urinals                           | 0.5 gallons per flush                            |
| Water closet                               | 1.28 gallons per flush <sup>d,e</sup>            |

For SI: 1 gallon = 3.785 L, 1 gallon per minute = 3.785 L/m, 1 pound per square inch = 6.895 kPa

- a. A hand-held shower spray is a shower head.
- b. Consumption tolerances shall be determined from referenced standards.
- c. Shower heads shall comply with all requirements for high-efficiency shower heads in ASME A112.18.1-2020/CSA B125.1
- d. For a dual-flush water closet, the full-flush volume shall not exceed 1.28 gallons.
- e. A 1.6 gallon per flushing cycle is permitted where a water closet is connected to a building's existing sanitary drainage piping.

*Section 605.2, Lead Content of Water Supply Pipe and Fittings* is amended to read as follows:

The lead content in pipe and fittings used in the water supply system shall comply with 40 CFR 143.12(a) as "lead free" as follows:

1. Not contain more than 0.2 percent lead when used with respect to solder and flux; and,
2. Not have more than a weighted average of 0.25 percent lead when used with respect to the wetted surfaces of pipes, pipe fittings, plumbing fittings and fixtures.

*Chapter 7* is amended as follows:

Any reference in this chapter that refers to the International Private Sewage Disposal Code shall be deferred to the Maricopa County Environmental Services Department.

*Section 701.5 Damage to drainage system or public sewer* is amended to reference Section 1003 in its entirety and any requirements in that section shall be deferred to the City of Glendale Water Services Department.

*Section 803 Special Wastes* is hereby amended to defer to the City of Glendale Water Services Department.

*Section 903.1.1 Roof Extension* is amended as follows:

This section allows the Authority Having Jurisdiction to determine the minimum height above a roof that a vent must terminate. The City of Glendale shall require that all vents terminate a minimum of 6 inches above the roof and not less than 12 inches from any vertical surface.

*Section 1003 Interceptors and Separators* is amended by deferring to the requirements of the City of Glendale Water Services Department where applicable.

*Chapter 13 Non-Potable Water Systems* is amended by deleting this chapter in its entirety. These systems shall be designed and constructed in accordance with applicable Maricopa County and State of Arizona regulations and requirements.

**Sec. 9-22. Amendments to the 2023 National Electrical Code.**

*Article 90- Introduction*

*Section 90.1 (A)* is amended to read as follows:

*90.1 (a) Practical safeguarding.* The purpose of this code is the practical safeguarding of persons and property from hazards arising from the use of electricity. Any and all electrical work for light, heat, power, or any other purposes shall be installed in conformity with the rules and regulations as set forth in this code and that document titled, *National Electrical Code, 2023 edition*, also known as *NFPA 70*, and in conformity with the rules, policies, regulations and amendments as set forth by the building official. This Code is not intended as a design specification or an instruction manual for untrained persons.

*Section 90.2(C)(7)* is added to read as follows:

*Special Inspection.* The City of Glendale requires Special Electrical Inspections for the types of work specified below as amended by adding sections 90.2(C)(7) and 90.2(C)(8) Special Electrical Inspections include, but are not limited to, testing or observation of the work assigned for conformance with the approved design drawings and specifications, and submission of appropriate inspection reports or certificates to the City of Glendale Electrical Inspector.

The Special Electrical Inspector shall be a qualified person who demonstrates competence to the satisfaction of the Building Official for the type of work requiring Special Inspection. These individual(s) or firm(s) shall be responsible for performing the Special Inspection tasks and reports required by the City of Glendale. The Special Electrical Inspector(s) shall be an independent, third-party individual, firm or testing agency and shall not be the installing contractor or any other person responsible for the work.

Electrical Special Inspection:

1. Ground-fault protection performance tests for equipment provided or required to have ground-fault protection.
2. Switchboard, panelboards, motor control center, and all other equipment rated 1,000 amps or more; or over 600 volts. (over-potential test, also known as a dielectric withstand test, and commonly referred to as a hi-pot test.)
3. Emergency and standby power systems including: switchboards, panelboards, distribution boards, transfer equipment, power source, conductors, fire pumps, exhaust and ventilation fans.
4. Other special inspections as required by the building official.

*Section 90.2(C)(8)* is added to read as follows:

*Electrical observation.* Electrical observation by the ‘Registrant of Record’ shall be provided for the following installations:

1. Installation or alteration of that portion of a health care facility electrical system which fall within the scope of article 517, Part 3- “Essential Electrical System” of the *2023 National Electrical Code*.
2. Installations or alterations of high voltage electrical systems, which exceed 600 volts.
3. Installations or alterations of electrical systems within locations classified as hazardous by the provisions of the *2023 National Electrical Code*, or the currently adopted International Fire Code, except for gasoline dispensing installations and systems located within storage garages, repair garages or lubritoriums.

The owner shall employ the Engineer responsible for the electrical design, or another Engineer designated by the Engineer responsible for the electrical design to perform visual observation of complex electrical equipment and systems for general conformance to the approved plans and specifications, including but not limited to, placement and interconnection of equipment. Electrical observation shall be performed at intermediate significant stages of the construction progression and when installation is complete and ready to be inspected by the Building Official. Certificates of Electrical Observation shall be completed and sealed by the Engineer of Record for all life safety items as one of the requirements prior to release of a temporary certificate of occupancy. All certificates of Electrical Observation shall be completed and sealed prior to the project’s final approval and the electrical portion of the certificate of occupancy is completed.

#### *Article 100 Definitions*

*Article 100* is amended by revising the definition of the following items to read as follows:

*Kitchens. Commercial and Institutional Kitchens and Bars.* For the purposes of this section, a kitchen or bar is defined as any area where food or beverage is prepared, served

or dispensed.

*Article 210- Branch Circuits*

*Section 210.8(B)(2)* is amended to read as follows:

(2) *Kitchens: Commercial and Institutional Kitchens and bars.* For the purposes of this section, a kitchen or bar is defined as any area where food or beverage is prepared, served or dispensed.

*Sections 210.52(C)(2) and 210.53(C)(3)* are amended; delete the text and replace with the following:

210.52(C)(2) Island and peninsular countertops and work surfaces. At least one receptacle shall be installed at each island and peninsular countertop space with a long dimension of 600 mm (24 in.) or greater and a short dimension of 300 mm (12 in.) or greater. A peninsular countertop is measured from the connected perpendicular wall.

210.52(C)(3) Receptacle outlet location. Receptacle outlets shall be located in one or more of the following:

1. On or above, but not more than 20 inches (508 mm) above, the countertop or work surface.
2. In a countertop using receptacle outlet assemblies listed for the use in countertops.
3. In a work surface using receptacle outlet assemblies listed for use in work surfaces or listed for use in countertops.

Receptacle outlets rendered not readily accessible by appliances fastened in place, appliance garages, sinks or range tops as covered in 210.52(C)(1), Exception No.1, or appliances occupying assigned apces shall not be considered as these required outlets.

Exception: To comply with the following conditions (1) and (2), receptacle outlets shall be permitted to be mounted not more than 12 inches (300 mm) below the countertop or work surface. Receptacles mounted below a countertop or work surface in accordance with this exception shall not be located where the countertop or work surface extends more than 6 inches (150 mm) beyond its support base.

1. Construction for the physically impaired
2. On island and peninsular countertops or work surfaces where the surface is flat across its entire surface (no backsplashes, dividers, etc.) and there are no means to mount a receptacle within 20 inches (500 mm) above the countertop or work surface, such as an overhead cabinet

Informational Note No. 1: See 406.5(E) for installation of receptacles in countertops and 406.5(F) for installation of receptacles in work surfaces. See 380.10 for

installation of multioutlet assemblies.

Informational Note No. 2: See Informative Annex J and ANSI/ICC A117.1-2009, Standard on Accessible and Usable Buildings and Facilities, for additional information.

#### *Article 230 Services*

*Section 230.2* is amended by adding the following sentence to the end of the first paragraph:

No electrical service on one property shall supply power to another separate and distinct property unless these properties are legally combined and under the same ownership.

*Section 230.43* is amended to read as follows:

*Section 230.43.* Wiring methods for 600 volts, nominal, or less. Service-entrance conductors shall be installed in accordance with the applicable requirements of this code covering the type of wiring method used and shall be limited to the following methods:

1. Rigid metal conduit
2. Intermediate metal conduit
3. Wire ways
4. Bus ways
5. Auxiliary gutters
6. Rigid non-metallic conduit may be used underground
7. Schedule 80 rigid non-metallic conduit may extend above ground to the service equipment.

(Informational note): Refer to the serving utility company's requirements for additional information on installing service-entrance conductors on or within buildings and underground laterals serving the premises.

#### *Article 250 Grounding and Bonding*

*Section 250.118, Types of equipment grounding conductors.* Amend item #4 as follows:

4. Electrical metallic tubing with an additional equipment grounding conductor.

#### *Article 300 Wiring Methods*

*Section 300.4(D) Exception 1* is amended to read as follows:

Exception 1: Steel plates, sleeves, or the equivalent shall not be required to protect rigid metal conduit, intermediate metal conduit, or electrical metallic tubing. *Rigid nonmetallic conduit (PVC conduit) is required to be protected.*

*Section 310.12* is amended to read as follows:

*310.12: 120/240-Volt, Single-Phase Dwelling Services and Feeders.* For one-family dwellings and the individual dwelling units of two-family and multifamily dwellings, service and feeder conductors supplied by a single-phase, 120/240-volt system shall be permitted to be sized in accordance with 310.12(A) through (D).

(A) Services. For a service rated 100 amperes through 400 amperes, the service conductors supplying the entire load associated with a one-family dwelling, or the service conductors supplying the entire load associated with an individual dwelling unit in a two-family or multifamily dwelling, shall be permitted to have an ampacity not less than 83 percent of the service rating. If no adjustment or correction factors are required, Table 310.12(A) shall be permitted to be applied.

(B) Feeders. For a feeder rated 100 amperes through 400 amperes, the feeder conductors supplying the entire load associated with a one-family dwelling, or the feeder conductors supplying the entire load associated with an individual dwelling unit in a two-family or multifamily dwelling, shall be permitted to have an ampacity not less than 83 percent of the feeder rating. If no adjustment or correction factors are required, Table 310.12(A) shall be permitted to be applied.

(C) Feeder Ampacities. In no case shall a feeder for an individual dwelling unit be required to have an ampacity greater than that specified in 310.12(A) or (B).

(D) Grounded Conductors. Grounded conductors shall be permitted to be sized smaller than the ungrounded conductors, if the requirements of 220.61 and 230.42 for service conductors or the requirements of 215.2 and 220.61 for feeder conductors are met.

Where correction or adjustment factors are required by 310.15(B) or (C), they shall be permitted to be applied to the ampacity associated with the temperature rating of the conductor.

Informational Note No. 1: See 240.6(A) for standard ampere ratings for fuses and inverse time circuit breakers.

Informational Note No. 2: See Informative Annex D, Example D7.

*Section 334.10* is amended to read as follows:

**334.10 Uses Permitted.** Type NM and Type NMC cables shall be permitted to be used in the following, except as prohibited in 334.12:

1. One- and two-family dwellings and their attached or detached garages, and their storage buildings.
2. Multi-family dwelling units and their detached garages – permitted to be of Types III, IV and V construction.
3. Cable trays in dwellings in accordance with 334.10(1) or in dwelling units, in

accordance with 334.10(2) where the cables are identified for the use.

*Article 410 Luminaires, Lampholders, and Lamps*

*Section 410.36(B)* is amended by adding a second paragraph to read as follows:

Intermediate or heavy-duty ceiling systems shall be used for the support of luminaires (lighting fixtures). All light fixtures shall be positively attached to the suspended ceiling system. The attachment device shall have a capacity of 100 percent of the lighting fixture weight acting in any direction. Luminaires (fixtures) weighing less than 56 pounds and track lighting shall have two 12 gauge wires attached at opposing corners of the luminaire(s) (fixture) or track lighting strip to the structure above. These wires may be slack, and shall contain, at a minimum, at least 3 tight twists within a 3-inch length of the wire at each end. Recessed luminaire housings, exit signage, all single bulb fixtures and emergency unit equipment that are installed within or on a suspended ceiling shall have a minimum of at least one 12-gauge wire attached to the structure above and this wire may be slack and shall contain, at a minimum, at least 3 tight twists of the wire within a 3-inch length at each end. Luminaires weighing more than 50 pounds shall comply with NEC 314.27 (a)(2).

**Sec. 9-23. Amendments to the 2024 International Property Maintenance Code**

*Section 101.1, Title* is amended to read as follows:

These regulations shall be known as the *Property Maintenance Code of Glendale, Arizona*, hereinafter referred to as “this code.”

*Section 102.3, Application of other codes* is amended by replacing *International Zoning Code* with *Glendale Unified Development Code* in the last sentence.

*Section 103.1, Creation of agency* is amended to read as follows:

The Building Safety Division is hereby created and the official in charge thereof shall be known as the building official. The Code Compliance Division is hereby created and the official in charge thereof shall be known as the code compliance official. The function of these agencies shall be the implementation, administration and enforcement of the provisions of this code. When this code refers to the *code official*, it has the same meaning as the building official and the code compliance official.

*Section 105.2.2, Alternative materials, design and methods of construction and equipment* is amended by deleting the Exception.

*Section 105.6 Official records* is amended to read as follows:

The *code official* shall keep official records as required by Sections 105.6.1 through 105.6.5. Such official records shall be retained in accordance with the regulations of the State of

Arizona and City Clerk's Office.

*Section 105.7, Liability* is amended by replacing “member of the board of appeals” with “hearing officer” in the first sentence.

*Section 106* is deleted and replaced by the following:

*106 - APPEALS RELATED TO UNSAFE BUILDINGS, STRUCTURES AND EQUIPMENT*

*106.1 Appeals.* Decisions, orders and notices of violations relating to unsafe buildings, structures or building service equipment may be appealed to the building official. The appeal shall be filed within 30 calendar days from the date of the order or action of the building official; provided however, that if the building or structure or building service equipment is in such condition as to make it immediately dangerous to the life, limb, property, or safety of the public or adjacent property and is ordered vacated and is posted in accordance with this code, such appeal shall be filed within 20 calendar days from the date of service from the building official in accordance with this code.

*106.1.1 Processing, Scheduling and Noticing of Appeal.* Upon receipt of any appeal filed pursuant to this section, the building official shall schedule a hearing with a hearing officer appointed by the city manager's office. As soon as practicable, the hearing officer shall fix a date, time and place for the hearing of the appeal. Such date shall not be less than 10 calendar days nor more than 60 calendar days from the date the appeal was filed with the building official, unless the parties agree to another date. Written notice of the time and place of the hearing shall be given at least 10 calendar days prior to the date of the hearing to each appellant by either causing a copy of such notice to be delivered to the appellant personally or by mailing a copy thereof, postage prepaid, addressed to the appellant at the address shown on the appeal.

*106.1.2 Failure to Appeal.* Failure of any person to file an appeal in accordance with the provisions of this code shall constitute a waiver of the right to an administrative hearing and adjudication of the notice of violation or any portion thereof.

*106.1.3 Scope of Hearing on Appeal.* Only those matters or issues specifically raised by the appellant shall be considered in the hearing of the appeal.

*106.1.4 Staying of Notice of Violation.* Except for vacation orders made pursuant to this section, enforcement of any notice of violation issued under this code shall be stayed during the pendency of an appeal therefrom which is properly and timely filed.

*106.1.5 Failure to Abate.*

- (a) If the unsafe building, structure or building service equipment is not repaired or demolished as required by the notice provided for in Section 109, the building official shall give written notice to the owner of the unsafe building, structure or service equipment and other parties in interest, by certified mail or personal service, to appear before a hearing officer at a designated time and place to show cause why the unsafe conditions have not been repaired or demolished in accordance with the statement of particulars set forth in the notice provided for in Section 109. The city manager shall appoint a hearing officer who shall

conduct the hearing in accordance with this section.

- (b) The hearing officer shall hear such testimony as the building official, owner and other parties in interest may offer relevant to the condition of the unsafe building, structure or building service equipment and the failure to repair or demolish the same.
- (c) The hearing officer shall make written findings of fact from the testimony offered as to whether or not the building, structure or building service equipment in question is an unsafe condition as defined in this section and whether good cause exists for the failure to repair or demolish the unsafe condition.
- (d) If the hearing officer finds the building, structure, or building service equipment to be unsafe and if the owner of the unsafe building, structure or building service equipment or other parties in interest fail to show good cause why the unsafe building, structure or building service equipment should not be demolished forthwith, the hearing officer shall authorize the building official to cause the damaged building to be demolished. The costs of such demolition shall be charged against the real property on which the unsafe building, structure or building service equipment existed as an assessment. Such assessment shall be recorded in the office of the county recorder and shall be a lien on such real property from the date of its recording until paid. Such lien shall be subject and inferior to a lien for general taxes and to all prior encumbrances of record.
- (e) If the hearing officer finds the building, structure or building service equipment to be unsafe and that good cause exists to grant the owner or other parties in interest additional time to complete the repair or demolition of the damaged building, structure, or building service equipment, the hearing officer shall order that such repairs or demolition be completed with diligence and before a date certain, provided that no extension of time longer than 270 calendar days shall be granted to complete the repairs or demolition. If an extension of time to complete repairs or demolition of the unsafe building, structure or building service equipment is granted but the owner and other parties in interest do not complete the repair or demolition of the unsafe conditions within the extension of time granted, the building official, upon the expiration of the extension granted, shall cause the unsafe building, structure or service equipment to be demolished forthwith, no further extensions shall be allowed or granted. The costs of such demolition are the responsibility of the property owner and are due 30 calendar days after the final invoice is submitted. Where costs are not paid within 30 calendar days of issuance of the final invoice, the city shall place a lien upon the property and charge interest at the annual rate of 10% until such time as the lien is satisfied. Such assessment shall be recorded in the office of the county recorder and shall be a lien on such real property from the date of its recording until paid. Such lien shall be subject and inferior to a lien for general taxes.
- (f) Any determination by the hearing officer, including any additional extension in time beyond that initially granted by the hearing officer may only be appealed to Maricopa County Superior Court.

If the whereabouts of any person entitled to notice under this section cannot be ascertained by the city in the exercise of reasonable diligence, service of such notice may be made by publishing the notice in a newspaper printed and published in the city for two (2) consecutive weeks.

*Section 109.1, Unsafe conditions* is amended by replacing “condemned” with “unsafe to occupy.”

*Section 109.1.5, item #5* is amended by deleting the words “or immoral persons.”

*Section 109.2, Closing of vacant structures* is amended by revising “placard of condemnation” to “placard stating unsafe to occupy.”

*Section 109.4.2, Method of service* is amended by revising the first paragraph to read as follows:

Such notice shall be deemed to be properly served where a copy thereof is served in accordance with one of the following methods. Service shall be deemed complete upon delivery.

*Section 109.7, Placarding* is amended by revising placard bearing the word “Condemned” to placard bearing the words:

DO NOT ENTER  
UNSAFE TO OCCUPY  
IT IS A CLASS I MISDEMEANOR TO OCCUPY THESE PREMISES  
OR TO REMOVE OR DEFACE THIS NOTICE

In the last sentence, revise “condemned equipment” to “unsafe equipment.”

*Section 109.7.1, Placard removal* is amended by removing the word “condemnation” throughout this subsection.

*Section 109.8, Prohibited occupancy*, revise the first sentence to read:

Any occupied *structure* declared unsafe to occupy and placarded by the *code official* shall be vacated as ordered by the *code official*.

*Section 110.5* shall be amended to read as follows:

*Section 110.5 Costs of emergency repairs and securing the property.* All costs incurred in the performance of emergency work; securing a home, business and/or property shall be paid by the legal property owner. The legal counsel of the jurisdiction shall institute appropriate action against the owner of the premises or owner’s authorized agent where the unsafe structure or equipment is or was located for the recovery of any costs imposed on the jurisdiction.

*Section 110.6, Hearing* is amended by revising “appeals board” to “building official.”

*Section 111.1, Demolition, General, item #1*, revise “2 years” to “1 year.”

*Section 202, General definitions;* delete the definition of “Condemn.”

*Section 303.2, Swimming Pools, Enclosures* is amended by deferring these requirements to the adopted 2024 *International Swimming Pool and Spa Code* and related amendments.

*Section 304.3, Premises Identification* is amended by revising the last sentence to read as follows:

The size of the address numbers shall comply with the city’s adopted fire code and its amendments.

*Section 602.3, Heating and Cooling Supply* is amended to read as follows:

Every owner and operator of any building who rents, leases or lets one or more dwelling units or sleeping units or indoor occupiable work spaces shall supply heating and cooling to the occupants thereof. These dwelling units, sleeping units and indoor occupiable work spaces shall be provided with a heating system capable of maintaining a temperature of not less than 70°F; and a cooling system capable of maintaining a temperature no greater than 82°F (if cooled by air conditioning) or 86°F (if cooled by evaporative cooling); at a point 3 feet (914 mm) above the floor and 2 feet (610 mm) from exterior walls in habitable rooms. The installation of one or more portable space heaters or portable space coolers shall not be used to achieve compliance with this code section.

*Section 602.4* is deleted in its entirety.

## **Sec. 9-24. Amendments to the 2024 International Energy Conservation Code.**

*Section C101.1 Title* is amended to read as follows:

This code shall be known as the *Energy Conservation Code of the City of Glendale, Arizona*, hereinafter referred to as “this code.”

*Section C202, General Definitions, RESIDENTIAL BUILDING* is amended to allow the residential provisions of this energy code to apply to residential occupancies R-2, R-3 and R-4 of four or more stories in height. In accordance with A.R.S. 9-462, triplexes and fourplexes are allowed to comply with the residential provisions of this energy code. As an option, these R-2, R-3 and R-4 occupancies may be constructed to comply with the commercial provisions of this energy code.

*Section C408.2.1* is amended by adding the following sentence:

The provision of a commissioning plan shall be optional.

*Section C404.5.1, Maximum allowable pipe length method*, revise item 1 to read as follows:

1. For a public lavatory faucet, the maximum allowable piping length from the nearest source of heated water supply pipe to the termination of the fixture supply pipe shall be 10 feet.

*Section C405.15, Renewable energy systems.* This section is deleted in its entirety. The corresponding requirements in ASHRAE 90.1, Section 10.5.1 are deleted.

*Section R101.1 Title* is amended to read as follows:

This code shall be known as the *Energy Conservation Code of the City of Glendale, Arizona*, hereinafter referred to as “this code.”

*Section R104.1.1, Above Code Programs*, add the following subsection:

R104.1.1.1 RESNET Testing & Inspection Protocol. The Residential Energy Services Network (RESNET) Mortgage Industry National Home Energy Rating System Standards (MINHERS) for third party testing and inspections shall be deemed to meet the requirements of sections R402.5.1, R402.5.1.2 and R403.3.7 and shall meet the following conditions:

1. Third Party Testing & Inspections shall be completed by RESNET certified Raters or Rating Field Inspectors and shall be subject to RESNET Quality Assurance Field Review Procedures.
2. Sampling in accordance with Chapter 6 of the MINHERS Standards shall be performed by Raters or Rating Field Inspectors Working under a RESNET Accredited Sampling Provider.
3. Third Party Testing is required for the following items:
  - a. R402.5.1– Building Envelope – Thermal Air Barrier Checklist
  - b. R402.5.1.2 – Testing – Air Leakage Rate
  - c. R403.3.7 – Sealing – Duct Tightness
  - d. Any other testing and inspections required under the code.
4. Alternate testing and inspection programs and protocols shall be allowed when approved by the Building Official.

*Section R202, General Definitions, RESIDENTIAL BUILDING* is amended to allow the residential provisions of this energy code to apply to residential occupancies R-2, R-3 and R-4 of four or more stories in height. In accordance with A.R.S. 9-462, triplexes and fourplexes are allowed to comply with the residential provisions of this energy code. Also, as an option, these R-2, R-3 and R-4 occupancies may be constructed to comply with the commercial provisions of this energy code.

*Section R404.2, Interior lighting controls.* Delete this section in its entirety.

*Section R404.3, Exterior lighting controls.* Delete this section in its entirety.

## **Sec. 9-25. Amendments to the 2024 International Swimming Pool and Spa Code**

The *International Swimming Pool and Spa Code, 2024 Edition*, is amended in the following respects:

*Section 101.1* is amended to read as follows:

101.1 Title. These regulations shall be known as the *Swimming Pool and Spa Code of Glendale, Arizona*, hereinafter referred to as “this code.”

*Chapter 1, Scope and Administration* is amended by the deletion of Sections 102 through 114. For administration of this code, see the *2024 International Building Code* and related amendments.

*ISPSC Section 202, Definitions: RESIDENTIAL SWIMMING POOL (Residential Pool)*. Revise this definition as follows:

A pool intended for use that is accessory to a residential dwelling and available only to the household and its guest including any structure intended for swimming, dipping or immersion purposes with a minimum water depth of 18 inches (457.2 mm). This includes in-ground, above-ground and on-ground swimming pools, hot tubs, spas and fixed-in-place wading pools. All other pools shall be considered public pools for purposes of this code.

*ISPSC Section 305.1, Barrier requirements, General*. Add the following text:

It is the responsibility of the property owner and any other person in responsible charge of a swimming pool to ensure that the required swimming pool barrier, including all gates, doors, locks, latches, and other portions of the barrier are maintained safe and in good working order at all times. No person shall alter or remove any portion of a swimming pool barrier except to repair, reconstruct, or replace the barrier in compliance with provisions of this section. All barriers shall be installed, inspected and approved prior to plastering or filling with water.

*ISPSC Section 305.2.1, Barrier height and clearances*. Revise item #1 to read as follows:

1. The top of the barrier shall be not less than 60 inches (1524 mm) above grade where measured in the side of the barrier that faces away from the pool or spa. Such height shall exist around the entire perimeter of the barrier and for a distance of 3 feet (914 mm) measured horizontally from the outside of the required barrier. A dwelling or accessory building may be used as part of such barrier.

*ISPSC Section 305.2.1, Barrier height and clearances*. Add the following item:

5. The barrier shall be at least 20 inches from the water’s edge.

*ISPSC Section 305.2.5, Mesh fence as a barrier*. Delete the text and replace with the following:

Mesh fences, other than chain link fences in accordance with Section 305.2.8, shall be installed in accordance with the manufacturer’s instructions and shall comply with ASTM

F2286 and with all of the following:

1. The bottom of the mesh fence shall be not more than 1 inch above the deck or installed surface or grade.
2. The maximum vertical clearance from the bottom of the mesh fence and the solid surface shall not permit the fence to be lifted more than 4 inches from grade or decking.
3. The fence shall be designed and constructed so that it does not allow passage of a 4-inch sphere under any mesh panel. The maximum vertical clearance from the bottom of the mesh fence and the solid surface shall be not greater than 4 inches from grade or decking.
4. An attachment device shall attach each barrier section at a height not lower than 45 inches above grade. Common attachment devices include, but are not limited to, devices that provide the security equal to or greater than that of a hook-and-eye-type latch incorporating a spring-actuated retaining lever such as a safety gatehook.
5. Where a hinged gate is used with a mesh fence, the gate shall be equipped to accommodate a locking device. Pedestrian access gates shall open outward away from the pool or spa, shall be self-closing and shall have a self-latching device.
6. Patio deck sleeves such as vertical post receptacles that are placed inside the patio surface shall be of a nonconductive material.

*ISPSC Section 305.2.8, Chain link dimensions.* Revise to read as follows:

The maximum opening formed by a chain link fence shall be not more than 1  $\frac{3}{4}$  inches (44 mm). Where the fence is provided with slats fastened at the top and bottom that reduce the openings, such openings shall be not greater than 1  $\frac{3}{4}$  inches (44 mm). The chain link mesh shall be minimum 11 wire gauge.

*ISPSC Section 305.3.2, Double or multiple gates.* Revise to read as follows:

If a set of double gates or multiple gates is the only access to the yard area where the swimming pool is located, they shall have not fewer than one leaf secured in place and the adjacent leaf shall be self-closing and be secured with a self-latching device. The gate and barrier shall not have openings larger than 1/2 inch (12.7 mm) within 18 inches (457 mm) of the latch release mechanism. The self-latching mechanism shall comply with the requirements of Section 305.3.3.

If a pedestrian gate is present in conjunction with the double or multiple gates, the double or multiple gates need not be self-closing or self-latching and shall be equipped with a padlock or similar locking device. Where the release mechanism of the latching device is located less than 54 inches (1372 mm) from the bottom of the gate, the release mechanism shall comply with the following:

1. The release mechanism shall be located on the pool side of the gate at least 3 inches (76 mm) below the top of the gate, and

2. The gate and barrier shall have no opening greater than 1/2 inch (12.7 mm) within 18 inches (457 mm) of the release mechanism.

*ISPSC Section 305.4*, delete this section and replace with the following:

#### 305.4 Secondary protection.

1. *Application.* The provisions of this section shall apply to swimming pools, spas, hot tubs or other contained bodies of water (above or below ground) when a residence, living area, accessory dwelling unit or accessory building, in which a child younger than six (6) years of age will or does reside, constitutes part of the barrier or enclosure required by Section 305.2:
  - a. Such swimming pool, spa, hot tub or other contained body of water is constructed or installed on or after the effective date of this ordinance at a single family residence; or
  - b. An existing swimming pool or other body of water lawfully constructed prior to the effective date of this ordinance, but which does not conform to these regulations, shall become subject to these regulations as a result of any alteration, addition, or expansion of a dwelling unit, accessory dwelling unit or guest room having access to such pool, that increases the livable area; or
  - c. The existing single family residence is sold.
2. *Requirements for secondary protection.* When an event described in paragraph (1) above occurs, one of the following methods of secondary protection shall be provided:
  - a. Between the swimming pool or other contained body of water and the residence or living area, a minimum five (5) foot high wall, fence or barrier to the pool area which meets all of the requirements of Sections 305.2 and 305.3; or
  - b. The pool shall be protected by a motorized safety pool cover in compliance with ASTM F1346 which requires the operation of a key switch and which does not require manual operation other than the use of the key switch. The key switch shall be located not less than 54 inches (1372 mm) above the floor or adjacent ground level and where the entire pool cover can be visually inspected; or
  - c. All ground level doors or other doors with direct access to the area containing a swimming pool or other contained body of water shall be equipped with either: (1) a self-closing and self-latching device with the latch located at least 54 inches above the finished floor; or (2) an alarm placed not less than 54 inches above the finished floor which activates automatically whenever the door is opened. The alarm shall sound continuously for a minimum of 30 seconds beginning within the first 7 seconds after the door and its screen, if present, are opened and be capable of providing a sound pressure

level of not less than 85 dBA when measured at 10 feet in any direction. The sound of the alarm shall be distinctive from other household sounds such as smoke detectors, telephones, and doorbells. The alarm system may be equipped with a manual means to temporarily deactivate the alarm for a single opening. Such deactivation shall last no longer than 15 seconds. An “off” switch is not acceptable. The deactivation switch shall be located at least 54 inches above the finished floor.

Sliding doors shall not form any part of a required barrier unless equipped with a self-closing and self-latching mechanism. Multi-panel sliding doors or walls shall meet the requirements of this section, or shall be secured in place by a permanent fastening method that requires a tool to remove.

Emergency escape or rescue windows from sleeping rooms with access to the swimming pool or other contained body of water shall be equipped with a latching device not less than 54 inches above the floor. All other openable dwelling unit or guest room windows with similar access shall be equipped with a screwed-in-place wire mesh screen or a latching device located not less than 54 inches above the floor; or

- d. An alarm maintained in or on the swimming pool or other body of water. The alarm shall be installed so as to activate automatically whenever a person enters the swimming pool or body of water and remain activated until manually turned off. The alarm shall sound continuously within the first 7 seconds after a person enters the swimming pool or body of water and be capable of providing a sound pressure level of not less than 85 dBA when measured at 10 feet in any direction. The sound of the alarm shall be distinctive from other household sounds such as smoke detectors, telephones, and doorbells; or
- e. The swimming pool shall be an above-ground swimming pool which has non-climbable exterior sides which are a minimum height of 4 feet. Any access ladder or steps shall be removable without tools and secured in an inaccessible position with a latching device not less than 54 inches above the ground when the pool is not in use; or
- f. Latching or locking hard safety cover which may be latched or locked shall be deemed to meet all barrier requirements of this section for any spa or hot tub which is not more than 8 feet in width, length or diameter; or
- g. Alternative protection not specified herein and providing protection meeting the intent of these requirements is allowed when approved by the building official.

### *3. Compliance.*

- a. All plans submitted to the city for swimming pools to be constructed or installed after the effective date of this section shall

specify the manner in which compliance with secondary protection shall be accomplished. Submission of plans shall constitute verification by the contractor and owner of compliance with this section and the manner of compliance.

- b. If an existing single family residence containing a swimming pool or other body of water is sold after the effective date of this ordinance, and secondary protection is required by this section, the buyer shall comply with the provisions of this section no later than 30 days after the date the buyer takes occupancy of the residence.

4. Maintenance. Secondary protection required by this section shall be maintained in proper operating order by the owner or occupant.

*ISPSC Section 305.* Add the following section:

305.9 Exemptions. The requirements of Section 305 do not apply to the following:

- a. A system of sumps, irrigation canals, irrigation flood control or drainage works constructed or operated for the purpose of storing, delivering, distributing or conveying water.
- b. Stock ponds, storage tanks, livestock operations, livestock watering troughs or other structures used in normal agricultural practices.
- c. Lakes or decorative ponds.

*ISPSC Section 307.2.2 Materials and Structural Design, Exception* is revised to read as follows:

Exception: Pools and spas constructed with reinforced concrete or reinforced shotcrete with a minimum compressive strength of 2,500 pounds per square inch when designed by a *registered design professional* and approved by the *building official* shall be permitted.

*ISPSC Section 411.1.4, Public Swimming Pools, Entry and Exit.* Revise to read as follows:

Swimming pools greater than 20 feet wide in width shall be provided with entries and exits on each side of the deep area of the pool. The entries and exits on the sides of the deep area of a pool shall be located not more than 82 feet apart.

## **Sec. 9-26. Amendments to the International Green Construction Code**

*IgCC Section 101.1 Title.* Amend the text as follows:

These regulations shall be known as the *Green Construction Code* of Glendale, Arizona, hereinafter referred to as “this code.”

*IgCC Table 101.5.1 Requirements Determined by the Jurisdiction,* is amended as follows:

All of the code sections listed in the Table are adopted as “optional” requirements. Compliance with the *2024 International Green Construction Code* is voluntary as determined by the design professional.

*IgCC Chapter 1, Administration* is amended by the deletion of Sections 102 through 110. For administration of this code, see the *2024 International Building Code* and related amendments.

**Secs. 9-27 – 9-30. Reserved.**

SECTION 2. That the Glendale City Code Chapter 9, Article III is deleted in its entirety and a new Article III is adopted and shall read as follows:

**ARTICLE III. WATER CONSERVATION PLUMBING REQUIREMENTS**

**Sec. 9-31. Purpose.**

This article establishes maximum rates of water flow or discharge for plumbing fixtures and devices in order to promote water conservation.

**Sec. 9-32. Certification.**

The plumbing fixtures and devices required to be installed pursuant to this article shall be certified by the International Association of Plumbing and Mechanical Officials and comply with all applicable American-National Standards Institute standards.

**Sec. 9-33. Definitions.**

In this article, unless the context otherwise requires:

*Commercial, industrial and public construction:* Buildings used for commercial, industrial or public purposes, including restaurants, bars, nightclubs, public buildings, comfort stations, schools, gymnasias, factories, offices, athletic clubs, hotels and motels.

*Director:* The building safety director or his designee.

*Person:* An individual, public or private corporation, company, partnership, firm, association, society, estate or trust, any other private organization or enterprise, the United States, any state, territory or country or a governmental entity, political subdivision or municipal corporation organized under or subject to the constitution and laws of this state.

*Plumbing fixture:* A lavatory faucet, lavatory faucet replacement aerator, kitchen faucet, kitchen faucet replacement aerator, shower head, urinal, water closet, evaporative cooler or decorative fountain. "Plumbing fixture" does not include parts necessary for routine maintenance.

*PSI:* Pounds per square inch of water pressure.

*Residential construction or residential dwelling:* Buildings used for temporary or permanent human habitation, including single-family residences and accessory guest houses, multifamily dwellings, townhouses, condominiums, apartments, the sleeping quarters of hotels and motels, dormitories and group housing units.

*Urinal:* A fixture that consists of a water flushed bowl, and any associated flush valve, and that is used for the disposal of human urine.

*Water closet:* A fixture that consists of a water flushed bowl, and any associated flush valve, and that is used for the disposal of all wastes from the human body.

#### **Sec. 9-34. Prohibited plumbing fixtures; residential construction.**

Except as provided in Arizona Revised Statutes Sections 45-315 and 45-319, on the effective date of this ordinance, no person may install any plumbing fixture for use in this city in any new residential construction or for replacing plumbing fixtures in existing residential construction, unless the fixtures meet the following water-saving performance standards:

- (1) Lavatory faucets and replacement aerators shall be designed to deliver no more than one and one-half (1.5) gallons of water per minute at a pressure of sixty (60) psi or shall be equipped with permanent flow control devices that allow delivery of no more than one and one-half (1.5) gallons of water per minute at a pressure of sixty (60) psi.
- (2) Kitchen faucets and replacement aerators shall be designated to deliver no more than one and eight tenths (1-8/10) gallons of water per minute at a pressure of sixty (60) psi or shall be equipped with permanent flow control devices that allow delivery of no more than average of one and eight tenths (1-8/10) gallons of water per minute at a pressure of sixty (60) psi.
- (3) Shower heads shall be designed to deliver no more than two (2) gallons of water per minute at a pressure of eighty (80) psi.
- (4) Water closets shall be designed to use no more than one and twenty-eight hundredths (1.28) gallons of water per flush.
- (5) Urinals shall be designed to use no more than one-half (0.5) gallon of water per flush. No urinals may be installed that use a timing device to flush periodically regardless of demand.
- (6) Evaporative cooling systems and decorative fountains shall be equipped with water recycling or reuse systems.

#### **Sec. 9-35. Prohibited plumbing fixtures; commercial, industrial and public construction.**

Except as provided in Arizona Revised Statutes Sections 45-315 and 45-319, beginning on the effective date of this ordinance, no person may install any plumbing fixtures for use in this city in any new commercial, industrial or public construction or for replacing plumbing fixtures in existing commercial, industrial or public construction, unless the fixtures meet the following water-saving performance standards:

- (1) Lavatory faucets shall be equipped with a mechanism that causes the faucet to close automatically after delivering no more than one (1) quart of water.

- (2) Shower heads shall be designed to deliver no more than two (2) gallons of water per minute at a pressure of eighty (80) psi.
- (3) Water closets shall be designed to use no more than one and twenty-eight hundredths (1.28) gallons of water per flush.
- (4) Urinals shall be designed to use no more than one-half (0.5) gallon of water per flush. No urinals may be installed that use a timing device to flush periodically regardless of demand.
- (5) Evaporative cooling systems and decorative fountains shall be equipped with water recycling or reuse systems.

**Sec. 9-36. Violation; civil penalties.**

- (a) A person who knowingly violates any provision of this article is subject to a civil penalty of not more than one hundred dollars (\$100.00) for the first violation. A person who has previously been found in violation of any provision of this article is subject to a civil penalty of not more than two hundred fifty-dollars (\$250.00) for a second or any subsequent violation. The installation in this city of each plumbing fixture that fails to comply with the standards prescribed by this article constitutes a separate violation. Tampering with a fixture that was originally designed to comply with the standards prescribed by this article constitutes a violation. If a violation involves installing a fixture that does not comply with the standards prescribed by this article, the person who acquired the building or plumbing permit or the person who installed the fixture, or both, are subject to the penalties specified in this section.
- (b) The city may bring an action to recover penalties under this section in superior court in the county in which the violation occurred, after a hearing conducted pursuant to Sec. 9-37.
- (c) This section does not apply to the owner or occupant of a residential dwelling who violates this article in connection with the installation of a plumbing fixture in a residential dwelling occupied by the owner or occupant.

**Sec. 9-37. Inspections.**

The director or the director's authorized representative shall, during normal business hours, have access to unoccupied new residential construction for the purpose of making periodic inspections to determine compliance with this article. New residential construction shall only be inspected prior to issuance of the certificate of occupancy or upon final electrical inspection. Inspections pursuant to this section shall be on reasonable notice to the owner or occupant of the premises to be inspected unless reasonable grounds exist to believe that such notice would frustrate the enforcement of this article. The director may, and if required by law shall, apply for and obtain warrants for entry and inspection to carry out the administration and enforcement purposes of this article.

**Sec. 9-38. Cease and desist order; hearing; injunctive relief.**

- (a) If the director has reason to believe that a person is violating or has violated this article, the director may give the person written notice by certified mail that the person may appear and show cause at a hearing to be held at least thirty (30) days from the date of mailing the notice why the person should not be ordered to cease and desist from the violation. The notice shall

inform the person of the date, time and place of the hearing and the consequences of failure to appear.

- (b) After a hearing pursuant to subsection (a) of this section, or after the expiration of the time to appear, the director shall issue a decision and order. The decision and order may take such form as the director determines to be reasonable and appropriate and may include a determination of violation, a cease and desist order, a recommendation of a civil penalty and an order directing that positive steps be taken to abate or ameliorate any harm or damage arising from the violation. The person affected may appeal the decision to superior court in the county in which the violation is alleged to have occurred.
- (c) If the person continues the violation after the director or local official has issued a final decision and order pursuant to subsection (b) of this section, the city may apply for a temporary restraining order or preliminary or permanent injunction from the superior court according to the Arizona Rules of Civil Procedure. A decision to seek injunctive relief does not preclude other forms of relief or enforcement against the violator.

SECTION 3. That the provisions of this ordinance shall become effective thirty (30) days after passage by the Glendale City Council.

PASSED, ADOPTED AND APPROVED by the Mayor and Council of the City of Glendale, Maricopa County, Arizona this \_\_\_\_\_ day of \_\_\_\_\_, 2025.

\_\_\_\_\_  
MAYOR

ATTEST:

\_\_\_\_\_  
City Clerk (SEAL)

APPROVED AS TO FORM:

\_\_\_\_\_  
City Attorney

REVIEWED BY:

\_\_\_\_\_  
City Manager